Document Title:	**Evaluation of the Domestic Violence Homicide Prevention Initiative**
Author(s):	**Joy S. Kaufman, Ph.D.; Christopher D. Maxwell, Ph.D.; Tami P. Sullivan, Ph.D.**
Document Number:	**310542**
Date Received:	**June 2025**
Award Number:	**2013-ZD-CX-0001**

Final Report

2013-ZD-CX-0001

Evaluation of the Domestic Violence Homicide Prevention Initiative

Principal Investigator: Joy S. Kaufman, Ph.D., Professor of Psychiatry

joy.kaufman@yale.edu
Yale University School of Medicine
Division of Prevention and Community Research
389 Whitney Avenue
New Haven, CT 06511

Co-Investigators: Christopher D. Maxwell, Ph.D., Professor, School of Criminal Justice, College of Social Science, Michigan State University

Tami P. Sullivan, Ph.D., Associate Professor of Psychiatry, Yale University School of Medicine

Award Recipient Organization: Yale University
P.O. Box 208327
New Haven, CT 06520

Project Period: 01/01/2014 – 06/30/2021

Award Amount: $5,524,827.00

Evaluation Team

The core team includes Principal Investigator Joy S. Kaufman, Ph.D. and Co-Investigators Christopher D. Maxwell, Ph.D. and Tami P. Sullivan, Ph.D. The Investigative team is joined by Senior Data Manager Katina Gionteris, BA, Qualitative Data Manager, Kathryn Clark, MS and Research Assistant, Cindy Medina, BA. Descriptions of the role for each team member is below.

Joy S. Kaufman, Ph.D. is a Professor of Psychiatry (Psychology Section) at Yale University School of Medicine, Deputy Director for Operations and Director of Program and Service System Evaluation at The Consultation Center and Director of Evaluation Research in Yale's Division of Prevention and Community Research. Trained as a clinical and community psychologist, Dr. Kaufman has more than 30 years of experience conducting program evaluations, needs assessments, and evaluations of service delivery systems. She has provided consultation and technical assistance to state departments on issues such as the development of performance indicators, training and technical assistance plans to enable community-based organizations to implement funder-mandated reporting requirements and utilizing data to inform program and policy development. Dr. Kaufman is the Principal Investigator of the DVHPDI Evaluation.

Christopher Maxwell, Ph.D. is Professor in the School of Criminal Justice at Michigan State University and is a member of MSU's Center for Gender in Global Context (GenCen). Dr. Maxwell's research interests include testing for the benefits and costs of sanctions and therapeutic treatments for spouse abusers, the impacts of police and court services on victims of domestic violence, the epidemiology of violence against intimates, and the causes and correlates of violence against intimates. Between 2008 and 2014, Dr. Maxwell served as the Associate Dean for Research for MSU's College of Social Science, and between 2004 and 2009 he was appointed Associate Research Scientist at the University of Michigan where he served as the Director of the U.S. Department of Justice's National Archive of Criminal Justice Data. He is currently Faculty Associate at the University of Michigan's Institute for Social Research, and Honorary Senior Research Fellow at Cardiff University, Wales, UK. Dr. Maxwell in a Co-Investigator of the DVHPI Evaluation.

Tami P. Sullivan, PhD. is an Associate Professor of Psychiatry (Psychology Section) at Yale University School of Medicine where she has directed Family Violence Research and Programs for 20 years. Dr. Sullivan's program of research centers on individual- and system-level factors that affect the wellbeing of women victims of intimate partner violence (IPV). At the individual level, her work aims to advance understanding of the relationships among IPV and its highly prevalent negative outcomes such as posttraumatic stress, substance use, and sexual risk in an effort to develop preventive interventions that promote safety and resilience. At the systems-level, she conducts IPV research and evaluation within the criminal justice and other service systems. She studies the impact of the system's response on victims' wellbeing including the ways in which it promotes or impedes victims' safety, recovery and resilience. Dr. Sullivan is a licensed psychologist who has extensive clinical experience with IPV victims and offenders, providing services in a range of clinical and community settings including domestic violence service organizations. Dr. Sullivan is a Co-Investigator of the DVHPDI Evaluation.

Katina Gionteris, Senior Data Manager provided technical assistance and support to staff at the intervention sites where administrative data were extracted for the project. Ms. Gionteris had primary responsibility for cleaning and merging administrative datasets within sites and harmonizing the data across sites. In addition, she developed the data system for the victim interview component of the study. Finally, Ms. Gionteris had the primary responsibility of preparing the databases for analysis.

Kathryn Clark, MS, Qualitative Data Manager provided oversight of the coding and analysis of the qualitative data collected during the key informant interviews and focus groups. In that work, Ms. Clark trained and supervised data coders. In addition, Ms. Clark oversaw the development, implementation, and analysis of the collaboration survey.

Cindy Medina, BA, Research Assistant provided support to the study team including programming the victim interview protocol to be administered across sites, coordinating the site visits, conducting key informant interviews, coding qualitative data and general research tasks.

Major Goals and Objectives

The evaluation of the Domestic Violence Homicide Prevention Demonstration Initiative (DVHPDI) has two goals. The first is to assess how the model programs, the Lethality Assessment Program (LAP) and the Domestic Violence High Risk Team (DVHRT) were implemented in each community in order to understand if the models were implemented as intended (with fidelity), the rate of model implementation, the barriers and facilitators to model implementation and perceptions of key stakeholders regarding the impact of the model within their communities. The second goal is to assess outcomes that resulted from the implementation of the model programs including impact on collaboration among providers, offender accountability, victim participation in services, victim perceptions of safety, re-offense and re-victimization.

Evaluation Questions

Six questions guided the evaluation of the DVHPDI. These, along with sub-questions, are presented below:

1. What is needed to implement each model program (LAP and DVHRT)?
    a. Does the dissemination strategy lead to implementation with fidelity?
    b. What structures and supports are needed to implement the model programs?
    c. What are the TA resources needed to implement the model programs?

2. How do stakeholders perceive the model programs?
    a. What do stakeholders perceive as strengths of the model programs?
    b. In what ways did the training and technical assistance meet their needs?
    c. What are the barriers and facilitator to implementing the model programs in the community?

3. How does implementing the model programs impact collaboration?
    a. What is the impact on collaboration between law enforcement (LE) and domestic violence service providers (DVSPs)?
    b. What is the impact on collaboration among agencies that provide services to victims of domestic violence (DV) and/or offenders?

4. What is the impact on rates of re-offense and re-victimization?
    a. What is the difference in the frequency and nature of re-offense/re-victimization when victims participated in the model programs over time?
    b. Does the frequency and nature of re-offense/re-victimization differ for those who participated in the model program and those who did not?

c. Is there a decrease in risk level for victims who participate in LAP between intake and 6-month interviews?

5. What is the impact on victim participation in services?
    a. How does participation impact victim use of DVSP services?

6. What is the impact of the model programs on victim reported feelings of safety/fear and use of protective strategies?
    a. What are victim reported feelings of safety after participation in the model programs?
    b. Are there changes in victims' feelings of safety and use of protective strategies over time?

Research Design, Methods, Analytic and Data Analysis Techniques

This report documents the evaluation of implementation and outcomes for the United States Department of Justice (USDOJ) Office on Violence Against Women (OVW) funded Domestic Violence Homicide Prevention Demonstration Initiative (DVHPDI). The DVHPDI includes the implementation of two domestic violence homicide reduction models: the Lethality Assessment Program (LAP) and the Domestic Violence High Risk Team (DVHRT) program. There are three LAP sites and one DVHRT site that participated in the Demonstration Initiative (DI) for a total of four communities that were in the DI. Each of these communities included a Local Researcher/Evaluator in their implementation plan and these local evaluators played a key role in the implementation of the evaluation plan. In addition, two matched comparison sites that implemented the LAP outside of the DI later were recruited as Typically Implementing (TI) sites to allow for a comparison of sites involved in this DI and sites that do not have the extra resources provided by the DI. Below is a review of the design, methods and data analytic strategies employed in each component of the study.

Key Informant Interviews. Qualitative methods were used to assess stakeholder perceptions of the facilitators and barriers to implementing the model program. Individual key informant interviews were conducted with law enforcement (command and patrol), DVSPs, prosecutors, and victims that targeted the five broad domains from the Consolidated Framework for Implementation Research (Damschroder et al, 2009): (1) characteristics of the model program; (2) external pressures to provide protection for high risk victims of domestic violence; (3) internal agency factors (e.g., fit within usual care, incentives, prioritization of tasks, leadership engagement, available resources); (4) characteristics of the victims; and (5) implementation processes used in the model programs including training, technical assistance, and supervision. Key informant interviews were also conducted with the Chief of Police, the Directors of the DVSPs, lead prosecutors, and other key stakeholders to further assess organizational barriers and facilitators. Depending on the site, these interviews were conducted at two timepoints (in three sites) or three time points (in three sites). In addition, focus groups were conducted with model developers to assess implementation and model uptake in each of the sites.

Qualitative data collected from key informant interviews and focus groups was audio recorded, transcribed, and independently coded by two members of the evaluation team who utilized debriefing to discuss and challenge findings (Guba & Lincoln, 1994). The Evaluation Team utilized grounded theory methods developed by Strauss and Corbin (1997) to identify themes related to implementation facilitators and barriers across informants. After coding was completed, Nvivo was used to analyze the qualitative data. The collection of data from multiple informants, iterative process of data collection and analysis, use of two researchers to code each transcript and work to consensus, keeping an audit trail of

the data analysis process, and the theoretical sampling of themes and concepts increases creditability, transferability, dependability, and confirmability of the findings (Guba & Lincoln, 1994).

Collaboration Survey. To assess collaboration among partner agencies in the intervention and comparison communities, a web-based interagency collaboration survey was administered, The *Levels of Collaboration Survey* (Frey, Lohmeier, Lee & Tollefson, 2006). The *Levels of Collaboration Survey* (Frey, Lohmeier, Lee & Tollefson, 2006), assesses uni- and bi-directional collaboration among types of providers within the service network and the degree of this collaboration specific to information sharing, advocacy, referrals, and resources to be utilized in this evaluation. The survey was supplemented by asking respondents (two representatives per agency) to indicate whether they work with each specific agency in the community to increase the safety of victims of domestic violence and if so, the frequency of this collaboration. This supplemental section of the survey allowed for social network analysis to determine changes in the network density, reciprocity in collaborations, and the density of the support network for victims of domestic violence. This web-based collaboration survey was administered at two (3 sites) or three time points (3 sites). The list of partner agencies surveyed was based on the Community Mapping that was completed by the Culturally Specific Technical Assistance providers (CSTA) and in collaboration with key stakeholders at each site. Participant respondents provided consent via the web-based survey and a unique identifier was used to track participants overtime. Social Network Analysis (SNA) was conducted utilizing the Gephi software package (Bastian, Heymann & Jacomy, 2009) to determine network density, strength of collaborations, and how diffuse the network is.

Administrative Data. To assess the extent to which participating law enforcement agencies (LEA) initiated the lethality screen process during their two-year-long evaluation period, the evaluation team received LEA-recorded incident records that covered a six and half year time span that began four years before the site initiated the LAP. The evaluation team initially sought incident records where the police officer had recorded that the incident involved one of the following intimate partner [IP] relationships: current or past intimate partner, regardless of their gender, sexual orientation or marital status.[1] The evaluation team also sought all other incident records that involved a perpetrator that LEA staff had identified through the initial records extraction (e.g., the extraction of all IPV-related incidents).[2] Among these two data extractions, the evaluation team identified all interpersonal violence (IP) incidents during the evaluation period (an IP incident is one in which one of the recorded perpetrator-to-victim relationship is coded as IP). Besides these IP incidents, the evaluation team included in the register of IP incidents those instances where the victim or perpetrator had not described their relationship as intimate but the evaluation team had identified another incident where that same perpetrator-victim relationship dyad had described their relationship as intimate to a police officer.[3] The evaluation team

[1] The victim-suspect relationship codes we sought generally fell within the following FBI-NIBRS y2013 relationship codes: spouse (SE), common-law spouse (CS), victim was boyfriend/girlfriend (BG), homosexual relationship (HR), and victim was ex-spouse (XS). We also sough incident data if agencies used the "a child in common" or the "ex-partner" codes. If they did not use these, we assumed that the LEA, per the FBI-NIBRS's direction, use the "victim was boyfriend/friend" to capture incidents involving these ex-partners.

[2] When two LEAs that fell within the same geographical boundary, we combined the list of IPV offenders for whom we wished for them to search in the databases for both LEAs. Thus, if a perpetrator was initiated identified by agency A, but if another or the same victim was served by agency B had also complained that the same perpetrator, the data utilized by the evaluation team would include all these incidents.

[3] Because we searched for additional records involving same the victim-perpetrator dyad, we added incidents that involved an IP relationship but were not recorded at that incident as IP by the police. Therefore, it is probable that

produced standard variables across the agency's data fields and then pooled sites incident records into one multi-site database to produce this final report.

For both model programs the evaluation team also sought criminal justice records for each offender identified in the study in order to build a comprehensive database that will depict the "life-history" of each victim and offender dyad. The evaluation team attempted to compile these data from the following data systems: judicial warrant / summons, jail / sheriff booking/custody, weapons/firearms confiscation/property, prosecutor complaint review, prosecutor arraignment databases, judicial court hearing, pretrial supervision/service, disposition and sentencing, restraining/protective order, and corrections tracking. The primary outcome analysis was incidents recorded by the police that involved the same victim-perpetrator dyad (i.e., the same two people in the same roles as they were recorded at the index offense). More specifically, the evaluation team defined recidivism (e.g., a failure) as any subsequent complaint recorded by the LEA, regardless of the offense type or the actions by the police officer (e.g., arrest) that involved the same perpetrator victimizing the same victim at any time after the last action taken by the police at the index incident. Because a single incident can generate multiple reports with different report numbers due to more than one 911 dispatcher sending officers to the same or related address, these were eliminated as another failure, reports filed within 12 hours of an earlier report involving the same dyad.[4] With the exception of this 12-hour exclusion criteria, all other incidents involving the same dyad, regardless of the offense action by the police, or time, were counted as a failure of the index incident. Survival analyses were conducted to determine time to recidivism/revictimization by level of involvement in the model program.

DVSP Data for Victims Using Services. The Evaluation Team worked in collaboration with local evaluators and the DVSP's in the intervention and comparison communities to establish the process through which individual client outcome data would be collected as part of the typical service delivery process at the DVSPs and ultimately, shared with the Evaluation Team. Only data from victims who signed a release of information at the DVSP were shared with the Evaluation Team. These data varied considerably by DVSP in terms of how services were categorized, and the metric used to assess dosage.

---

the registry we used does not include all "IPV" incidents as we did not have the opportunity to learn about some incidents because many dyads have no other incident in the LEA databases. The number of IP missed because the parties did not identify themselves to the police as intimates is likely sizable given that more than 75% of incidents involved a relationship dyad who had no other incident in the file. In other words, it is likely that more than a trivial number of incidents are not included in the batch of IPV incidents because during the only incident involving a dyad it was not described by the police as an IP relationship.

[4] The decision to combine incidents reports that were filed within 12 hours of the filing of an earlier report was decided in consultation with the LEA's applicable command staff. While the LEA data management staff take step to "flag" these duplicate reports, they acknowledge that the algorithms we use to identify failures had likely identified a number of records that did not meet their reporting policy. Together, the evaluation team and the LEA command staff decided that these dual reports should be combined into one record containing the values of key fields (e.g., offense, arrest flag, weapons) from the separate reports. The 12-hour long window represents a comprise between the FBI-UCR's 24-hour window and the possibility that within this period some duplicate reports may in fact constitute new crime offense that required another dispatch and report filing (e.g., the absconded perpetrator returned to the incident address after the police officers had closed the original incident to assault the victim). We did not find that these duplicate reports were more often found among one of our seven intervention groups.

Data were harmonized across sites. Only descriptive data at the aggregate level are provided in this report.

Longitudinal Victim Interviews. To understand the immediate and short-term impact of the LAP intervention, victims in two LAP sites were asked to participate in three in person interviews, the first ideally within 72 hours to 2 weeks after initial contact, the second at three months, and the third at six months. Individuals were eligible to participate in this component of the evaluation if they had an encounter with police regardless of whether a LAP was administered, the police recorded a criminal offense, or they executed and arrest. Victims younger than 18 and encounters involving dual victims were not eligible to participate in the victim interviews since the LAP protocol is not intended for these populations. Initially, victims were recruited through passive means whereby law enforcement officers distributed business-sized cards to individuals for whom the relationship between the victim and the suspect was past or current intimate partner. These cards requested that individuals call a local number to learn about the study and their eligibility to participate. This method resulted in few calls, so the local teams implemented active recruitment where they obtained a list of all potential victims of domestic violence from law enforcement within days of the incident for which law enforcement was called. Local researchers contacted victims by letter and invited them to call to be screened for the study. If the letter did not yield a response, victims were contacted by telephone to invite them to participate in the study. No more than 3 attempts were made to contact any individual. All contact methods adhered to strict methods established by the Yale/MSU evaluation team so as not to put the victim at risk. All recruitment materials indicated that the victim was being contacted to participate in a health study.

Face-to-face interviews were conducted in private locations to ensure confidentiality. Interviewers obtained informed consent and administered a semi-structured interview via laptop computers or iPads, which included standardized instruments, questionnaires developed for the purposes of this evaluation and open-ended questions. All measures were based on participant self-report. The interview took approximately two hours to complete. Participants were compensated for their time with $50 in cash at the end of each interview. Participants were debriefed about what to expect as a result of participating. See Table 1 for the constructs assessed and measures used to assess them to answer these evaluation questions.

Analyses are conducted to compare individuals grouped by the four levels of the LAP intervention. These groups are categorized based on the level of the LAP intervention received by the victim: (1) those who were not administered the LAP (referred to as No LAP), those who were administered the LAP but determined not at high risk (referred to as LAP, not HR) , those who were administered the LAP and determined high risk (referred to as LAP HR), and those were administered the LAP, determined high risk and spoke with someone at the hotline (referred to as LAP HR+HL). The LAP HR+HL group – the group with that received the highest level of the intervention – serves as the reference group since the purpose of the evaluation is to determine the benefit of administering the LAP and connecting victims with DV services. Therefore, the three other groups (i.e., No LAP, LAP not HR, LAP HR) are compared only to the LAP HR+HL group, but not to each other. We analyzed data with generalized linear modeling to test the effects of the LAP intervention on revictimization; victims' feelings of safety/fear; and use of services and safety strategies.

Table 1. Victim Interviews: Table of Constructs and Measures to Answer Evaluation Questions

CONSTRUCT	MEASURE(S)	DESCRIPTION/PURPOSE
DV severity	• Physical assault scale of CTS-2 (Straus et al 1996) • Sexual Experiences Survey – modified (Koss, et al, 1982) • Psychological Maltreatment of Women Inventory – Short Version (Tolman, 1989) • Unwanted Pursuit Behaviors (Langhinrich-Rohling et al, 2000)	Assess victim's experiences of physical, sexual and psychological victimization, and unwanted pursuit behaviors.
Awareness and Utilization of Resources to Address IPV	Combination of established measures supplemented with questions developed by DVHPDI Evaluation team	Assess victim's awareness and utilization of resources to address safety and wellbeing related to DV-related issues beyond initial-contact provider.
Safety Strategies	Safety Strategies from VIGOR (Hamby, 2013)	Assess victim's perceptions of their safety and informal and formal strategies used to affect safety.
Fear	Fear Scale (Swan and Sullivan, 2002,)	Assess victim's level of safety from/fear of offending partner.

Systematic Social Observations. As a component of the implementation assessment, the evaluation team conducted a series of *Systematic Social Observations* [SSO] of police encounters with participants involved in intimate partner violence incidents. SSO is a rigorous, replicable, reliable, and reproducible approach for directly observing and then systematically coding the nature of the social interactions between individuals and their associated physical settings. It permits one to collect data in natural settings independent from what is already captured by administrative record systems, sequence an event's activities, and collect data on the context of each event. By taking this approach, one combines the techniques of traditional qualitative exploration with those utilized by modern survey-based methodologies (Reiss Jr., 1968) to describe many different or distinct interactions between two or more individuals. These techniques are commonly used to collect data to document police-citizen interactions in their communities. For the DVHPDI evaluation, we followed the protocols developed by Mastrofski and his colleagues (Mastrofski, Parks, Reiss Jr, & Worden, 1995-99; Mastrofski et al., 2010; Mastrofski, Parks, Reiss, et al., 1998; Mastrofski, Parks, Reiss Jr, et al., 1998).[5] By doing so, the observer used a structured coding protocol that directed the observer's attention to specific features of police work that are applicable to the implementation of the LAP assessment in the context of an eligible encounter. Besides the structured questionnaire, the observer drafted brief, a semi-structured narrative account of each applicable encounter. These narratives provided a method to validate the data collected using the structured coding protocol (Mastrofski et al., 2007). The evaluation team modified Mastrofski's original research protocol in three ways. First, the team did not document encounters[6] that took place between a police officer and a citizen that did not involve a domestic violence circumstance. Second, we augmented Mastrofski's original coding scheme to recode data about how the police officer treated the citizens. This modification added the same sequence of questions that Jonathan-Zamir and colleagues

[5] The complete *Project on Policing Neighborhood's* SSO protocol is located at http://www.icpsr.umich.edu/cgi-bin/file?comp=none&study=3160&ds=4&file_id=827202&path=NACJD.

[6] An encounter is constituted by a" face-to-face communication between a police officer and a member of the public that achieves 'significance'".

(2015) validated in their resent SSO of police. Finally, we added questions to capture whether the officer followed the LAP protocol developed by the Department of Justice's technical assistance provider. Therefore, each encounter is represented in the database by one encounter form, one form for each involved civilian, one LAP processing form, and one qualitative narrative.

Technical Assistance Provider Logs. On a quarterly basis, all model and culturally specific technical assistance providers were asked to complete logs documenting all contacts they had with sites, the length of those contacts, the content/purpose of the contact and the individuals involved. The Evaluation Team provided the technical assistance providers with a report template to enter all contacts; They were contacted on a quarterly basis to submit their report. Data are aggregated by type of encounter at the site level and by model program to determine the number, amount and type of contact provided by the technical assistance providers.

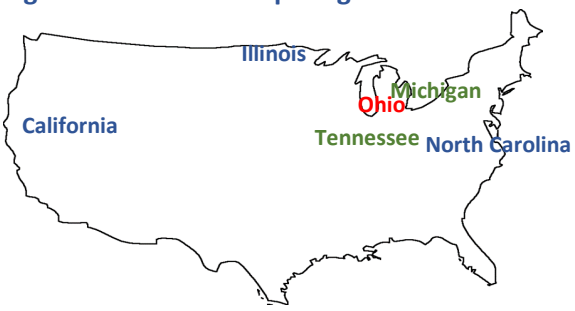
Expected Applicability of Research

This evaluation aims to inform the field about the implementation and outcomes of two model programs that seek to reduce domestic violence homicide. One of these model programs, the Lethality Assessment Program (LAP), has been widely disseminated but not evaluated in a multi-site study that assesses the implementation and outcomes based on self-report and administrative data. In light of that, this study has the potential to inform effectiveness of this model. Regarding the second model program, the Domestic Violence High Risk Team (DVHRT), the conclusions that can be drawn from this study are relatively limited since this model was implemented in only one study site and because we did not conduct key informant interviews with all victims assisted by the LEA, including those followed by the high risk team, those that were screened and not followed and those who were not screened. The results will highlight the strengths and limitations of implementation of the DVHRT model and will produce outcomes for this one community.

Participants and other Collaborating Organizations

A total of six sites participated in the evaluation of the DVHPDI. Three sites, California, Illinois and North Carolina (Figure 1 in blue) implemented the Lethality Assessment Program (LAP) as part of the demonstration initiative (DI) and received resources to assist in the implementation in terms of a grant to their community and training and technical assistance. Michigan and Tennessee (Figure 1 in green) implemented the LAP as it is typically implemented (TI), namely without the additional resources and technical assistance provide to the DI sites. The Ohio site implemented the Domestic Violence High Risk Team Model (DVHRT) as part of the DI and received resources to assist in the implementation of this program including a grant to the community and training and technical assistance. Each of these sites provided data for the evaluation of the DVHPDI.

Figure 1. States Participating in the Evaluation of the DVHPDI



Changes in Approach from Original Design and Reason for Change

In September of 2014 a new Principal Investigator for this project was named. With that change in project leadership came a revised study design which was submitted to and approved by NIJ in December of 2014. The study that was implemented had a few changes from the plan initially submitted to NIJ. First, at the request of the evaluation team, NIJ provided support and resources to include sites that implemented LAP as it is typically implemented in communities not associated with this Demonstration Initiative or evaluation; sites involved in the Demonstration Initiative received a level of support that far surpassed that typically received. Without these comparison sites, we would not know if any outcomes resulted from participating in the demonstration initiative or from implementation of the LAP in this community. Second, in order to fully understand the impact of the LAP on revictimization, protective strategies and use of services a Longitudinal Victim Interview component was added to the study.

Outcomes

Activities and Accomplishments

What follows is a summary of the number of data points by data type.

Key Informant Interviews. The evaluation team conducted a total of 15 site visits across the six sites to conduct key informant interviews with law enforcement officers and command staff, domestic violence service providers and victims. There were 352 interviews completed with law enforcement officers and command staff, 117 interviews with domestic violence service provider staff and supervisors and 139 interviews with victims of domestic violence. In addition, two sites had high risk teams and 54 individuals from these teams participated in interviews. In total 662 key informant interviews were conducted as part of this study.

Collaboration Survey. The web-based collaboration survey was conducted 12 times across the six sites. There was a total of 226 individuals who completed the survey.

Administrative Data.

Lethality Assessment Program Sites. Two of the three DI sites contributed incident data with sufficient detail to produce criminal history information. These sites provided data from four law enforcement agencies including two police departments and two sheriff offices. One of the two TI sites contributed similar structured data from one police department.

In the DI sites, over a 2-year period the 4 law enforcement agencies recorded 8,838 incidents that could prompt a LAP assessment (i.e., an incident involving an intimate victim-suspect relationship). Of those 5,920 LAPs were started (67%), 3,894 victims were recorded as high risk for lethality (44%), 2,451 high risk victims then spoke to the DVSP hotline at the scene of the incident (28%). These incidents were produced by 6,694 unique victim-offender dyads (i.e., same victim, same offender). In the TI site, over the 2-year period the law enforcement agency recorded 920 incidents that could prompt a LAP, of those 895 LAPs were started (97%), 396 were recorded as high risk for lethality (44%), 107 high risk victims then spoked to the DVSP hotline at the scene of the incident (12%).

Domestic Violence High Risk Team Site. In the DVHRT site the law enforcement agency responded to 5,359 interpersonal violence incidents during the reporting period. Of these 5,359 incidents 2,507 (47%) included a LE officer conducting a DA-LE screen and 38% (n=953) of screened victims were higher risk, 939 were referred to the HRT and 213 were accepted for further review.

Domestic Violence Service Provider Data. Five sites provided domestic violence services data which included 1,112 clients who had signed a release of information allowing their information to be shared with the evaluation team. The large majority of clients were cis-gender female (97.5%), 2.6 % were cis-gender male and 0.2% were transgender female. Nearly all were heterosexual (94.6%) with the remaining 5.4% identifying as lesbian, gay, bisexual or queer. The mean age was 34.71 years (SD = 10.64). Black/African American and White clients comprised the majority of the sample, 46% and 42.5% respectively; 5.1% self-identified as another race, 3.1% were multi-racial, 2.4% were indigenous and 0.4% were Asian. Almost one-fifth were Hispanic/Latina (19.3%). Regarding education, 22.9% had less than a high school education, 33.8% graduated high school or earned a GED, 30.0% attended some college or completed technical school, and 14.4% earned a bachelor's degree or higher. Slightly over one-third were employed full- or part-time and 69.8% had children. Limited English Proficiency was recorded for 6.9%, and a disability status was recorded for 12.9%.

Services of any type were used by 936 clients (84.2%) and 67,000 service interactions were recorded between clients and staff. A breakdown of the number of clients who used each service type and the number of service units can be found in Table 2.

Table 2. Number of Service Episodes Reported by Domestic Violence Service Providers

Service	Number of Clients Who Used Service		Number of Service Units	
	N	%	N	%
Advocacy (e.g., personal advocacy, legal advocacy)	725	65.2	9628	14.3
Legal services (e.g., advocacy, services, court accompaniment)	665	59.8	6263	9.3
Individual mental health support	650	58.5%	38462	57.0
Case management assistance	513	46.1	3574	5.3
In-person crisis intervention or safety planning	488	43.9	2994	4.4
Information or referrals	448	40.3	2795	4.1
Housing service (e.g., shelter, transitional housing) including services at shelter (e.g., shelter meetings)	356	32.0	3203	4.7
Telephone crisis intervention or safety planning	249	22.4	849	1.3
Transportation assistance	226	20.3	776	1.2
Healthcare advocacy or assistance	212	19.1	1161	1.7
Employment or educational services	210	18.9	1432	2.1
Childcare or services for children	196	17.6	759	1.1
Financial assistance or advocacy	146	13.1	547	.8
DV educational classes	38	3.4	156	.2
Material goods	10	0.9	89	.1
General follow-up	295	26.5	1926	2.9
Total Service Units			**67,406**	100

Longitudinal Victim Interviews. Across the two sites conducting the Longitudinal Victim Interview component, 1,154 individuals were screened to assess their eligibility to participate and of those screened, 1,009 (87.4%) were determined eligible. Of those eligible, 666 (60.1%) completed a baseline interview. Of those that completed a baseline interview 514 (77.2%) completed a three-month follow-up interview and 437 (65.6%) completed a six-month follow-up interview.

Systematic Social Observations. A co-investigator of the evaluation conducted the systematic social observations in the three sites and rode four shifts with each of the six law enforcement agencies for a total of 24 shifts and 288 hours. During this time, a total of 15 encounters that included 39 citizens were observed.

Technical Assistance Provider Logs. Training and technical assistance (TA) was provided by the Model TA providers to all sites (TI and DI) and Culturally Specific TA providers to the DI sites. What follows is a summary of the training and technical assistance provided by model program.

Lethality Assessment Program Model. Tables 3a and 3b provide the number and hours of technical assistance provided to the LAP sites in the Demonstration Initiative (DI). It is important to note that all LAP sites received training but only the LAP DI received technical assistance. The two typically implementing (TI) LAP sites received a total of four training sessions for a total of 20 hours of training with two sessions (12 hours) for LAP Train the Trainer and 2 sessions (6 hours) of other training.

Table 3a. Technical Assistance Topics for LAP DI Sites

	# TA Events		# Hours of TA	
	#	%	#	%
Collaborating	1,342	23	767.78	25
Develop/Enhance Culturally & Linguistically Appropriate Services	642	11	566.51	19
Community Mapping	189	3	514.82	17
Language Access Planning	260	5	231.1	8
Curricula and Training Issues	514	9	212.94	7
Standards of Service for Sexual Assault, DV & Stalking Programs	894	15	191.14	6
	5,773	100	**3,017.76**	100

Table 3b. Training Topics for LAP DI Sites

	# Training Events		Hours Training Events	
	#	%	#	%
LAP & Limited English Proficiency Train the Trainer	9	5	336.75	48
All Sites Meetings	4	2	76	11
Other (specify)	35	18	59.88	9
Discrimination and oppression issues	22	12	52.58	8
Cultural Responsiveness	16	8	38.12	5
Outreach to underserved populations	16	8	20.24	3
	190	100	**698.51**	100

Domestic Violence High Risk Team Model. Tables 4 and 5 provide the number of training and technical assistance events and hours by topic.

Table 4. Technical Assistance (TA) Provided to DVHRT Site

	Number of TA Events		Hours of TA Provided	
	#	%	#	%
Training and Consultation on Model Program	344	24%	178.75	28%
Developing or Enhancing Culturally and Linguistically Appropriate Services for Underserved Populations	223	15%	97.54	15%
Collaboration	221	15%	84.95	13%
Planning for Language Access	139	10%	56.41	9%

Table 5. Topics of Training Provided to Site

	Number of Training Events		Hours of Training Provided	
	#	%	#	%
Other (specify)	7	13%	29.75	19%
Discrimination and oppression issues	6	11%	12.18	8%
Safety planning for victims/survivors	5	9%	2.26	1%
Outreach to underserved populations	4	7%	10.08	6%
Victim service administration and operations	4	7%	11.47	7%
Accessibility	3	5%	2.51	2%
	56	100%	**158.93**	100%

Results and Findings for the Lethality Assessment Program (LAP)

The Maryland Network Against Domestic Violence developed the Lethality Assessment Program (LAP; MNADV, 2013). This program focuses on training law enforcement officers to utilize a standardized screening tool to identify victims at risk of being killed and then immediately connect victims who are at high risk to a domestic violence service hotline where a staff member will assist the high risk victim to create a safety plan. During their evaluation period, the four LEAs responded to 9,765 eligible IP incidents within the evaluation team's selection and filtering criteria. These incidents constitute cases that were eligible for a LAP screen. These analyses assess the process and impact of the LAP focuses on the 8,838 incidents that took place in one of the four LEAs supported by the Demonstration Initiative (DI) sites. Among these incidents, 78% (n=6,922) involved a female victim. Regarding race/ethnicity, 49% (n=4,357) of the incidents involved a Black or African American victim, 42% involved a white victim, 6% (n=513) involved a Hispanic victim and 2% (n=178) involved victims of other racial/ethnic backgrounds. The average age of these victims at the time of the incident is 33 years old. Fifty-nine percent (n=5,215) involved non-married intimate partners, 13 percent involved spouses, and 4% involved ex-spouses. Besides these three relationships, 21% of the 8,838 incidents involved a dyad that was not recorded by the officers as an IP relationship at that incident but was recorded as an IP at some other incident in the database. These incidents are labeled as involving "Non-Intimate Partner" relationships and are included because they could have produced a LAP assessment if the victim or perpetrator had described their relationship status during the incident like they had during another incident. Ninety-five percent of the incidents involved a victim and perpetrator that were of different gender (see Table 6).

A LAP assessment was administered in 67% (n=5,920) of these 8,838 IP incidents. LAPs took place significantly (p-value < 0.05) more often when victims were female (56% vs. 70%), but age did not differentiate those who were (vs. were not) administered a LAP. Incidents with female, Hispanic victims

Table 6. LAP Incident Demographics

	%	#
Victim's Sex		
Male	21%	1,882
Female	78%	6,922
Victim's race/ethnicity		
Other	2%	178
Hispanic	6%	513
White	42%	3,746
African American	49%	4,357
Victim-Perpetrator Relationship		
Intimate Partner	59%	5,215
Spouse	13%	1,122
Ex-Spouse	3%	271
Ex-Intimate Partner	4%	381
Non-Intimate Partner	21%	1,849

Table 7. Administration of the LAP by Victim Demographics

	%	N				
Victim's Sex						
Male	55%	1882	*			
Female	70%	6922				

	Male			Female		
		N			N	
Victim's Age (average)						
Not Administered	37	815		32	2,004	
LAP Administered	36	1,024		32	4,742	
Victim's race/ethnicity						
Other	46%	28		71%	150	*
Hispanic	58%	115		83%	398	
White	55%	744		67%	2,995	
African American	56%	980		72%	3,359	
Victim-Perpetrator Relationship						
Intimate Partner	61%	1,071	*	74%	4,127	*
Spouse	54%	256		64%	863	
Ex-Spouse	40%	60		56%	209	
Ex-Intimate Partner	25%	61		41%	317	
Non-Intimate Partner	48%	434		72%	1,406	

produced more LAPs (83% of Hispanic victims were screened) than incidents with female victims of any other racial/ethnic background. Incidents with Hispanic female victims followed by victims of "other" racial groups Involved more LAPs than incidents with white or African American female victims (see Table 7).

Because of the substantial and significant difference between the rates of LAP assessments administered to male and female victims, the remaining analyses were produced separately by victims' gender.

In terms of the difference in the odds that a LAP assessment would take place, while controlling for several victim and incident-level variables[7], **for male victims the results of multivariate analyses found that the odds are significantly (p-value < 0.01) smaller (by 60%) that a LAP took place when** the incident involved male victims and male suspects compared to incidents with male victims and female perpetrators. Results also revealed that the odds of a LAP assessment being administered was significantly (p-value < 0.05) smaller if the relationship was not recorded as intimate by the officer (by 49%), the suspect was not arrested (by 69%), if one of the offense codes included a "larceny" (by 63%) or one of the "other" offenses (by 40%) or if there was no recorded criminal offense (by 55%). Results also showed that in contrast to the "reference" LEA, each of the three other LEA was significantly (p-value < 0.001) less likely to administer the LAP assessment, the difference in their odds ranged from 82% to 92%[8]. The one factor that increased the odds of a LAP assessment being administered was the number of prior incidents. Across the four LEAs, each prior incident significantly (p-value= 0.001) increased the odds of a LAP being administered by an average of 20%. Several other measures analyzed in the model, including the victim's race/ethnicity and age, did not influence the odds of a LAP being administered.

In terms of **the odds of a LAP being administered when the victim is female, results of multivariate analysis revealed a number of significant factors**. Factors that decreased the odds of a LAP being administered include incidents involving same-sex perpetrators (by 76%), the relationship between victim and perpetrator involved either a "non-intimate" (by 19%) or an "ex-intimate" (by 27%) compared to an intimate partner, and the suspect was not arrested (by 58%). In addition, in comparison to incidents involving a misdemeanor assault offense, incidents were less likely to involve a LAP when they included a sexual assault, robbery, harassment, burglary, larceny, motor vehicle, drug offense, or no criminal offense at all. Finally, compared to the reference LEA, the odds of a LAP assessment being administered were significantly lower (p-value < 0.001) for incidents that occurred in any of the other three LEAs. While these differences were in the same direction as the results for male victims, the rates between these three LEAs are significantly different (p-value < 0.000) from each other. Thus, the odds of a LAP being administered were significantly different from each other across all four LEAs. Like incidents involving male victims, the only factors that significantly increased the odds were the number of prior

[7] The victim and incidents measures that were in common across the LEA and included in the general linear model included victim's age, race & ethnicity, the nature of the relationship and its status at the time of the incident, the number of prior incidents involving the dyad, the type of offense recorded by the police, where the suspect was arrested, the LEA,

[8] In a post-hoc comparison of the LEA LAP rates, we did not find that any of the three other LAPs produce significantly different rates when compared to each other. Thus, it is the case that all three were different from the one LEA but not each other.

incidents involving the same suspect. For incidents involving a female victim, the odds of a LAP being administered increased significantly (p-value < 0.05) by 11% for each additional same-suspect-incident. The evaluation team did not find any significant difference between the reference and any comparison groups with regard to the victim's race/ethnicity.

Outcomes of the LAP. The police officer asked the victim to answer 12 "Yes" vs. "No" LAP assessment items/questions. Among female victims, the range of positive responses for any item is from a low of 40% (item 3: Do you think he/she might try to kill you?) to a high of 63% (item 6: Is he/she violently or constantly jealous or does he/she control most of your daily activities?). As is shown in Table 8, the average positive response rate for women across all 12 items is 42%. Thus, about half the time, a female victim positively endorsed an item/question. Among the male victims, the range of positive responses for any item is from a low of 19% (item 4: Does he/she have a gun or can he/she get one easily) to 49% (item 6: Is he/she violently or constantly jealous or does he/she control most of your daily activities?). The average positive response rate for men across all 12 items is 33%. Men responded positively more frequently than women to just two of the 12 items: item 1 (Has he/she ever used a weapon against you or threatened you with a weapon) and item 8 (Is he/she unemployed?). Among the 4,213 female victims who answer at least one question, the average number of items positively endorsed was 5.20, just less than half the LAP items asked. With an average of just more four positive items (x=4.15), the 829 males answering at least one question, positively endorsed significantly fewer items than females.

Table 8. By LAP Item Positive Response Rates by Victim's Sex

		Male		Female	
		%	N	%	N
1	Has he/she ever used a weapon against you or threatened you with a weapon?	35%	820	27%	4,149
2	Has he/she threatened to kill you or your children?	28%	822	41%	4,153
3	Do you think he/she might try to kill you?	27%	784	42%	3,848
4	Does he/she have a gun or can he/she get one easily?	19%	785	40%	3,971
5	Has he/she ever tried to choke you?	34%	823	61%	4,166
6	Is he/she violently or constantly jealous or does he/she control most of your daily activities?	55%	824	63%	4,177
7	Have you left him/her or separated after living together or being married?	49%	804	53%	4,108
8	Is he/she unemployed?	25%	784	21%	3,988
9	Has he/she ever tried to kill himself/herself	34%	822	41%	4,165
10	Do you have a child that he/she knows is not his/hers?	34%	822	41%	4,165
11	Does he/she follow or spy on you or leave threatening messages	39%	820	49%	4,154
12	Is there anything else that worries you about your safety? (If yes) What worries you?	14%	759	26%	3,841
	Average Across 12 items	**33%**	**806**	**42%**	**4,074**

Note: All 12 bi-variate comparisons were statistically significant.

High-Risk Assessments. The LAP has two mechanisms for officers to classify someone as "high risk," 1) the victim scores high risk on the screener or even though the victim scored low risk on the screener, or 2) based on the officer's assessment that they believe the victim is high risk. Table 9 includes a breakdown by the victim's gender of the percentage of all victims and the percentage of victims classified as high risk as a result of 1) scoring high risk or 2) officer assessment places victim at high risk. **Using either scoring method, the officers classified 27% (n=497) of all male victims as high risk.** Twenty-six percent were at high risk because of their score and another 1% because of the officers' qualitative assessment. **Among the 1,018 male victims who were screened with a LAP, the officers scored 49% of the victims as high risk** using either scoring mechanism. Forty-six percent were at high risk because of their score and another 2% because of the officers' assessment. **Among all 6,737 female victims, 48% scored as high risk** by either method. Sixty-two percent were scored high risk because of their LAP score and 7% because of the officers' assessment. **Of the female victims who were screened with a LAP (n=4,727) 68% were found to be high risk**. Among all IPV incidents and among those screened, female victims were significantly more often scored as high risk than their male counterparts.

Table 9. Higher-Risk Assessment by Victim's Sex

	Male		Female	
	All IPV Incidents	**Among Screened**	**All IPV Incidents**	**Among Screened**
Higher-Risk by Instrument Score	26%	46%	43%	62%
Higher-Risk by Officer Assessment	1%	2%	5%	7%
Higher-Risk by either mode	27%	49%	48%	68%
Total N=	**1,833**	**1,018**	**6,737**	**4,727**

Who Scored as High Risk? **Among 1,018 male victims who were assessed with a LAP screen, older victims, same-sex victims, and victims with more prior incidents had significantly (p-value <0.05) greater odds of assessing at high risk**. In addition, in comparison to incidents only involving a misdemeanor assault offense, an incident involving an aggravated assault, harassment, disorderly conduct, and "other" offenses, as well as incidents taking place in one of the three comparison LEAs, had significantly (p-value <0.05) greater odds of assessing at high risk. Neither the victim's relationship status with the perpetrator nor their race or ethnicity was related to the odds of assessing at high risk for male victims. Whether or not the police arrested the perpetrator was also not related to the odds of assessing the male victim as high risk.

Among 4,727 assessed **female victims, older victims, those whose ex-intimate partner was the perpetrator (compared to a current intimate partner), white victims (in contrast to Black or African Americans), and those with more prior incidents all had greater odds of being high risk.** In addition, those incidents where the perpetrator was arrested, in comparison to incidents only involving a misdemeanor assault offense, aggravated assault, harassment, kidnapping, larceny, or "other" offenses had significantly (p-value <0.05) greater odds of assessing at high risk. Only those incidents with a drug or alcohol offense produced a smaller odd of a high risk assessment than did incidents with a misdemeanor assault. Finally, in contrast to an incident involving intimate-partners, the incidents involving spouses, ex-spouses, and "non"-intimate relationship were not more likely to have different odds of high risk assessment among women.

Who spoke to the Domestic Violence hotline? As can be seen in Table 10 among all male victims, 13% spoke to the domestic violence hotline worker. **Among the 955 high risk males, 25% spoke to the hotline worker.** Fifteen percent of all female victims spoke to the hotline worker. [9] **Among the 2,128 high risk female victims, 48% spoke to the hotline worker.**

Table 10. Victims that Spoke to Domestic Violence Hotline

		Male		Female	
		All IPV Incidents	Among Higher Risk	All IPV Incidents	Among Higher Risk
Spoke to DV Hotline		13%	25%	15%	48%
	n=	1,833	955	6,737	2,128

Among the 955 high risk male victims, incidents involving the same-sex relationships (by a factor of 2.28) and incidents within two of the three comparison LEAs had significant (p-value 0.05) greater odds of speaking to the hotline worker. An incident involving aggravated assault, harassment, or disorderly conduct had significantly greater odds of the victim speaking to the hotline worker. Of note, no other factor significantly decreased the odds of speaking to the hotline worker, including the number of prior incidents between the dyad, the nature of the dyad's relationship or the victim's ethnicity/race. While a larger estimated percentage of white (by ≈ +2%) and Hispanic (by ≈ +12%) male victims spoke to the hotline worker, neither of these two differences were large enough to reach statistical significance (p-value < 0.05).

Among the 2,128 high risk female victims, each prior incident (by 10%) and two of the three comparison LEAs increased the odds of speaking to the hotline worker. In contrast to incidents only involving misdemeanor assaults, incidents involving aggravated assault, harassment, kidnapping, drugs or alcohol, or "other" offense were also related to a greater odd of the victim speaking to the hotline worker. The only factor that was related to a reduced odds of speaking to the hotline worker (by 14%) was when the suspect was not arrested. Several other factors were not related to the odds of speaking to the hotline, including the female victims' age, the victims' relationship status with their perpetrator, and the victims' race/ethnicity. While a larger estimated percentage of white (by ≈ +3%) and Hispanic (by ≈ +5%) female victims spoke to the hotline worker than Black or African American women, neither of these two differences were large enough to reach statistical significance (p-value < 0.05).

Assessment of Fidelity in Implementation of the LAP

Two sources of data were used to assess fidelity in implementing the LAP: Systematic Social Observations and Key Informant Interviews.

Systematic Social Observation (SSO)

The **unit of analysis is an encounter between the observed police officer and a citizen**. An encounter begins when the first physical contact is made between the officer and the citizen and typically ends when the officer completes the encounter by returning to her or his patrol car or establishes contact with an unrelated group or single citizen representing a new encounter. An encounter may span multiple locations (e.g., the officer leaves the victim's home to begin searching for the purported

[9] Note: Seven percent (n=67) of the male victim-based LAPs and six percent (n=264) of the female victim-based LAPs were missing information about the disposition of the hotline call

suspect) or may even separate into multiple sub-encounters (e.g., if while searching for a suspect, the officer addresses another police issue unrelated to the current encounter).

During the 288 hours (e.g., 12 days) of SSO, the observer documented fifteen IPV encounters (1 per 19 hours of observation). Eleven of the fifteen were dispatched as "DV" incidents. The other four were dispatched as either a "fight, a "stabbing," or something other than a crime event. Twelve of the incidents involved an offense of an assault of an intimate partner, one was a "disorderly conduct," and two involved an attempted homicide. Both attempted homicides involved a female perpetrator who stabbed her male partner. One male victim was in his late 40s, and the other was in his early 20s. One incident was dispatched as a fight, and the other was self-dispatched by the officer as a "stabbing." This later one was discovered by the officer while patrolling his district. The officer witnessed the victim lying on a city sidewalk and stopped to investigate the situation. Witnesses in the area identified the perpetrator as the victim's girlfriend because they heard her loudly threatening the victim with death. Neither of these two incidents produced a LAP at the scene because the victims were hospitalized, although one officer mentioned that someone else would later go to the hospital to complete the LAP.[10]

In total, the **observer documented information about 39 civilians**. Twenty-one of these civilians were females, and seventeen were males. These twenty-one females included nine IPV victims and six perpetrators (the other six were witnesses). The seventeen males included seven victims and seven perpetrators. Thus, the **observer witnessed encounters with a similar number of female and male victims.** Forty-four percent of the victims were African American, and twenty-five percent white. The observer also coded thirteen percent as Hispanic. More than two-thirds (69%) of the victims were older than 29, but none older than 59. One of the incidents involved a same-sex relationship, and one victim did not speak English (three victims were bilingual). Two of the perpetrators, both males, were arrested at the scene.

LAP initiation process. Eight of the fifteen incidents did not involve an officer initiating a LAP assessment. They did not involve a LAP because one encounter did not have an IP relationship (involved a mother and an adult son), three did not met the LAP criteria such as they involved a dual complaint, and two involved a transported "stabbed" victim. While two of the eight incidents did not produce a LAP, the observer coded them as meeting the LAP selection criteria (both incidents involved a male victim).

Among the other seven incidents, an officer completed a LAP assessment. All seven incidents involved a female victim. Six of the seven LAPs produced a high risk score. Five of the six officers advised the victim that she is in "danger," **three of the six advised the victims that "people in their situation have been killed"**, and two of the six officers advised the victims that s/he has concern for their "safety." The **officers asked all six high risk female victims to speak with DV hotline workers**. Four of these six victims agreed to their request. Among the four officers who called the hotline, two used their phones and the others used the victim's phone. All four handed the phone to the victim, but **just one of the four moved away while the victim was speaking to the hotline.** Following the call, while two of the six officers discussed safety planning activities with the victim and one offered to transport the victim, **none**

[10] Incidents observed during the SSOs may not be represented in the administrative data provided by the LEAs because the officers may not have coded the incident in such a way that the parameters set by the extraction method would have identified these cases as eligible for the evaluation (e.g., the relationship code for some incidents may not have been considered intimate).

of the officers restated their risk assessment, contacted their supervisor, discussed the distribution policy of the LAP screen form, or reiterated their assessment with the citizens.

Among the six incidents **that did not involve an at high risk victim, an officer advised each victim to call 911 immediately if they needed help again, and all referred the victim to local DV services.** Four of the six officers (66%) provided the victim with their personal contact information, three of the six (50%) advised the victim about dangerous situations, and one also advised them to look for danger signs. Two of the six (33%) also recommended that the victim call the hotline, and in one of these incidents, the officer instructed the victim to use a "safe" phone when calling.

Besides these systematically coded data, the **observer noted that no victim raised concerns about the officers wearing their body cameras**. However, **while no victim declined to complete the LAP screener when asked, two of the six high risk victims declined the hotline call.** Just one of the seven victims became emotionally upset during the LAP process. Two of the seven (28%) LAPs involved a language barrier; one officer used the language phone line, and one officer asked the victim's teenage son to translate for his mother the questions while both were sitting at the kitchen table with other family member standing in the room. Though another officer outside the home detained the perpetrator while the LAP took place, the son looked particularly distressed when directed to ask his mother whether she had children by another relationship.

SSO Conclusions. Overall, **while officers knew to administer the LAP if an assault of a female occurred, they otherwise struggled with other LAP implementation guidelines.** Thus, their training needs to re-emphasize **when and how to use the "repeat calls" criteria**. Furthermore, because incidents where the LAP should have likely been implemented all involved male victims, **officers' training also needs to emphasize that they need to use the LAP when the victim is male.** The officers **would also benefit from more specific guidance about LAP use in incidents involving "mutual aggression"** because some officers expressed concern to the observer about why they cannot use the LAP in these incidents. Besides the challenge of selecting which cases to assess, the **officers did know to ask the victim all the LAP questions; they did know how to score the LAP once the questions were asked; and they did know to inform the high risk victims that they are in danger and to place call to DVSP hotline number whenever victims score as at high risk.** The most significant gaps in the entire implementation process were with the post-hotline call steps. Just two of the six documented steps were ever taken, and none were taken in more than two times across the six applicable incidents. **The officers did not restate or reiterate their risk assessments, did not call their supervisor or discuss their LEA's LAP distribution policy.**

LAP Key Informant Interviews

Data to assess fidelity in implementing the LAP was extracted from the key informant interviews conducted during site visits with the three DI and two TI sites. These data were collected in the first six months of implementation and again between 16 and 20 months after implementation. Evaluation team staff conducted in-person, individual interviews with law enforcement,

Table 11. LAP Key Informant Interview Participants

	DI Sites		TI Sites	
	Time 1	Time 2	Time 1	Time 2
LE Officers	91	80	28	32
DVSPs	21	23	14	13
Victims	20	28	18	24
TOTAL	**132**	**131**	**60**	**69**

domestic violence service providers and victims, and focus groups with the Maryland Network Against Domestic Violence (MNADV) staff after each site implemented the LAP interview and a final interview with the MNADV team in 2020. As can be seen in Table 11, there were 263 interviews conducted across the DI sites and 129 interviews across the TI sites.

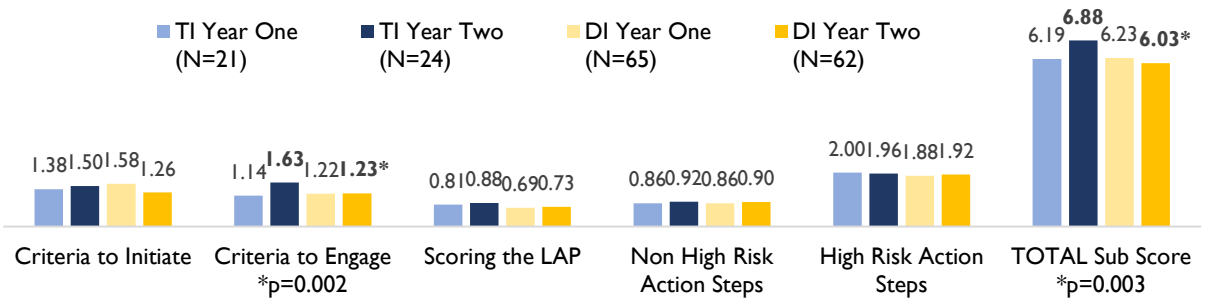
The tool to assess LAP fidelity was developed based on the MNADV training curriculum. The tool was completed two independent coders examining the data from the key informant interviews conducted with law enforcement officers. Table 12 provides the items and scoring from the LAP fidelity tool.

Table 12. Overview of Tool to Assess LAP Fidelity

Construct	**Items** (score = 1 if present)	Maximum Score by the Domain
Criteria to initiate LAP Screen	Intimate partner involvement Belief that an assault has occurred Sense/instinct tells officer that potential danger is high Repeated calls or complaints with same individuals or location	2
Criteria to Engage in LAP	Conduct LAP without the abuser present Ask all questions in order and verbatim	2
Score the LAP	Remember specifics of scoring or state instructions on form	1
Non-high Risk Action Steps	Advise victim of dangerous situation/watch for signs of danger Provide information DVSP provider & officer contact information Prepare report and submit to supervisor/DV Unit end of shift	1
High Risk Action Steps	Inform the victim that they are in a dangerous situation and that people in their situation have been killed Inform the victim of the requirement to call DVSP hotline and ask permission to speak to advocate about their situation Call hotline, give basic facts & LAP items endorsed, provide privacy when victim on the phone, assist with safety planning if asked If victim unwilling to talk to hotline, reiterate the danger, act as intermediatory between hotline & victim to safety plan Provide information DVSP provider & officer contact information & obtain victim contact information Prepare report and submit to supervisor/DV Unit end of shift	2

As can be seen in Figure 2 the average score for fidelity in implementing the LAP protocol is mostly consistent when comparing DI and TI sites. In Year 1, no differences emerged in fidelity between DI and TI sites. However, in Year 2 the DI sites had significantly lower fidelity scores in the **Criteria to Engage** domain. We learned that **many officers embedded the LAP questions into their investigation and then completed the LAP assessment later**, calling the hotline if the victims responses indicated they should be classified as High Risk. The DI sites **report lower total levels of fidelity** in Year 2 when compared to the TI sites.

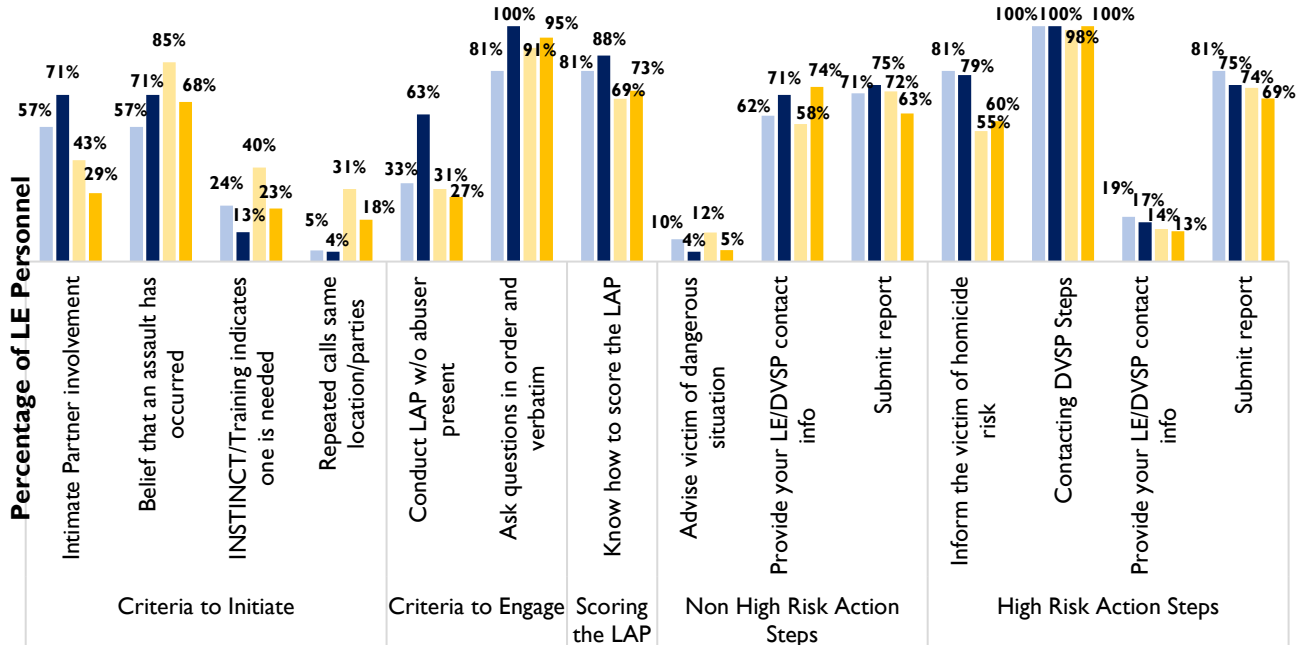
Figure 2. LAP Fidelity Analysis Demonstration Initiative (DI) vs. Typically Implementing (TI) Sites



By implementation condition (e.g., DI vs. TI) and time point, Figure 3 depicts the percent of officers who reported knowledge of each step in the LAP process. While **most officers report knowing the procedure for administering and scoring the LAP**, **contacting the hotline for high risk** victims and **filing their reports,** other components are understood less well. At Time 2, **Officers in the DI sites (29%) are less likely than those in the TI sites (71%) to identify if the relationship between victim and suspect is intimate partner** prior to administering the LAP assessment

Separately, the LAP protocol instructs officers to use their judgement to classify a victim as High Risk if they deem necessary even if the victim scores Not High Risk. This assessment is referred to as officer **"gut check". The rate of officers who report knowledge that they can use the gut check to classify a victim as high risk ranged from 13 to 40 percent.** While part of the LAP protocol, few officers reported that they inform victims who score Not High Risk that they are in a dangerous situation (range 4% to 12%). Finally, about 80% of TI officers and 55% of DI officers reported that they **inform High Risk victims that they are at risk for homicide. T**his was lower than expected as this is a key component of the LAP protocol. Instead, officers reported telling victims they were at risk but would not say at risk for homicide/being killed.

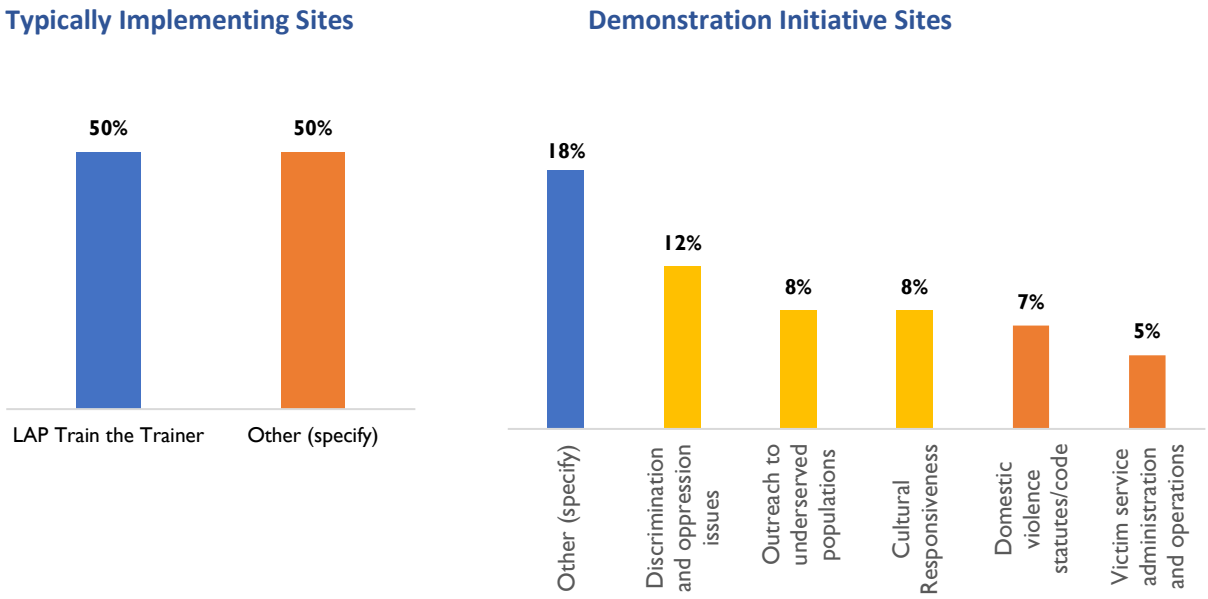
Figure 3. Percent of Officers Reporting LAP Steps Over Time DI vs TI



What is needed to implement the LAP?

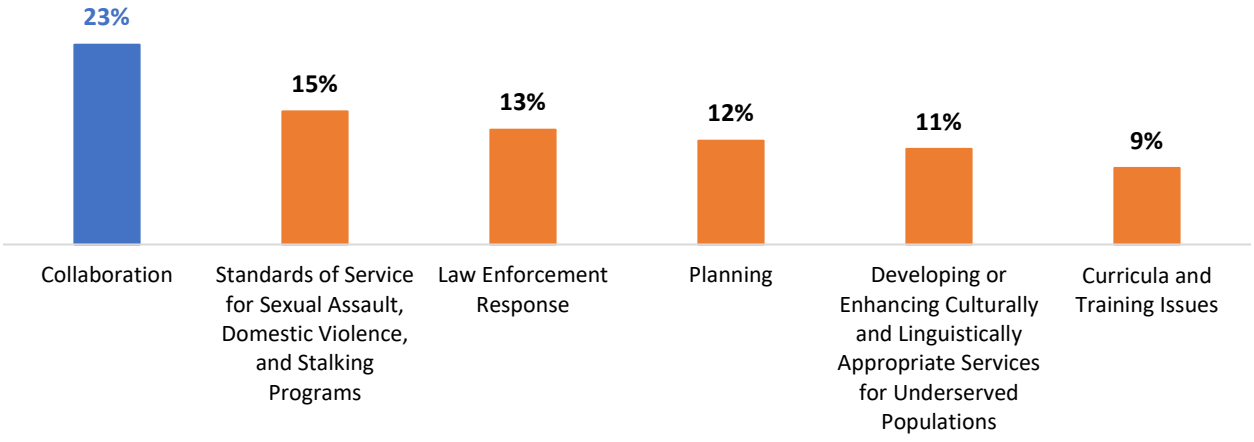
All LAP sites received training and technical assistance (TA) to implement the LAP from the Maryland Network Against Domestic Violence (MNADV). In addition, the three DI sites received additional training and technical assistance from three culturally specific (CSTA) technical assistance providers. As is show in Figure 4, the **DI sites received an average of 699 training events or 312 hours of training**. The **TI sites each received 2 training events for a total of 10 hours of training for each site.**

Figure 4. LAP Training Data Comparing TI and DI sites



With regard to technical assistance, the **TI sites received no technical assistance** while the **DI sites received 1,514 hours of technical assistance on average** per site (see Figure 5). The TA was focused on collaboration (23%), law enforcement standards and developing or enhancing the Culturally and Linguistically Appropriate Services (CLAS) standards within agencies. In total, each of the **TI sites received 10 hours of training** and the **DI sites received on average more than 1,800 hours of training and technical assistance.**

Figure 5. Percent of Technical Assistance by Category Provided to DI Sites



Stakeholder Perceptions of the Training and Technical Assistance Received

As part of the key informant interviews, law enforcement officers and domestic violence service providers were asked about their level of satisfaction with the training and technical assistance received. Both **law enforcement and domestic violence service providers reported that the training left them feeling prepared to implement the LAP**. One domestic violence provider stated, "*I felt confident. Like I said, the initial trainings were very general, giving us the bigger picture about how it was all going to function."* A law enforcement officer stated *"I mean they were very good about explaining what we're going to be doing on calls. So when I got to my first one I knew exactly what form to grab, what questions were going to be asked…"* Another law enforcement officer stated *"yeah, I definitely think that those sensitive questions like that, you've got to have some sort of training to ask them because if not, it's just, you're just going to ask it like a very direct question."*

Staff in the DI sites reported that they **appreciated the trainings offered by the culturally specific TA providers which helped them be more prepared** to administer the LAP process with individuals from racial and ethnic groups that may be different from their own. One staff member stated, *"Some of the training…It allowed us to get some training that we wouldn't normally get, so be open minded to that too. Like some of the cultural variations and the cultural competence training, and those things that, oddly enough, we wouldn't think that we would get with a domestic violence training."*

Structures and Supports Needed to Implement the LAP

During the interviews, staff were asked about the structures and supports that were needed to successfully implement the LAP. They reported **that buy-in for the program starting from everyone including agency leadership and frontline staff** was imperative as was the **development of procedures to allow and support active collaboration** between LE and DVSP. Staff discussed the **need for accountability between agencies** including but not limited to making sure that the LAP assessments were completed with all eligible victims and that DVSP staff not only answered the hotline but followed up with victims after that call. They also shared the **need for a strong network of community services and supports** that have the capacity to serve all of the newly referred victims. Finally, staff want the **resources for ongoing training on the LAP and DV** and they want to **see data demonstrating the effectiveness** of the intervention.

Perceived Barriers and Facilitators to Implementing the LAP

In terms of implementation barriers both DVSPs and LE reported that **not all DVSPs were prepared for the increased call volume,** which caused difficulties in the early months of the implementation. A law enforcement command staff reported *"So sometimes we would have officers call and they just wouldn't get an answer."* Law enforcement staff also talked about **gaps in the training process**, if an officer missed the main training, they had to pick up the LAP procedures "on the job." One officer *stated, "I was on vacation when they got trained on this, my partner told me what we had to do and it's pretty straight forward."* Officers also **reported inconsistencies in how they are implementing the LAP** including, as mentioned earlier, many officers were not comfortable telling High Risk victims they were at risk for homicide. One officer stated *"I just put, hey I feel like you know you're in danger, he might come back and maybe do some harm. I never say the homicide, because as soon as we throw the homicide, now, it's already bad enough for them…"*

Structural problems also existed within some sites. **Not all officers received a phone to use to call the DV hotline**. Some LE agencies instructed officers to use their personal cell phones. In other jurisdictions, officers had to call their sergeant to bring a phone out to the home or they had to transport the victim to the precinct to make the call to the hotline. One officer stated *"I'm listening usually because I'll put it on speaker phone. If it has to be my phone, it has to be speaker because I do not want anyone else touching my phone."* We also learned of inconsistent policies across and within jurisdictions where **some domestic violence service providers wanted officers to transport victims to safe locations** that, in some areas could have the officer off patrol for more than 2 hours, which causes difficulties within these jurisdictions. One officer reported *"… he called the crisis line and had to drive a victim an hour away...this takes an officer out of the beat for more than 2 hours on a Friday or Saturday night when we need bodies out there."* The **main facilitator** across sites was **buy-in from the law enforcement and DVSP leadership which, according to staff, was the key to successful implementation.** One staff member reported "*this worked because we all committed to it."*

Perceived Outcomes of the LAP

Domestic violence service providers and law enforcement officers were also asked what they saw as the outcomes of the implementation of the LAP in their communities. Across the board, **staff reported that the LAP increases the identification of high-risk victims**. One staff member reported "*If you are able to identify people that are high risk and if there is a way to make those people understand you are at high risk and that causes them to get out of the situation that they're in and to seek help, obviously, it's beneficial."* Law enforcement and domestic violence staff also reported that through their **enhanced partnership, victims have greater access to services.** One officer stated, "*just laying it out there and then the fact that we actively talked to someone at the scene, we did not leave it up to the victim to call on her own, we actually talked to someone right there."* In the DI sites, staff reported the benefit of **increased access to language lines**. One staff member reported "*yeah, I think that one of the things that this project caused us to pay attention to was language access and culturally responsive services. For language access you provide services in the language that the survivor is comfortable with and should always be, but we didn't always do that because we didn't have the budget. So not only saying it but having those policies in place were really important. That was huge for us."*

Impact of Implementing the LAP on Collaboration

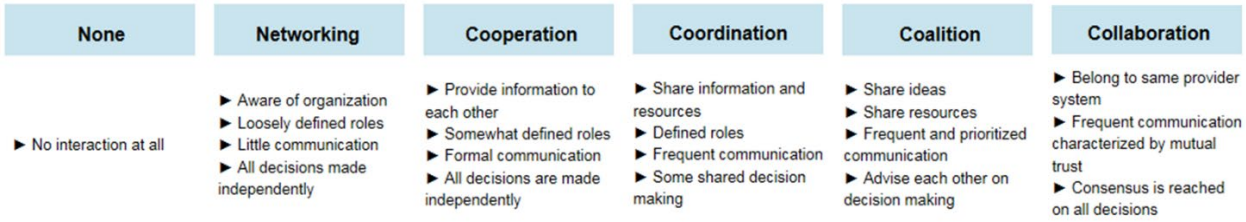
During the key informant interviews both law enforcement and DVSPs indicated that the **structure of the LAP enabled them to build strong collaborative relationships.** One domestic violence service provider stated, *"I feel like it brought our agencies together as a team."* Another reported *"LAP has really strengthened our relationship with law enforcement, and they've gotten a good education on domestic violence and our staff have gotten a lot of education on the limitations of law enforcement."* **Law enforcement officers wish they could receive feedback** regarding whether victims connected with services. *"Does it work? I don't know. We never find out if the victim went to their appointment."*

The Collaboration Survey was a site-specific web-based survey distributed by local research teams to a list of agency/service providers who support domestic violence (DV) victims. The survey asked about **characteristics of their collaboration with other providers**. Survey administration occurred at two timepoints within 6-months after implementation- 20-months post implementation. Table 13 provides the number of respondents by site. **Social Network Analysis (SNA)** was employed to analyze and visualize the data that collectively define how the site's domestic violence service network was structured at the time of the survey administrations. In completing the survey, agency representatives rated the type of collaboration they had with other agencies using the Collaboration Scale (Frey et al, 2006) displayed in Figure 6.

Table 13. Number of Respondents to the Collaboration Survey

	First Survey	Last Survey
DI Site 1	20	17
DI Site 2	24	24
DI Site 3	21	21
TI Site 1	9	9
TI Site 2	12	15

Figure 6. Collaboration Scale

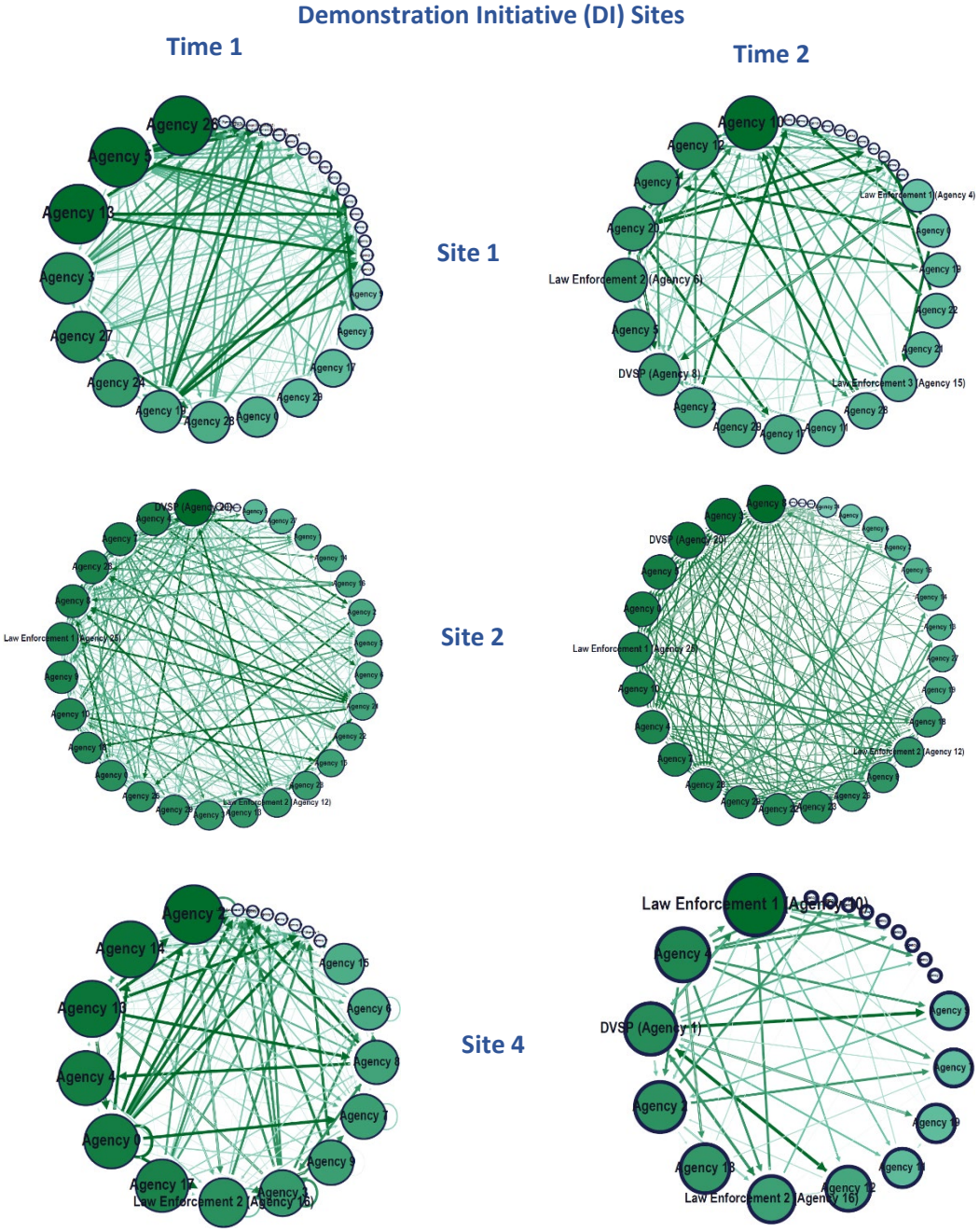


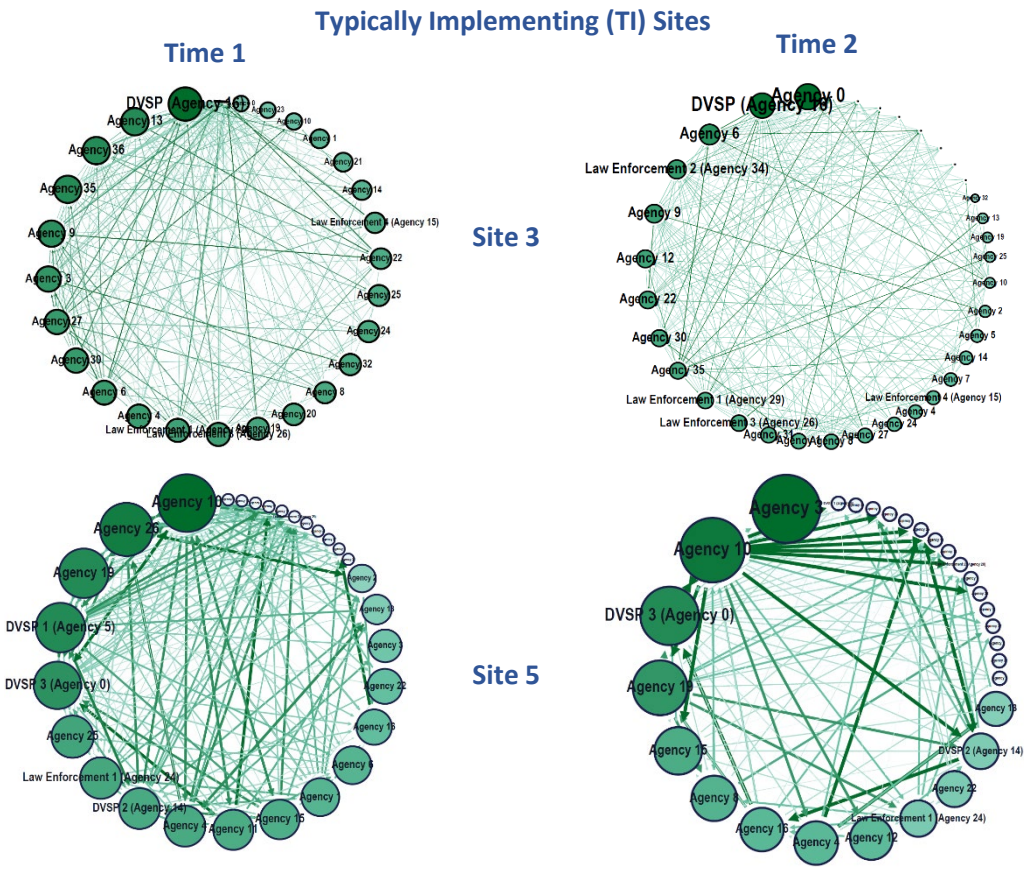
Social network analysis was used to assess **closeness centrality** where stakeholders that evidence high closeness centrality are connected to the rest of the network via shorter paths with fewer intermediary notes when compared to stakeholders with lower centrality scores. In Figure 7, the larger the circle the more agencies a given agency communicates with and darker lines indicate a higher level of collaboration on the collaboration scale. The level of closeness centrality remained consistent across the three survey administrations.

Closeness Centrality. Closeness centrality measures how connected each agency is to the rest of the network. Those agencies that are more connected and therefore have higher centrality scores, have shorter paths and fewer intermediary nodes then those agencies with lower centrality. The agencies with the larger circles are more central to the network, they communicate with lots of other agencies in the network. The darker the line between two agencies the higher they rated their interactions with those agencies

None of the LAP sites had an increase in connectiveness from Time 1 to Time 2. Demonstration Initiative (DI) sites 1 and 3 did not demonstrate any change in connectiveness between Time 1 and Time 2 and DI site 2 demonstrated a decrease in connectiveness over time. Typically Implementing (TI) site 2 maintained the same level of connectedness over time and TI site 1 decreased their level of connectedness between Time 1 and Time 2 (see Figure 7).

Figure 7. LAP Collaboration - Closeness Centrality



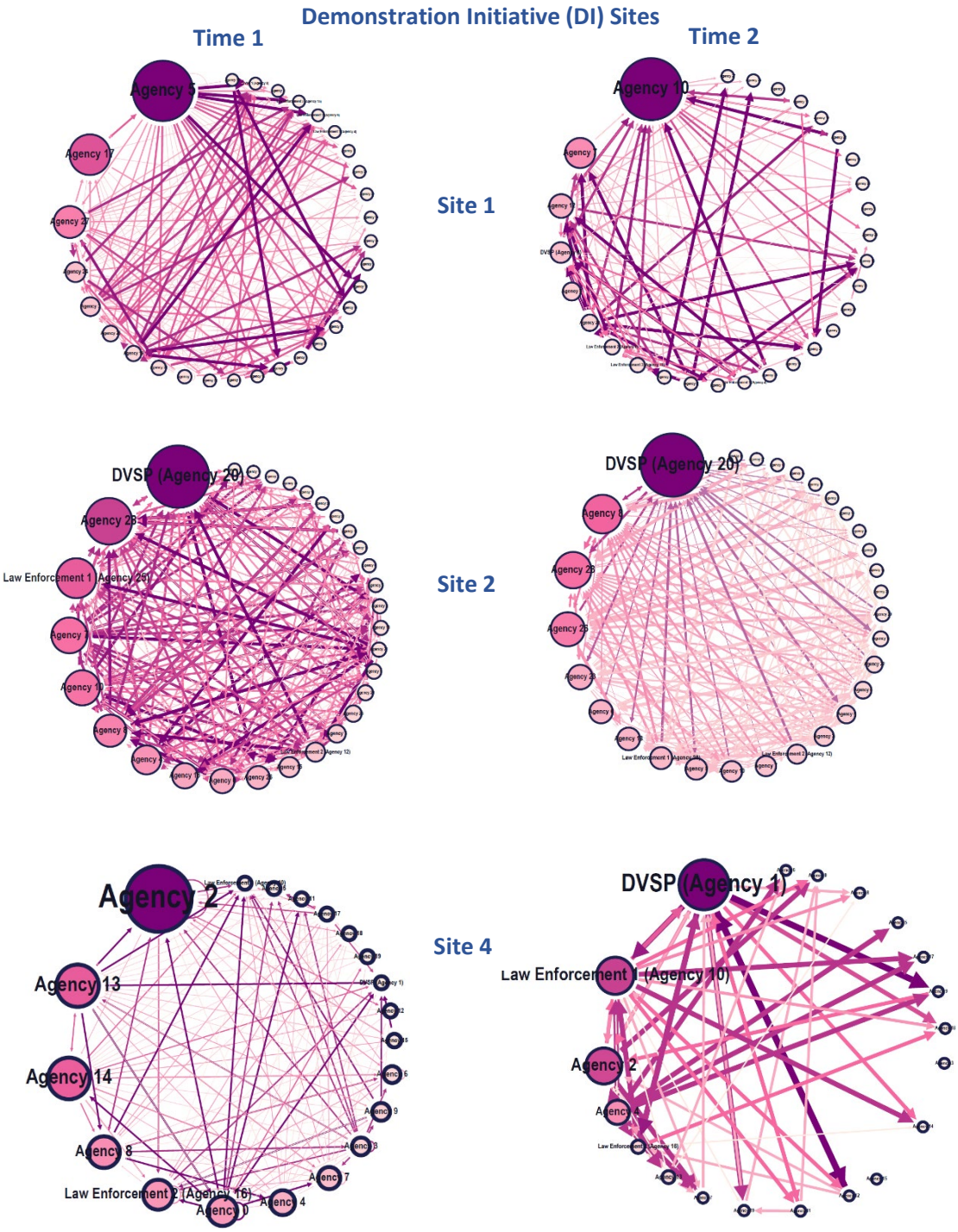


Betweenness Centrality. Betweenness Centrality measures how much an agency mediates or influences connections between other stakeholders. In Figure 8, the agencies with larger circles are those that mediate more of the connections in the network and those with darker lines have stronger interactions.

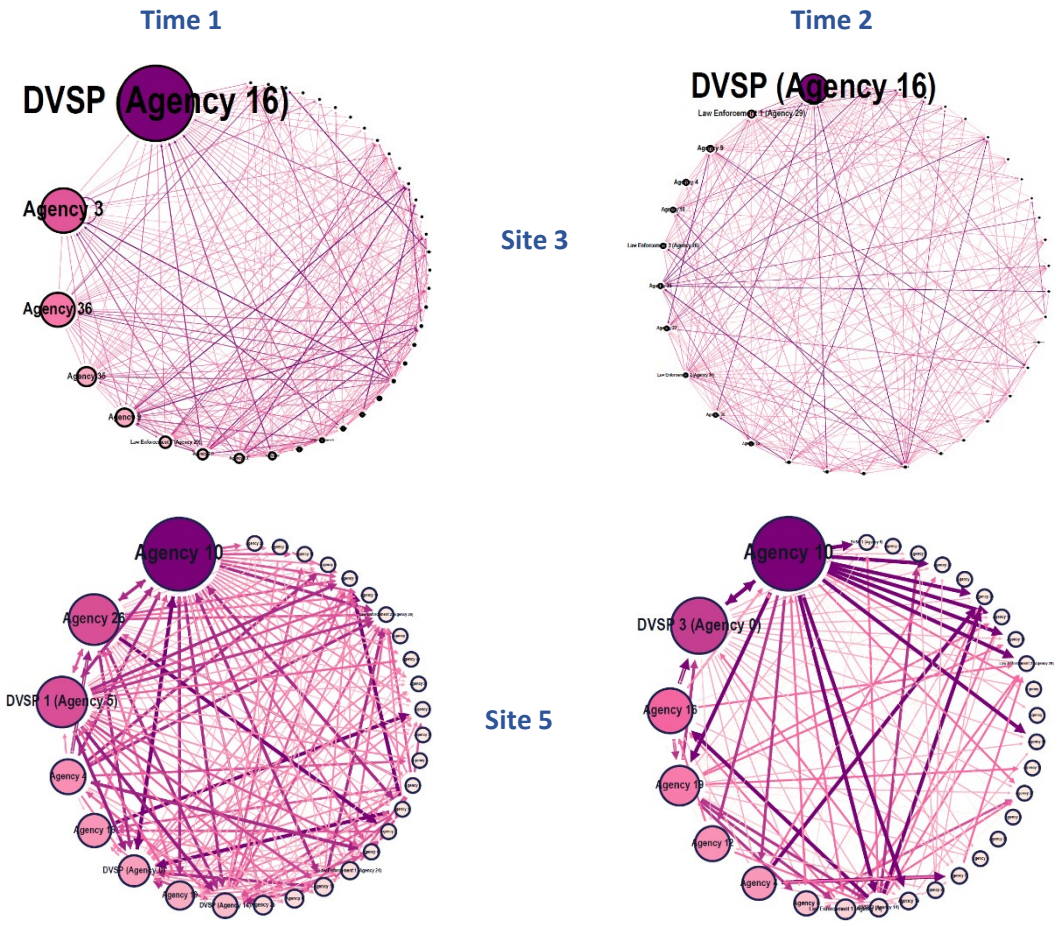
Across sites, the domestic violence service provider (DVSP) was the primary mediator of connections in the sites at Time 2. In DI site 1 and both TI sites the DVSP had the highest betweenness centrality at Time 1 and Time 2. For DI site 2 and DI site 3, while the DVSP was not the primary mediator at T1 this entity moved into that role at Time 2.

As part of the social network analyses Interaction Strength, Rate of Referrals Sent and Rate of Referrals Received were also assessed. **Interaction strength** or the strength of collaborative relationships **did increase in DI site 2, DI site 3 and TI site 2.** There was no change in interaction strength in DI site 1 or TI site 1. With regard to **rate of referrals sent to other agencies in the network, this stayed the same in most sites** with the exception of DI site 3 where it increased and TI site 1 where it decreased. There was **no change in any site regarding the rate of referrals received.**

Figure 8. LAP Collaboration Betweenness Centrality



Typically Implementing Sites (TI)



LAP Recidivism Outcomes

The primary outcome analysis for this evaluation was incidents recorded by the police that involved the same victim-perpetrator dyad (i.e., the same two people in the same roles as they were recorded at the index offense). More specifically, the evaluation team **defined recidivism (a failure) as any subsequent complaint recorded by the LEA, regardless of the offense type or the actions by the police officer** (e.g., arrest) **that involved the same perpetrator victimizing the same victim** at any time after the last action taken by the police at the index incident. The evaluation team defined an **index incident as the first incident involving the dyad that was eligible to produce a screen** after the beginning of each LEA's LAP initiative. This index incident also represents when the evaluation team sought data to track every dyad through the system's processes and overtime, to identify subsequent incidents (i.e., failures). This evaluation identified each victim-perpetrator dyad's "index" incident to avoid a statistical analysis problem that is caused by including multiple cases produced by the same dyad in the recidivism analysis. The following outcome analyses include all of the 4,927 female-victim-index cases as well as the 1,567 male-victim-index cases. **We produce the analyses by the victim's gender because the relative rates of LAP assessments administered and failures involving male (10%) and female (26%) victims are substantially different.**

For this report**, the primary intervention measure was the extent to which the *LAP protocol* was implemented following each index case**. This ordinal measure could range from cases with where the LAP was not administered (i.e., No LAP group) to cases where the victim screened as high risk and spoke with the DV hotline worker (LAP High Risk + Hotline group). In-between these two groups in terms of severity are those who were administered a LAP but assessed as "not high risk" (LAP Not High Risk) and those who were administered a LAP, assessed as high risk but the victim did not speak to the hotline (LAP High Risk). Among the 1,567 male-victim-based index cases, 45% comprised the No LAP group, 29% comprised the LAP Not High Risk group, 13% comprised the LAP High Risk group and the remaining 13% fell into the High Risk + Hotline group. For the 4,927 female-victim-based index cases, 34% comprised the No LAP group, 25% comprised the LAP Not High Risk group, 14% comprised the LAP High Risk group, and the remaining 27% fell into the High Risk + Hotline group (see Table 14). Thus, for the index incidents involving female victims, the most likely intervention was for the police to deliver the entire LAP process of administering the LAP assessment and then connecting the victim to the hotline worker (i.e., LAP High Risk + Hotline group); for the index cases involving male victims, the most likely intervention was for the police was no intervention at all (i.e., not administering the LAP to determine risk; No LAP group).

Table 14. Highest Level of LAP intervention

	Male		Female	
	%	N	%	N
No LAP	45%	705	34%	2,196
LAP Not High Risk	29%	452	25%	1,596
LAP High Risk (no hotline call)	13%	210	14%	930
LAP High Risk + Hotline	13%	200	27%	1,772

Regarding whether the LAP intervention is related to different recidivism/failure rates, the evaluation team produced a series of multivariate regression models that tested whether the failure rates for the No LAP, LAP Not High Risk, and LAP High Risk groups were each different from the failure rate for the LAP High Risk + Hotline group. In other words, **the victims who were administered the LAP, scored as High Risk and spoke to the hotline worker are the victims to whom all other victims are compared for this evaluation.** This specification permits an independent assessment of how each of the three lower intensity LAP intervention levels compares to the most intense level of the intervention in terms of outcomes. Besides specifying a separate dichotomous, indicator measure for three of the four intervention levels, the multivariate regression models included the victim's race, age, and relationship status with the perpetrator, whether the relationship was same-sex or not, each offense type (misdemeanor assault was the most frequent offense and was used as the reference), whether the perpetrator was arrested, the number of prior incidents involving the victim-perpetrator dyad, and the LEA. These additional variables were included in the regression models because the evaluation team did not control the site assignments and because these variables were likely correlated with the degree of intervention level a victim received and were likely related to recidivism. Because of these possibilities, the addition of these "control" variables increases but does not assure that significant differences that arise between each of the three LAP groups and the LAP High Risk + Hotline group are because of the intervention rather than because of one of these other variables.

In addition to using highly specified multivariate regressions, we calculated three versions of the outcome measure; each version has strengths and weaknesses, making no one version of the measure perfect. The three outcome measures are (1) whether the dyad had **any failure** (dichotomous), (2) the **number of failures** recorded by the police any time after the index event (the number of failures per person ranged between 0 and 9 for the male victims and between 0 and 13 among the female victims), and (3) the **likelihood of failure** given that the dyad had no prior failure before that day (i.e., time-to-failure as in survival models). We used logit regression to measure the dichotomous failure, a negative binomial regression to model the number of failures, and Cox regression to model the time-to-first failure. All three regression routines used a maximum likelihood estimation procedure to calculate the regression parameters, the same set of independent variables, and the same set of cases. As such, **the only difference between the three regression models is the metric of the dependent (failure) variable.**

Table 15. Recidivism Rates by LAP intervention and Outcome Dimension

			No LAP		LAP Not High Risk		LAP High Risk		LAP High Risk + Hotline
Female (n=4,927)	Prevalence	Odd-Ratio	0.69	***	0.79	**	0.83		
		%	23%		25%		26%		30%
	Frequency	Odd-Ratio	0.74	***	0.76	***	0.86	*	
		Rate	0.37		0.38		0.43		0.50
	Time-to-first incident	Odd-Ratio	0.79	***	0.69	**	1.06		
		Hazard Rate	0.27		0.31		0.32		0.34
Male (n=1,567)	Prevalence	Odd-Ratio	0.76		0.67		1.02		
		%	9%		8%		12%		12%
	Frequency	Odd-Ratio	0.73		0.67	**	1.09		
		Rate	0.10		0.09		0.15		0.14
	Time-to-first incident	Odd-Ratio	0.75		0.81		0.87		
		Hazard Rate	0.19		0.16		0.23		0.21

Note: * = p-value < 0.05; **=p-value < 0.01; *** = p-value <0.001)

Recidivism Rates by Intervention Level. As can be seen in Table 15 among the 4,928 index events with a female victim, the evaluation team found that the 1,772 victims in the LAP High Risk + Hotline Group consistently experienced greater rates of recidivism than any of the other LAP groups. In other words, **victims who received the highest level of intervention in the LAP had the highest rates of revictimization.** Seven of the nine test comparisons were statistically significantly different (p-value < 0.05) from the reference group (i.e., HR + Hotline). However, just one of these three comparisons between the LAP High Risk and LAP High Risk + Hotline groups was statistically significant (p-value < 0.05); the Lap High Risk Group reported 14% fewer recidivism incidents over the entire follow-up period than those in the LAP High Risk + Hotline group. However, these two groups did not have significantly different prevalence or hazard rates. **For female victims, the No LAP and LAP Not High Risk groups were always related to statistically significant (p-value < 0.01) fewer failures than the LAP High Risk + Hotline group no matter how recidivism was measured** (see Figure 9)**.**

Figure 9. Survival Curve for Female Victims by Level of LAP Intervention

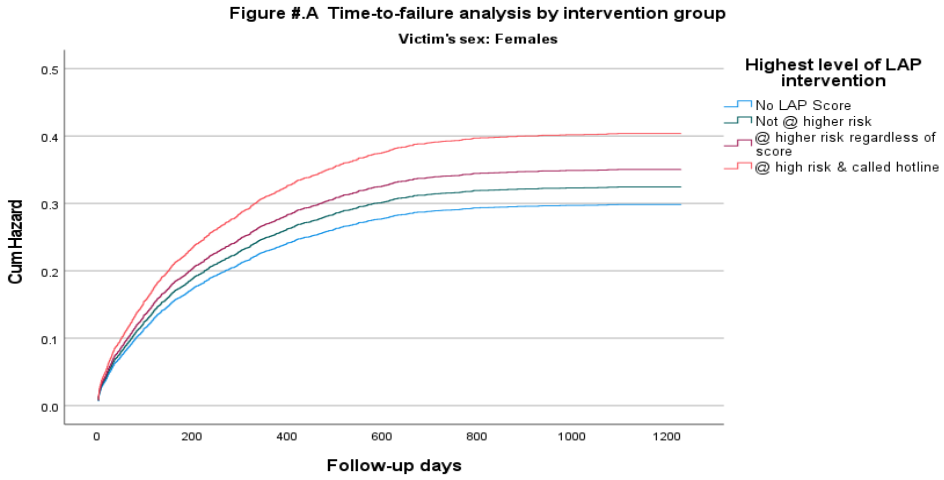
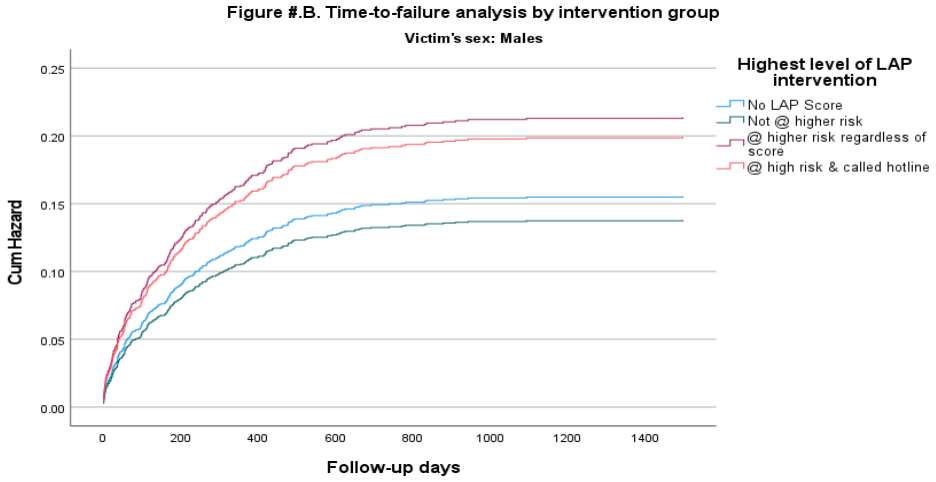


Figure 10. Survival Curve for Male Victims by Level of LAP Intervention



Among the 1,567 index events with male victims, **the LAP High Risk + Hotline group was related to greater recidivism rates in all but one instance** (see Figure 10)**.** However, in contrast to the many statistically significant differences among the female intervention groups, only one of the twelve comparisons for the male victims reached statistical significance (p-value < 0.01). This significant difference was between the LAP Not High Risk group and LAP High Risk + Hotline group. In this comparison, for male victims, the LAP Not High Risk group was related to about 36% fewer failures than the LAP High Risk + Hotline group**.** Nevertheless, **the consistency of the effects pointed toward greater failure rates among those who had a greater level of LAP intervention** (Figure 10)**.**

Homicide Outcomes. Besides measuring overall victimization rates, the evaluation team specifically identified homicides of victims that had taken place among the index events or subsequent incidents involving their index perpetrator. Among the **6,528 IPV victims, five were completed homicide victims during the evaluation period**. The five homicide victims were females. The police recorded four as white and one as Hispanic. They ranged from twenty-two to forty-eight years of age. Three of the five victims were the perpetrators' spouses, and two were the perpetrators' current intimate partners. One victim

had no prior police contact before the homicide, three victims had just one prior contact before the homicide event. One of the four victims had two prior contacts (all five were within the implementation period). Among the four index cases that qualified to be administered the LAP assessment, three victims (75%) had at least one LAP score, and one victim had two prior LAP scores. All three LAPs produced a score indicating that the victim was at high risk. Two of three high-risk victims spoke to the hotline, and one of the two victims spoke to the hotline both times. Overall, less than 0.001 percent of the 3,315 High Risk female victims became a homicide victim, and none of the 2,912 Not High Risk female victims were killed by their partner. Thus, while one victim was never administered the LAP assessment, the **LAP screening process did not misclassify someone as Not High Risk who eventually was killed by their partner**.

Summary of Outcomes for Demonstration Initiative (DI) vs. Typically Implementing (TI) LAP Sites

A final step in the analysis of impact of the LAP initiative, **was to compare the LAP process and outcomes between sites that were part of the demonstration initiative (DI sites), which received enhanced resources and support, and sites that implemented the LAP protocol as it is typically done** (i.e., without enhanced resources and support). Though two sites were involved in this evaluation as typically implementing (TI sites), we could only include data from one these sites in the following analysis due to several limitations with the data provided.[11] Thus, to keep the intervention comparison closely aligned to the original plan, we chose only to include the one demonstration initiative site that matched closest to the remaining typically implementing site based on population size and demographics.

While several differences are described below, there are also many similarities between the two implementation conditions. One of the significant differences is that a LAP assessment was administered in 97% of the IPV incidents in the TI site. This rate is substantially more than the 40% rate of administration in the matched DI site. It is also worth noting that the rate of LAP screen administration in the TI site is not much higher than one of the three demonstration initiative LEA sites that we did not include in this particular analysis (this DI site administered LAP assessments in 85% of their eligible IPV incidents).

No differences emerged in the rates of items positively endorsed across any of the 12 LAP items. Similarly, no differences emerged in the rates of those assessed as High Risk by either scoring or officer's judgement ("gut check") methods. After controlling for victim and incident characteristics, a multivariate logit regression model **found that type of implementation model (demonstration initiative vs. typically implementing) did not affect the odds that an individual was assessed as High Risk in either the male or female victim samples.** When this finding is considered with results of other analyses that compared

[11] One significant limitation regarding the second site was their unwillingness to share data about the victim-perpetrator relationship which meant that we could not exclude domestic violence cases such as incidents involving parents abusing their children, children abusing their parents, and fights between siblings that are not interpersonal violence. This limitation also meant we could not identify intimate partner violence incidents, such as those involving only property damage, that fell outside the community's domestic violence definition. Another significant limitation was that the second site would not share identities of perpetrators that were not arrested making it impossible to calculate a recidivism measure unless the police arrested at the index event and all subsequent events include arrests. This gap would have resulted in a substantially different measure of recidivism than what we used in the other DI and TI sites. A third limitation is that this site was only willing to provide their chosen arrest data through their Freedom of Information Act process.

the rates of positively endorsed items across the 4 demonstration initiative LEAs where more than half the LAP screen items had endorsement rates that were nearly identical across the sites, **we conclude that the higher rates of administering the LAP assessment does not necessarily impact the overall rate that victim was classified as High Risk.**

Among incidents where **the victim was classified as High Risk, there is a substantial difference in the rate victims spoke to the advocate on the hotline regardless of the victim's gender.** Among female victims, 60% in the DI sites versus 29% TI site spoke with the hotline. Similarly, among male victims, 46% of the DI versus 13% in the TI site spoke with the hotline.

Regarding recidivism rates the **TI site's absolute level of recidivism was significantly smaller that the demonstrative initiative's** by nearly 60 percent among female victims (p-value < 0.001), however, there were **no significant differences among these victims across the four LAP groups by the two implementation models** among female victims (see Table 16; p-values for the three two-way-interaction-term-coefficients ranged from 0.244 to 0.616). While recidivism/failure rates are different between the DI and TI sites, **there is no difference between each of the three intervention groups and the High Risk + Hotline group across the two implementation conditions.** In other words, **the intervention effect is about the same in both the DI and TI sites even though the level of recidivism in each of the four intervention groups is significantly higher in the DI site.** Finally, while we present the male-victim comparisons in Table 16, with just seven males comprising the LAP High Risk + Hotline group in the typically implementing site (and just 120 male victims across the four intervention groups), there are far too few cases in the TI site relative to the DI site to test whether the difference in the four recidivism/failure rates varied by the two implementation models.[12] **The results of this analysis comparing the DI and TI sites shows that the impact of LAP implementation both with and without enhanced technical assistance produces the same levels of recidivism.**

Table. 16 Difference in Prevalence of Recidivism by Intervention Group and Training Model

		No LAP	LAP Not High Risk	LAP High Risk	LAP High Risk + Hotline
Females	TI	14%	19%	14%	22%
	n=	14	235	251	100
	DI	29%	38%	33%	35%
	n=	788	198	185	264
Males	TI	18%	17%	21%	0%
	n=	11	64	38	7
	DI	18%	15%	15%	29%
	n=	357	54	39	34

Note: While none of the four intervention group comparisons reached a p-value of < 0.05, the chi-square test did produce a p-value of < 0.03 when the TI and DI female victim samples were pooled. In this pooled analysis, the LAP High Risk + Hotline group, with a 31% rate, had the most significant proportion of victims with a failure. This 31% rate is more than 50% greater than the 22% failure rate found among the LAP High Risk group.

[12] When a logistic regression was produced using just the male sample, the p-values all exceeded 0.999 for the three interaction terms that tested whether the difference between the treatment group varied in size by the implementation model.

Longitudinal Victims Interviews

Individuals were eligible to participate in this component of the evaluation if they had an encounter with police regardless of whether a LAP was administered, the police recorded a criminal offense, or they executed and arrest. Victims younger than 18 and encounters involving dual victims were not eligible to participate in the victim interviews since the LAP protocol is not intended for these populations.

Two methods were used to invite victims to participate in this component of the evaluation. The first method involved police officers distributing cards to all victims whose relationship to the suspect was current or past intimate partner, regardless of the reason for the call to police. This card invited individuals to contact the local research team to determine their eligibility to participate. The second method involved the local research team sending a letter to eligible individuals within one week of the incident for which the police were called informing them of the study and their eligibility to participate. The local research team followed up each letter with a phone call to determine individuals' interest to be screened for eligibility.

Victims were invited to participate in three interviews over a six-month period: at baseline, 3 months after the incident and 6 months after the incident. During the baseline interview, participants reported experiences about the 3 months prior. At the 3-month and 6-month interviews, participants reported back to the date of the prior interview. All interviews were conducted face-to-face (with the exception of four 6-month interviews that were conducted by phone during the beginning of COVID). Victims were compensated $50 for each interview.

Data are analyzed for 654 victims who completed baseline interviews. The majority were female (84.6%). Approximately half were Black or African American (46.2%), 34.7% were White, 7% were multiracial and less than 1 percent were another racial identity. Hispanic participants accounted for 11.3% of the sample. Of the 654 suspects reported during incidents, 17% were arrested at the scene.

Though the sample size of male victims is larger than in many previous studies on domestic violence interventions, it is relatively smaller than the sample of female victims and will require different analytic approaches. Therefore, **findings from the victim interview component of the evaluation are presented only for women**.

Findings from the Female Victim Subsample

On average, female participants were 35 years old. The large majority identified as heterosexual 88%, 9% identified as bisexual, 2% lesbian/homosexual and less than 1% identified with a different sexual orientation or reported they were unsure. Approximately half were Black or African American (45.8%), 34.5% were white, 7% were multiracial and less than 1 percent identified as another racial identity. Hispanic participants accounted for 12% of this subsample. About half (55%) were employed full or part-time, 27% were unemployed and 18% reported not being in the labor force. Regarding victims' partners, 96% were men and, on average, were 36 years old.

Prior to the incident (82%), the majority of female victims and partners lived together, *at the time of* the incident, 51% lived together and *after* the incident 21% lived together. At baseline, 50% of women described their relationship as rocky/unstable, 9% as consistent/solid/stable and 22% as both stable/unstable; 18% reported not being in a relationship at the baseline interview and 2% were unsure of their relationship status. The average duration of relationships at the time of the baseline interview

was approximately 6 years. Eighty-eight percent of women reported their partner was the first to use physical aggression in their romantic relationship.

Overtime, victims' relationship status with her partner changed (see Table 17).

Table 17. Victim Relationship Status

	Baseline		3 months		6 months	
	n	%	n	%	n	%
Consistent stable or solid	61	9.4	70	13.9	65	14.9
Rocky or unstable	321	49.3	85	16.8	55	12.6
Both consistent & rocky	144	22.1	51	10.1	33	7.6
Not in any type of relationship	125	19.2	299	59.2	277	63.7
Total n	**651**		**505**		**435**	

Incident Involving Police as Entry Point

Regarding the incident that served as the entry point for victims to participate in the longitudinal interviews (i.e., index incident), 75% called the police themselves. For 31% of these incidents, the partner was present when the police arrived and of the partners who were present, 49% were arrested at the scene.

As previously mentioned, analyses are conducted to compare separately the No LAP, LAP Not High Risk and LAP High Risk groups to the LAP High Risk + Hotline group. **Of the female participants, 21.0% comprised the No LAP group, 23.9% comprised the LAP Not HR group, 17.2% comprised the LAP HR group, and 38.0% comprised the LAP HR+HL group.**

We controlled for variables that may confound with the implementation of the intervention as indicated by theory and prior research (i.e., victims' race, victims' age, relationship to partner, suspect arrested at the incident and evaluation site.) Additionally, for analyses regarding revictimization, we controlled for IPV at the previous timepoint(s); for analyses regarding fear, we controlled for baseline physical IPV; for analyses regarding services, we controlled for services received in prior timepoint(s); for safety strategies we controlled for baseline physical IPV. Of note, control variables for these analyses differ somewhat from those conducted with administrative data because some the same key factors/variables were not available across both data sets or were unique to a specific outcome. We analyzed data with generalized linear modeling to test the effects of the LAP intervention on revictimization, victims' feelings of safety/fear, and use of services and safety strategies. **The LAP HR+HL group – the group with that received the highest level of the intervention – serves as the reference group since the purpose of the evaluation is to determine the benefit of implementing the LAP protocol and connecting victims determined at high risk with domestic violence hotline services.** Therefore, the No LAP, LAP not HR, and LAP HR groups are not compared to each other but only to the LAP HR+HL group. The overall hypothesis is that, at the least, the LAP HR+HL group would fare significantly better than the LAP HR group.

*In Figures 11 – 23 below, a red asterisk above any given interview timepoint (i.e., baseline, 3 months and 6 months) indicates that particular LAP intervention group significantly differed from the LAP HR+HL group at that timepoint.

Impact of the LAP Intervention on Rates of Revictimization

To determine the impact of the LAP intervention on rates of revictimization we analyzed differences by LAP group on physical, psychological and sexual victimization as well as unwanted pursuit behavior using the generalized linear models described earlier.

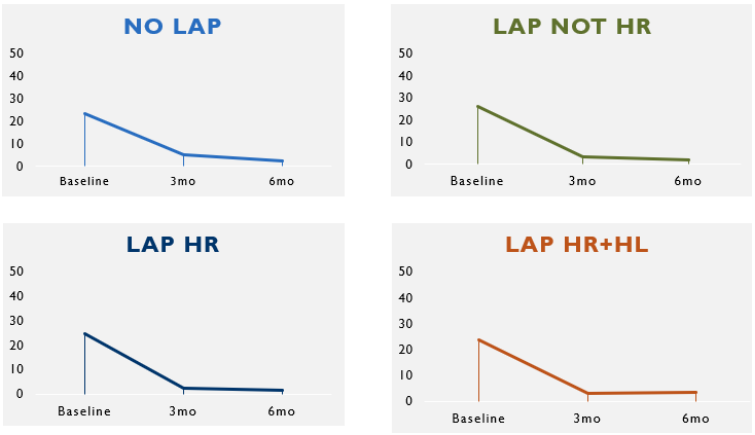


Figure 11. Physical IPV Revictimization. No differences exist between any LAP group and the LAP HR+HL group on physical IPV at any timepoint. Overtime, all groups showed a decrease in physical IPV.

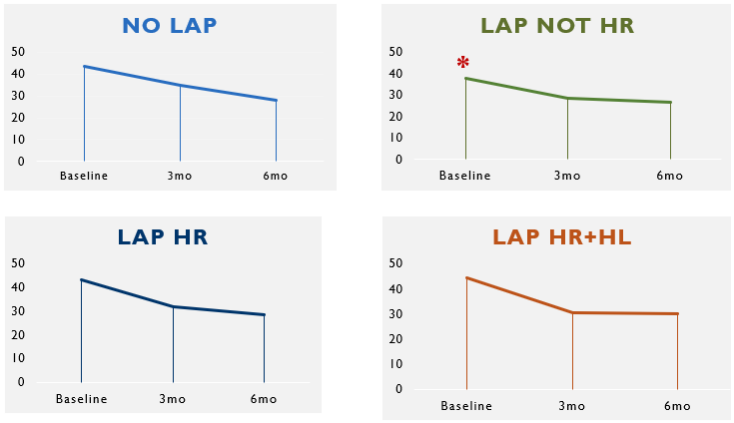


Figure 12. Psychological IPV Revictimization. Baseline psychological IPV was lower in the LAP not HR group than the LAP HR+HL group. No other differences exist between any other LAP group and the LAP HR+HL group on psychological IPV at any timepoint. Overtime, all groups showed a decrease in psychological IPV.

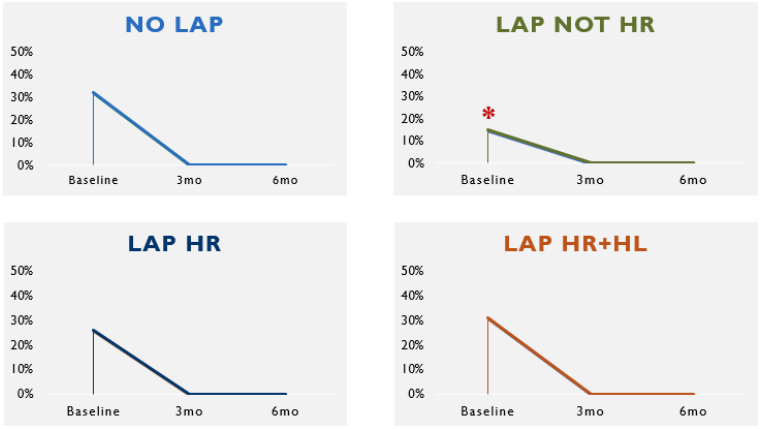


Figure 13. Sexual IPV Revictimization. Baseline sexual IPV was lower in the LAP not HR group than the LAP HR+HL group. No other differences exist between any other LAP group and the LAP HR+HL group on sexual IPV at any timepoint. Overtime, all groups showed a decrease in sexual IPV.

Figure 14. Unwanted Pursuit Revictimization. Baseline unwanted pursuit was lower in the LAP not HR group than the LAP HR+HL group. At 3 months, unwanted pursuit was higher in the No LAP group than the LAP HR+HL group. No other differences exist between any other LAP group and the LAP HR+HL group on unwanted pursuit at any other timepoint.

Summary of rates of revictimization. For most types of victimization, the No LAP, LAP Not HR and LAP HR groups did not differ from the LAP HR+HL group at baseline, meaning that they are essentially the same in terms of the physical, psychological, and sexual IPV and unwanted pursuit behavior coming into the study. The exception was for the LAP Not HR group in that women in that group had significantly lower psychological and sexual IPV and unwanted pursuit behavior that the LAP HR+HL group- as would be expected by their categorization as Not High Risk. **Notably, the LAP not HR group did not differ from the LAP HR+HL on physical IPV at baseline**. The only other exception was between the No LAP group and the LAP HR+HL group at 3 months: **the No LAP group experienced significantly higher unwanted pursuit behaviors than the LAP HR+HL group**.

Impact on Victim Reported Feelings of Safety/Fear

Among those who reported face to face contact at each timepoint, a single item assessed safety/fear with the question, "I felt safe that my partner would not hurt me" revealed variability (see Figure 15). Feelings of safety/fear decreased between baseline and 6 months.

Figure 15. Safety/Fear Over Time

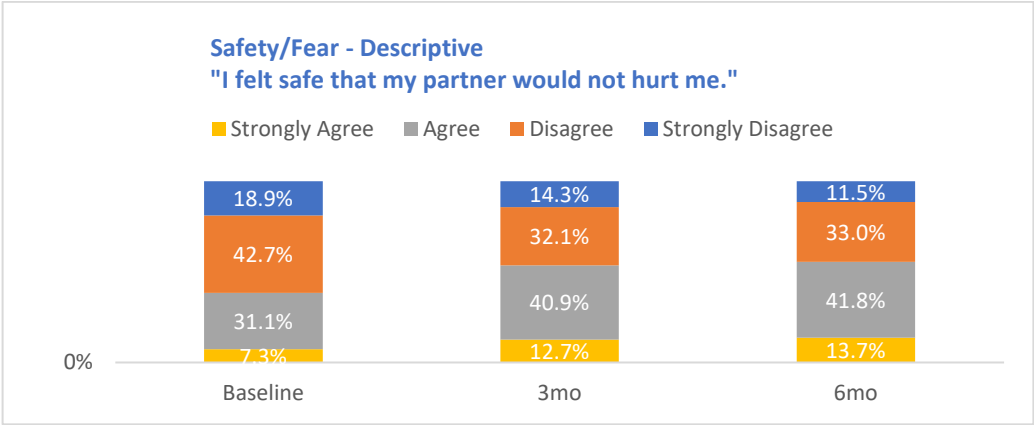
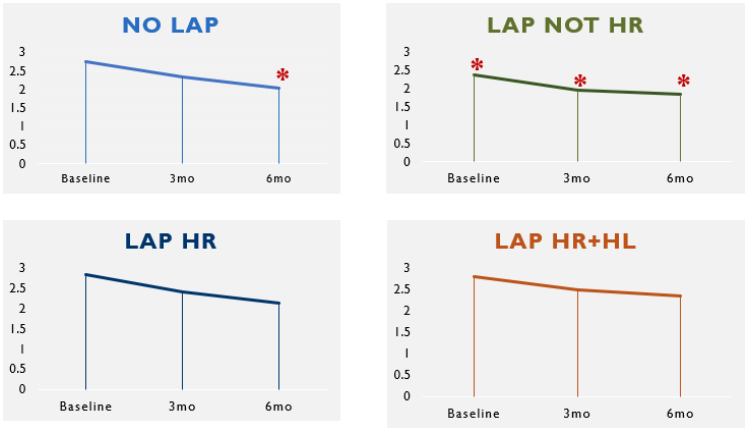


Figure 16. Safety/Fear by LAP Condition. Results of the generalized linear models using an 11-item Fear of IPV scale revealed that at baseline, only the LAP Not HR group differed from the LAP HR+HL group in that the LAP Not HR group experienced less fear; **the No LAP group and the LAP HR essentially experienced levels of fear equal to the LAP HR+HL group at baseline**. The LAP Not HR group continued to report significantly lower levels of fear than the LAP HR+HL group at the 3- and 6-month interviews. Finally, the No LAP group reported significantly lower levels of fear than the LAP HR+HL group at the 6-month mark. **The LAP HR group and the LAP HR+HL group experienced the same levels of fear at each timepoint across the study**.



Impact on Victim Participation in Services and Safety Strategies (Including Protective Orders)

The original design called for an evaluation of victims' participation in DV service systems by gathering data directly from the local DV service providers (DVSP). To do so, the DVSPs required that victims sign a release of information for their service data to be released to the evaluation team. There was significantly variability across sites in terms of the number of releases that were signed, though most sites had few signed releases relative to the number of cases where there was the potential for the LAP to be administered. Therefore, data are not available in the way we had planned to evaluate victim participation in DV service systems across all of the victims who came into contact with the police. Therefore, we shifted to examining victims' participation in service systems in the subset of victims that participated in the longitudinal victim interviews, and again, report only on female participants. The overall expectation is that the LAP HR+HL group, because they had been connected with the domestic violence hotline at the scene, would have higher rates/odds of utilizing services compared to the three groups that did not meet criteria as high risk and connect to the hotline.

At the baseline, 3-month and 6-month interviews, victims were asked to select from a list those "services you used specifically to deal with the conflict in your relationship." Figure 17 depicts frequency of use among the sample of female victims across all three study points.

Figure 17. Frequency of Service Use

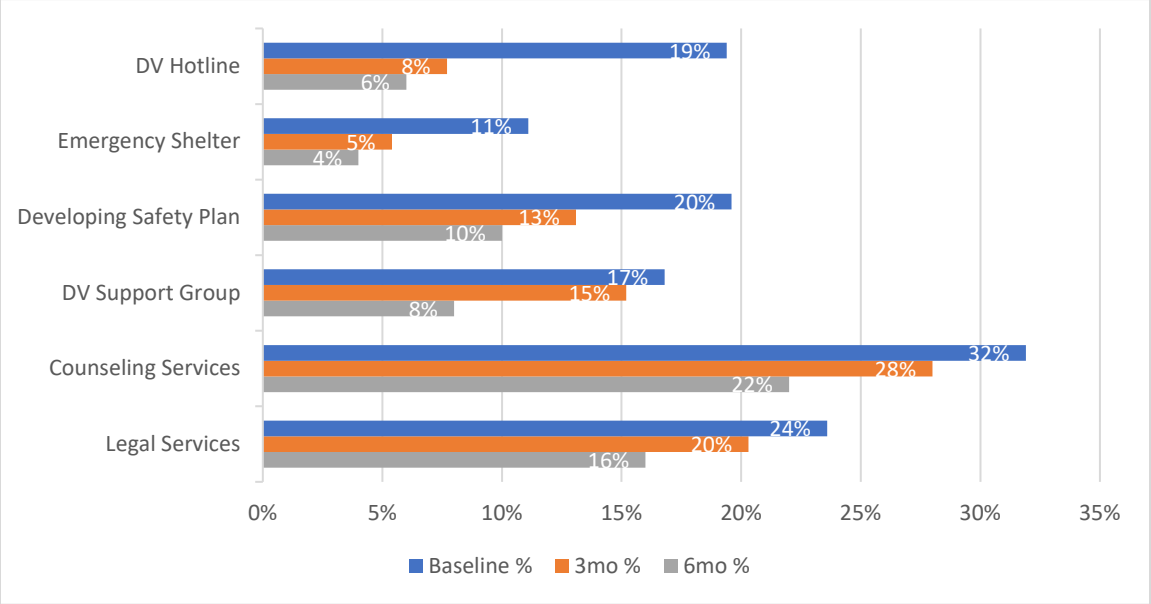
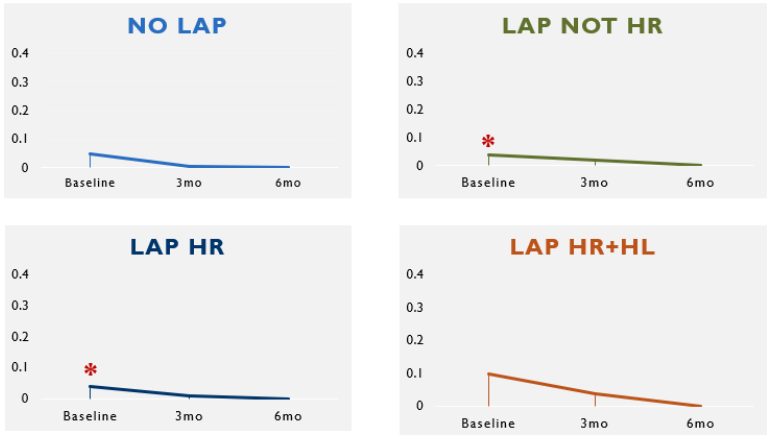


Figure 18. Use of DV Hotline per Victim Self Report. Results of the generalized linear models revealed that, at baseline, the No LAP and LAP Not HR groups reported lower odds of using the DV hotline than the LAP HR+HL group. **Notably, the LAP HR group essentially had the same odds of using the hotline as the LAP HR+HL group; this finding is unexpected and critically important to understanding the implementation and impact of the LAP.**

A fundamental assumption of the LAP is that many victims who are at high risk of homicide do not connect with DV services and therefore, a law enforcement risk assessment is needed to determine those at high risk so that officers can connect these victims with DV providers on the scene. **These findings regarding the lack of difference in hotline utilization between the LAP HR and LAP HR+HL groups suggest that those at high risk have the same odds of having connected with the hotline in the three months prior to the baseline interview or connecting with a DV hotline regardless of what happens at the scene when a LAP assessment is administered.** These findings should be considered in light of the findings presented earlier in this report that, among women, the odds of administering a LAP assessment are increased according to the number of prior incidents.

Figure 19. Use of Emergency Shelter. At baseline, the odds of accessing emergency shelter are significantly lower for the LAP Not HR group and the LAP HR group compared to the LAP HR+HL group, suggesting that **those who were administered the LAP assessment and who then connected with the hotline are more likely to use emergency shelter. However, there were essentially no differences between the No LAP group and the LAP HR+HL group at baseline, or any other timepoint on use of emergency shelter.**



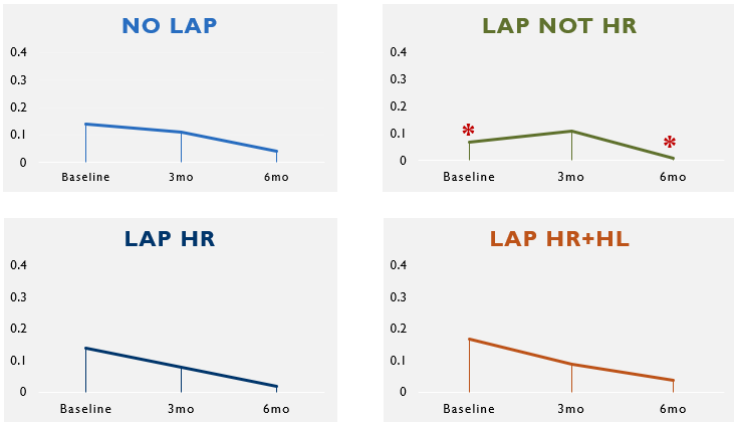
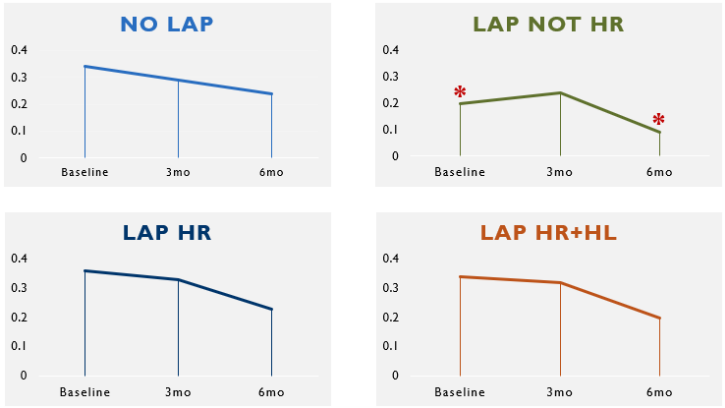


Figure 20. Development of a Safety Plan. At baseline and 6 months, the odds of using services to develop a safety plan are significantly lower for the LAP Not HR group compared to the LAP HR+HL group – however these groups were equivalent at the 3-month timepoint. Essentially, **the No LAP group and the LAP HR group had the same odds of using services to develop a safety plan as the LAP HR+HL group at all timepoints of the study**.

Figure 21. Attending DV Support Group. At baseline, the odds of attending a DV support group are significantly lower for the No LAP and the LAP Not HR group than the LAP HR+HL group; this difference persists at the 3-month mark for the No LAP group. **At all time points, the LAP HR and LAP HR+HL essentially have the same odds of attending a DV support group**.

Figure 22. Use of Counseling Services
At baseline and 6-months, the odds of attending counseling services is significantly lower for the LAP Not HR group compared to the LAP HR+HL group. **The No LAP and LAP HR groups had essentially the same odds of using counseling as the LAP HR+HL group**.



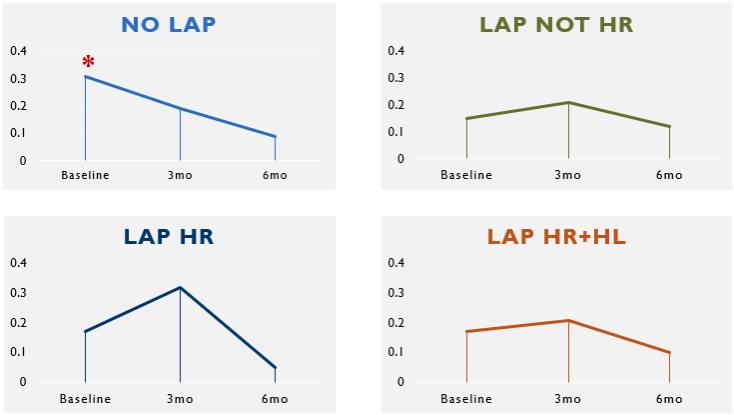


Figure 23. Use of Legal Advice/Services.
At baseline, the odds of using legal advice/services from a DVSP were significantly higher for the No LAP group compared to the LAP HR+HL group. **All other groups at all other timepoints essentially had the same odds of accessing legal advice/services from a DVSP as the LAP HR+HL group.**

Service Use Summary. Generally speaking, the LAP HR and LAP HR+HL groups did not differ from each other in terms of types of services utilized, which is unexpected. One potential explanation for this, among many, is that since these two groups had essentially the same rate of connecting with the hotline at some point before or at the baseline interview and they may have been made aware of what services were available to support them prior to the index incident and LAP intervention. The only service for which we see a difference between these groups is in use of emergency shelter at baseline. Perhaps this might give us a glimpse into one of many reasons victims might chose to speak to the hotline after being determined high risk based on the LAP assessment– because they need immediate assistance. Perhaps other women, because they have connected with a hotline at some point in the past, do not feel the need to talk with the hotline at the scene. **Future research and evaluation would benefit from elucidating the ways in which victims become aware of and connect with the hotline and services to determine if the LAP protocol should be modified.** Separately, **differences typically emerged between the LAP Not HR and the LAP HR+HL group, which would be expected**. **Differences between the No LAP and LAP HR+HL groups were service dependent, with the No LAP groups sometimes having lower odds** of using a particular service (i.e., DV hotline and DV support group) **and other times having higher odds** (legal advice from a DVSP). Like for other outcomes in the evaluation, **these findings speak to heterogeneity in the No LAP group**. One possibility is that officers previously administered a LAP assessment and therefore, did not administer one again at the index incident or, that factors were not present during the incident or were present but not acknowledges by officers that indicated a LAP assessment should be conducted.

Safety Strategies

Finally, we examined differences in use of safety strategies because an important question regarding impact of the intervention is whether individuals are able to implement strategies to increase their safety. With that said, the onus is not on the victim to reduce victimization.

At the baseline, 3-month and 6-month interviews, victims were asked to select from a list those strategies they used "to stop, prevent or escape the conflict in their relationship." Strategies were then grouped into the following four categories (see Figure 24):

- **Removed or hid weapons** so partner couldn't get at them, or so that victim could (2 items).
- **Planning to leave** included strategies such as keeping important numbers the victim could use to get help, keeping a bag of necessities packed, working out an escape plan, developing code so others would know the victim was in danger (6 items)
- **Criminal justice strategies** were calling the police or obtaining a protective or restraining order (2 items)
- **Creating distance** captured staying with a friend or family member to keep themselves safe, ended or tried to end the relationship, changing locks or otherwise improving security (3 items)

Figure 24. Frequency of Use of Safety Strategies Over Time

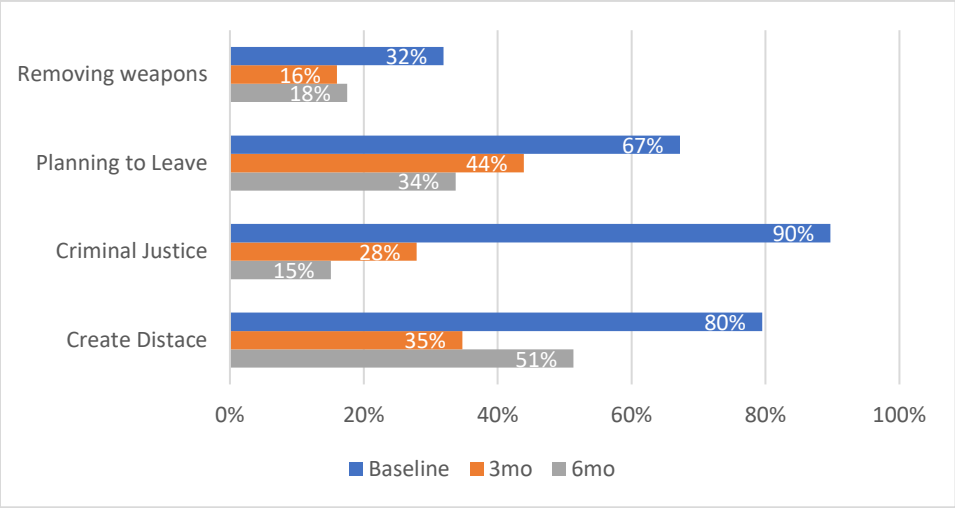
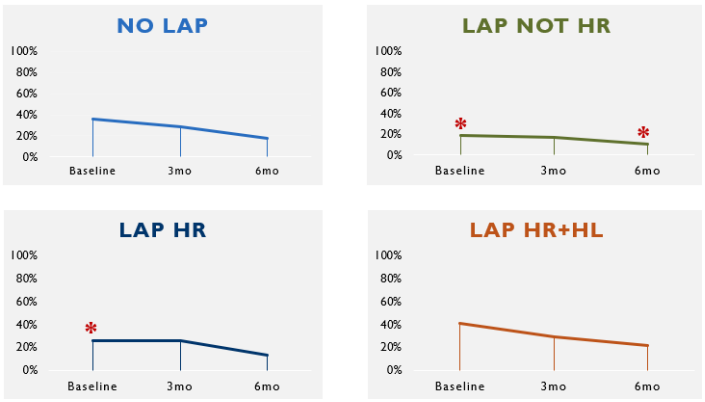


Figure 25. Safety Strategy: Removed or Hid Weapons. At baseline, **the odds of removing or hiding weapons to stop, prevent or escape the conflict in the relationship was lower for the LAP Not HR and the LAP HR groups compared to the LAP HR+HL group.** This difference persisted at 6 months for the LAP Not HR group. The No LAP and LAP HR+HL groups essentially had the same odds of removing or hiding weapons. **This is one of the few variables for which we see a difference between the LAP**



HR and the LAP HR+HL group. One strong possibility is that when women in the LAP HR+HL group spoke to someone on the hotline at the scene, the brief safety planning that occurred included a focus on immediate safety and hiding weapons; this is explicitly addressed in the LAP training and technical assistance protocol for DV providers.

Figure 26. Safety Strategy: Planning to Leave. At baseline, **the LAP Not HR and the LAP HR groups had significantly lower likelihood of using strategies that focus on safety in the event the victim plans to leave than the LAP HR+HL group**. This difference persisted across all timepoints for the LAP not HR group. **There essentially were no differences in the use of these safety strategies at any timepoint between the No LAP and LAP HR+HL groups, or at 3 and 6 months for the LAP HR and LAP HR+HL group.** Again, related to LAP training and technical assistance, the brief safety planning that occurred on the hotline was to focus on immediate safety including planning to leave or limiting contact if the victim so chose.

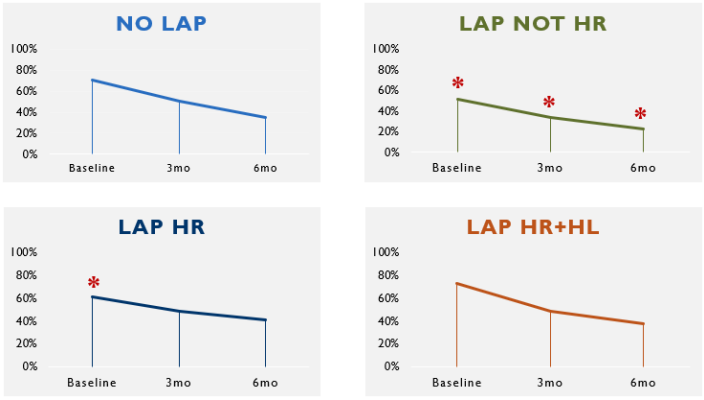
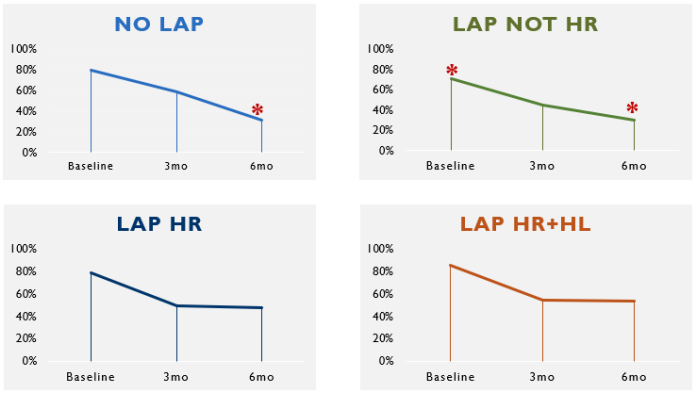


Figure 27. Safety Strategy: Creating Distance. At baseline, the likelihood of using strategies to create distance was significantly lower for the LAP Not HR group compared to the LAP HR+HL group. **The No LAP group was equally as likely as the LAP HR+HL group to use strategies to create distance at baseline and 3 months.** However, at 6 months, the No LAP group was significantly less likely to use these strategies than the LAP HR+HL group. **The LAP HR and LAP HR+HL essentially had the same likelihood of using these strategies at each time point.**



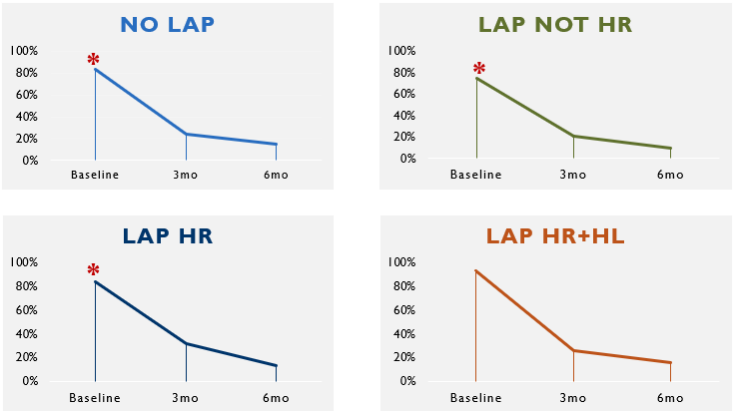


Figure 28. Safety Strategy: Use Criminal Justice System. At baseline, all groups had a lower likelihood of using the criminal justice system than the LAP HR+HL group. **At 3 and 6 months, all groups were essentially equivalent**.

Results for the Domestic Violence High Risk Team Implementation

Domestic Violence High Risk Team (DVHRT) model was created by the Jeanne Geiger Crisis Center (2014). In this model law enforcement officers conduct a lethality screen using the Danger Assessment – Law Enforcement (DA-LE; Messing, Campbell, Dunne & Dubus, 2012, 2020) to determine if victims are at higher risk for homicide. Those victims who are at higher risk are referred to a domestic violence detective and an advocate and are invited to be followed by high risk team comprised of domestic violence service providers, law enforcement and individuals from across the criminal justice system who work together to hold offenders accountable and victims safe. Victims can also be referred to the high risk team through community organizations trained to screen victims using the Danger Assessment (Campbell, Weber & Glass, 2009).

DA-LE Implementation. Within the evaluation team's selection and filtering criteria, **the LEA responded to 5,359 IP incidents during the evaluation period[13].** It is these incidents that constitute cases that are eligible for a DA-LE screen (see Table 18). Eighty percent (n=4,304) of these incidents involved a female victim. Seventy percent (n=3,747) of the incidents involved a Black/African American victim, and 28% involved a white victim. The average age of these 5,359 victims at the time of the incident is 33 years old. Seventy-two percent involved non-married intimate partners (n=2,894), 11% involved spouses, and five percent involved ex-spouses. Besides these three relationship types, 10% of the 5,359 incidents involved a dyad that was not recorded by the officers as an IP relationship at that incident but was recorded as an IP at some other incident in the database. We label these incidents as involving "other" relationships and include them because they could have produced a screen if the victim or perpetrator had described their relationship status during the incident like they had during another incident.[14]

Table 18. Rate of Initiating a DA-LE by Victim Demographics

	DA-LE	Total N
Victim's Sex		
Female	50%	4,304
Male	34%	1,055
Victim's record race		
African American	45%	3,747
White	53%	1,502
Other	41%	110
Victim-Perpetrator Relationship		
Intimate Partner	51%	3,894
Ex-Spouse	40%	288
Spouse	60%	612
Other	7%	565

Note: Using a Person Chi-Square test all three bi-variate comparisons reach statistically significant difference (p-value < 0.05)

[13] For the analysis that describes how the LEA implemented the DA-LE protocol, the EVALUATION TEAM removed from the IP incident registry four incidents where the LEA had recorded that incident involved a "dead body," "manslaughter," "vehicle homicide," or "homicide" because there it was no victim to screen.

[14] Because we searched for other records involving same the victim-perpetrator dyad, we added 565 incidents that involved an IP relationship but were not recorded at that incident as IP by the police. Therefore, it is probable that the registry we are using does not include all "IPV" incidents because we had no opportunity to learn about some incidents because many dyads have no other incident in the LEA databases. The number of IP missed because the parties did not identify themselves to the police as intimates is likely sizable given that more than 75% of incidents involved a relationship dyad who had no other incident in the file. In other words, it is likely that more than a trivial number of incidents are not included in the batch of IPV incidents because during the only incident involving a dyad it was not described by the police as an IP relationship.

Among these 5,359 IP incidents, 47 percent (n=2,507) had DA-LE logged by the local evaluation team. These DA-LEs took place significantly more often when victims were female (49% vs. 32%; p-value < 0.05) and more often among younger victims. In contrast to incidents involving the non-married, intimate partners, the victims who are married to their perpetrator are more likely screened (49% vs. 59%); but incidents are less likely screened (6.4% of these cases produced a screen) when the incident was coded as "other" (e.g., non-intimate) relationship. In contrast to incidents involving a felony assault offense (the most prevalent of the recorded offenses), those involving another offense, such as simple assaults, threats, and property crimes, were less likely to produce a screen. In contrast to incidents where no weapon was recorded, those involving a weapon that was neither a firearm nor knife are more likely screened (of note, neither those with a documented weapon or a knife increased the likelihood of a screen). Those incidents that produced an arrest were also more likely screened as are incidents involving dyads that had more prior recorded incidents, incidents during the weekend, and incidents earlier in the evaluation period. Of note, while incidents involving a white victim involved more screens by about 20% than incidents involving either a Black/African American or victims whose race/ethnicity is "other" (52% vs. 43% and 39%), the most fully specified multivariate regression analyses did not find that these three screening rates are significantly different.

The LEA produced 2,429 DA-LEs with a score during the two-year evaluation period. Eighty-six percent (n=2,096) involved a female victim. Sixty-six percent involved a Black/African American victim, and 32% involved a white victim. The remaining 2% involved someone the police had recorded as one of several other races. Eighty percent involved an intimate partner, 15% involved a spouse, and 5% involved an "ex-spouse." The remaining 36 screens involved a victim-perpetrator dyad that was not described to the police as an intimate relationship at the time of the incident but was described to the police as intimate during another incident.

Table 19. Percent responding "Yes" to DA-LE items by Victim's sex

	Males	Females	Total	Chi-Square Tests	Difference by Sex
1. Has the physical violence increased in severity or frequency over the past year?	59%	66%	65%	**0.026**	-6%
2. Have you left him/her after living together in the past year?	51%	56%	55%	0.065	-5%
3. Does he/she control most or all of your daily activities?	33%	44%	43%	**0.000**	-11%
4. Has he/she tried to kill you?	32%	33%	33%	0.594	-2%
5. Has he/she ever threatened to kill you?	59%	66%	65%	**0.020**	-7%
6. Has he/she used a weapon against you or threatened you with a lethal weapon?	56%	35%	38%	**0.000**	22%
7. Has he/she ever tried to choke (strangle) you?	41%	72%	67%	**0.000**	-31%
8. Has he/she choked (strangled) you multiple times?	26%	49%	46%	**0.000**	-23%
9. Do you believe he/she is capable of killing you?	60%	72%	70%	**0.000**	-11%
10. Does he/she own a gun?	9%	25%	23%	**0.000**	-17%
11. Has he/she ever threatened or tried to commit suicide?	39%	35%	35%	0.105	5%
Average Positive Response	42%	50%	49%		-8%

Item Analysis. The DA-LE screening instrument contains eleven yes and no items. Positive (e.g., "yes") responses to these 11 questioned ranged from a low of 23% (*10. Does he/she own a gun?*) to a high of 70% (*9. Do you believe he/she is capable of killing you?*). **The average positive response rate across the 11 items is 49%; the average number of positive responses is 5.25 out of 11 questions.** Regarding response rate differences across demographic groups, there are no differences in positive response rates across the three victim-perpetrator relationship types. Victims noted as White responded positively to more items than Black/African Americans (5.0 vs. 4.6 items), while the other race group responded positively at about the same rate as the Black/African Americans victims. Furthermore, female victims responded "yes" significantly more often than did males (5.4 vs. 4.5). By item, males and female victims responded positively at about the same rate across just three of the 11 items. These three questions are #2. *Have you left him/her after living together in the past year* (51 vs. 56%), #4? *Has he/she tried to kill you* (32 vs. 33%), and #11 *Has he/she ever threatened or tried to commit suicide* (39 vs. 35%). Among the other eight items, female victims responded with a "yes" answer significantly more often than males (p-value < 0.05). The different response rates ranged from as small as seven percent for item #*1. Has the physical violence increased in severity or frequency over the past year* to a reporting gap of a 31 percent difference for item #*7. Has he/she ever tried to choke (strangle) you*. Of note, **nearly three-quarters of the screened females reported that their intimate *partner had choked them* and was *capable* of killing them** (see Table 19).

DA-LE Fidelity Analysis

The data to assess fidelity in implementing the DA-LE protocol was extracted from the key informant interview data collected during site visits with DVHRT site. This data was collected after 4 months of implementation and again after 16 and 28 months of implementation. The evaluation team conducted interviews with law enforcement, domestic violence service providers, victims and members of the high risk team (HRT) and focus groups were conducted with Jeanie Geiger team after the DVHRT model was implemented and a final interview in 2021. The breakdown of key informant interviews can be found in Table 20.

Table 20. HRT Key Informant Interview Participants

	Time 1	Time 2	Time 3
LE Officers	21	24	18
DVSP staff	7	8	7
Victims	7	12	13
HRT members	18	14	15
TOTAL	**53**	**58**	**53**

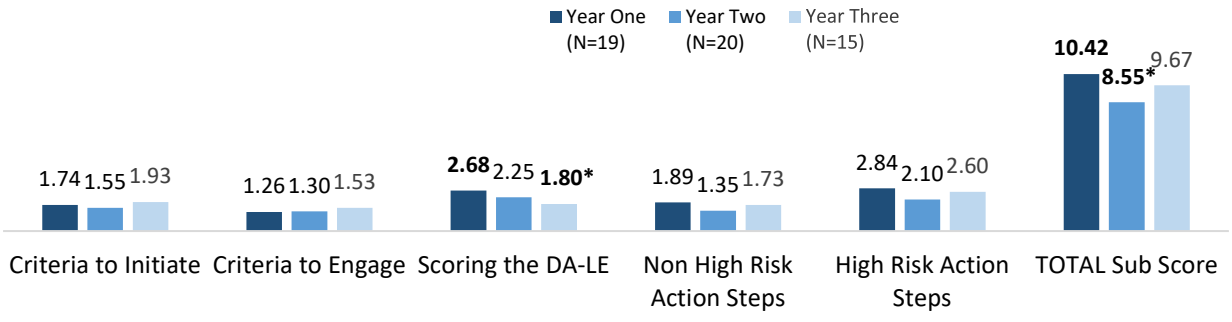
The Fidelity tool was based on the DA-LE training curriculum and the information was coded independently by two staff. The tool was completed by coding data from the key informant interviews conducted with law enforcement officers. Coding was completed independently by two coders. Table 21 provides the items in the DA-LE fidelity tool and the scoring.

Table 21. Overview of the Tool to Assess Law Enforcement Fidelity in Implementing the DA-LE

Construct	**Items** (score = 1 if present)	Maximum Score by Domain
Criteria to initiate DA-LE	Intimate partner involvement. Collect victim information only. Identify if victim needs bilingual officer/language line. Identify primary aggressor, if can't call sergeant/no DA-LE Instinct/training indicates a DA-LE is needed.	2
Conducting the DA-LE	Inform victim about DA-LE in positive way, part of investigation Separate parties & conduct DA-LE without the offender present Ask questions in order and verbatim Ask all questions Probe for more details & write on form	2
Score the DA-LE	Remember specifics of scoring or state instructions on form Knows they can override by checking further review Knows to document override	3
Non-high Risk Action Steps	Knows to supportive referral to DV services to ALL victims Knows to give victim Crime Victim's Rights booklet & to show victim officer contact info & case info Prepare report & submit with other documentation	2
High Risk Action Steps	Inform the victim that their situation is extremely dangerous Tell victim that a DV unit detective & DV advocate will follow-up Knows to supportive referral to DV services to ALL victims Knows to give victim Crime Victim's Rights booklet & to show victim officer contact info & case info Prepare report & submit with other documentation	3

Fidelity in implementing DA-LE steps is consistent across the three assessment periods with officers reporting about the same level of adherence to each phase of the process (see Figure 29). The only significant difference found was in officer reporting that they know how to score the DA-LE were significantly lower at the year 3 assessment when compared to the year 1 assessment.

Figure 29. DA-LE Fidelity Score Over Time

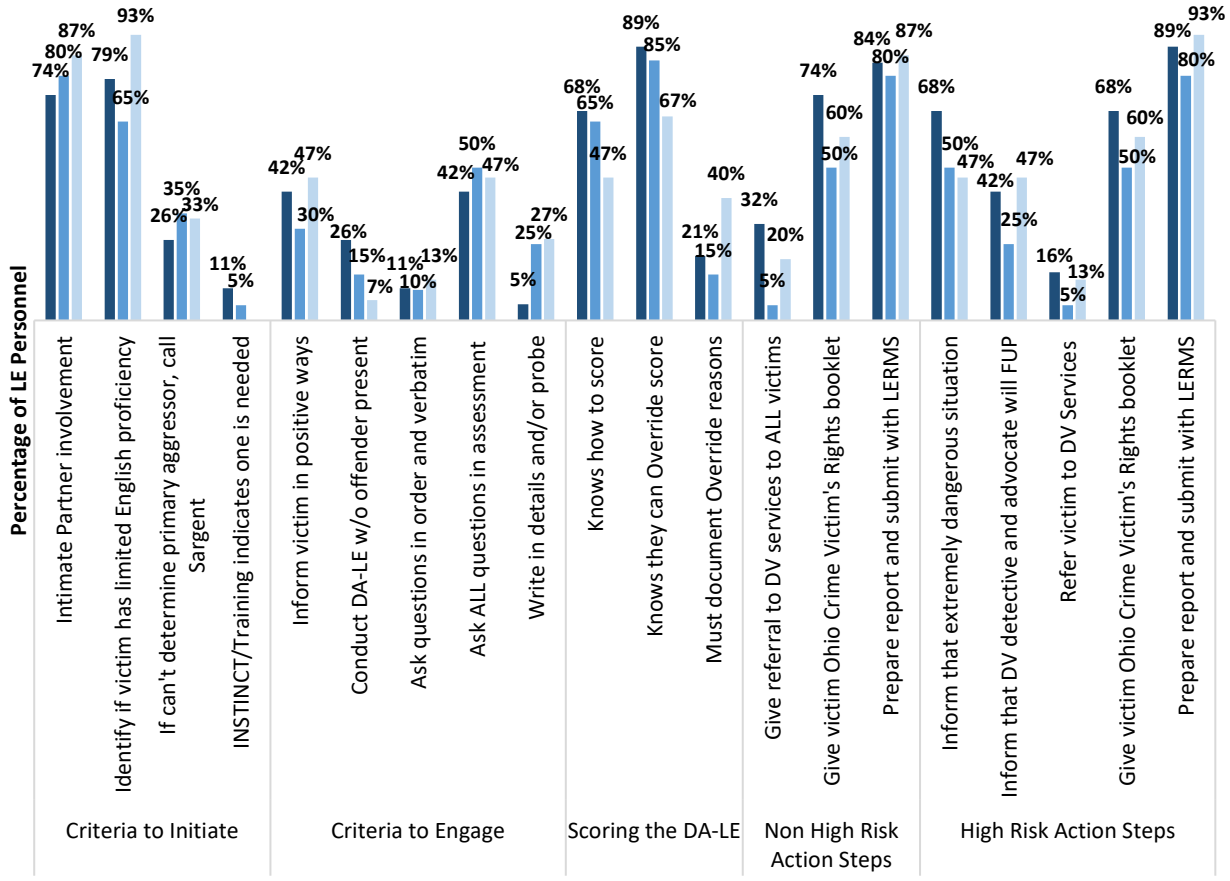


Examining the percentage of officers who indicated knowledge in each area is instructive (see Figure 30). Officers report that **they know that the DA-LE is for intimate partners**, that it should be administered in **the victim's primary/preferred language**, for the most part **report knowing how to**

score the DA-LE although that did decrease over time. They also report that they **know that they can override the score**, know to **prepare their reports** and **to give victim information on their rights.**

Officers had **less knowledge** of procedures when **they could not identify the primary aggressor** (officers who indicated knowledge range from 26% to 35%) and that they should conduct the DA-LE **without the offender present** (7%-26%). Few officers reported that they should **ask all questions in order and verbatim** (10%-13%) or the importance of **writing in details of what victim says on the form** and probe for information (5%-27%). While the percent of officers who reported the need to **document over-rides** improved overtime at Year 3 only 40 percent described this aspect of the process. Most officers did not report knowing that they **should refer all victims to DV services** (5%-32% for low risk and 5%-16% for high risk or that they should **inform high risk victims that DV detective and advocate** will follow-up (25%-47%).

Figure 30. Percent of Officers Reporting DA-LE Steps Over Time

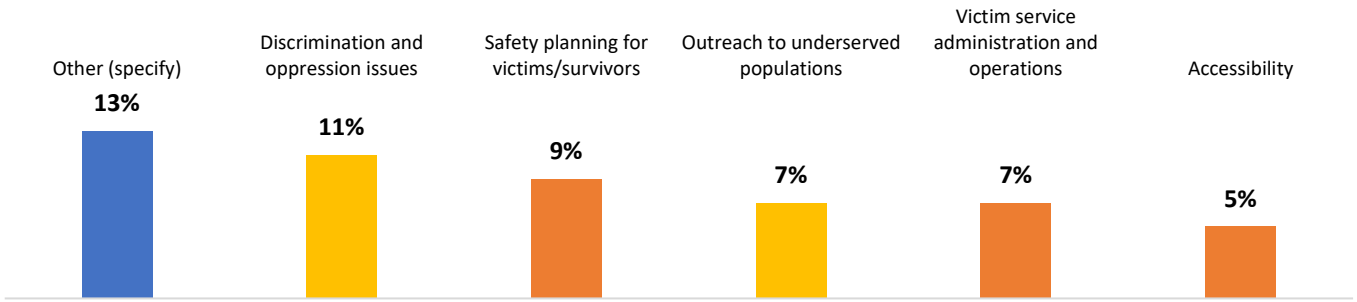


What is needed to implement the Domestic Violence High Risk Team Model?

The Domestic Violence High Risk Team (DVHRT) site received training and technical assistance (TA) from the Jeanie Geiger Crisis Center (JGCC) and three culturally specific (CS) technical assistance providers. In total the DVHRT site had 56 training events for a total of 159 hours of training. The TA providers classified 21 percent of the training as pertaining to victim services, 18 percent related to cultural

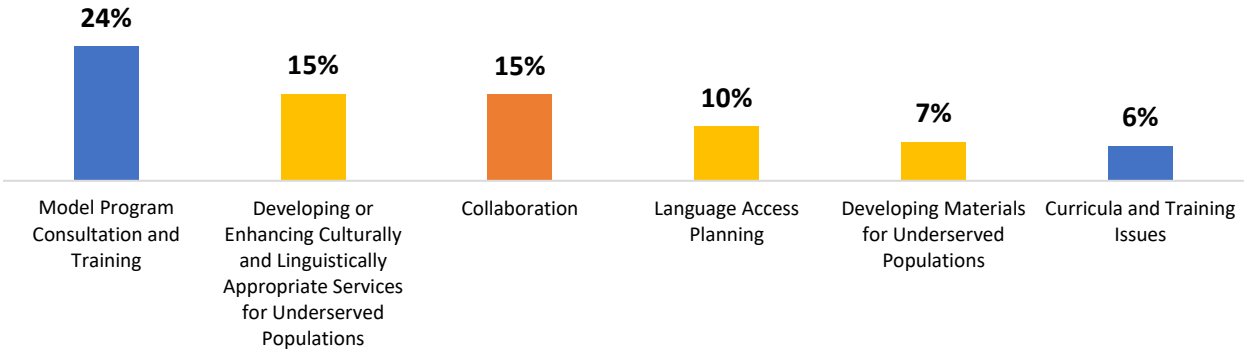
competency and about 13 percent were classified as other (see Figure 31). The DVHRT site received a total of **56 Training events** or **159 hours** of Training.

Figure 31. Percent of Training by Topic at the DVHRT Site



With regard to technical assistance for the DVHRT, the TA providers documented 1,462 incidents of technical assistance totaling 642 hours. Thirty percent of the TA was reported to be related to the DVHRT model, 32 percent related to cultural competency and 15 percent addressed collaboration. The DVHRT site received a total of **1,462 Technical Assistance events** or **642 hours** of TA (see Figure 32).

Figure 32. Percent of Technical Assistance by Category at the DVHRT Site



Perceptions of the Training and Technical Assistance

During the key informant interviews DVHRT team members and staff involved with implementation of the DVHRT were asked about their perceptions of the training and technical assistance they received. Four themes emerged from this data.

The local team did not know all of the expectations from the beginning. Local staff expressed frustration that the expectations were shared with them in "*bits and pieces*" resulting in numerous times during the process when they thought they were done with the training and technical assistance and ready to begin implementation and then another requirement was added. One local partner said, *"Our need as a collaborative partner was being able to understand fully from JGCC what they expected…so give us everything and let us work from there. But what happened is they gave us this, and then that, and I'm not sure we ever saw the big picture."* A number of partners reported that it seemed that **JGCC was concerned how the model would be perceived by entities involved in the demonstration initiative** one person indicated *"I think they (JGCC) viewed us as a risk to the success of their model."*

Most modifications to scale up from suburb to city was left to the local team. Staff also indicated that it seemed that most of the decisions regarding how to scale this intervention up to a large city were left to the local team with **minimum guidance from the TA providers.** One partner reported *"I don't think our TA providers were adequately prepared to handle a large city."* Another indicated "*They were not used to our scale of work and so it felt reactive versus proactive regarding how to take every step."*

TA providers choosing the entry/referral partners was a problematic. In the DVHRT site the Culturally Specific TA providers (CSTAs) chose the agencies to be the community partners, agencies serving diverse populations who would be trained in the Danger Assessment and could refer victims to the HRT (entry and referral partners). The **site staff did not agree with the agencies chosen** as they had worked with others who they knew were engaged in the work however that concern did not change the CSTA decision regarding the agencies. As one staff member stated *"Our TA providers selected our community partners, I think that's where the breakdown happened, because we had people that were not really doing the work that…now they got to do domestic violence and do a danger assessment…there are so many people in this community that do this work that we did not tap into. We knew who were the best partners but we had to go with who they chose."*

TA providers were slow to respond to questions. The site staff reported that the model and the culturally specific TA providers were slow to respond to questions. One person reported *"With the TA, we'd ask a question, and it would take them 2 months to get back to us."*

Structures and Supports Needed to Implement the HRT Model

High risk team members and local staff were also asked about the structures and supports that are needed to implement the DVHRT model. One thing that resonated across respondents was a systematic **commitment to preventing domestic violence** with all stakeholders invested in its success. They also spoke of the need to have **policies that allow for information sharing across systems** so that steps can be implemented to keep victims safe and all partners informed. Team members also spoke of the need for technical assistance providers supporting the dissemination and implementation of programs to **prioritize adapting interventions to the community.**

With regard to community supports, DVHRT team members also spoke of the need for a **robust array of community services** that have the capacity to support a higher number of individuals seeking care. They also discussed the need to have a **mechanism to identify those victims at high risk**. Team members also spoke of the **need for community members to understand and trust the system**, believing that law enforcement and providers will listen to their concerns.

Stakeholder Perceptions of the DA-LE

The DA-LE training was well received by law enforcement officers, one who felt that the DA-LE training materials were comprehensive and clear and that the training "*helped us to understand why we're doing it, the reasoning behind it*". Command and patrol officers also reported that using the DA-LE had **provided a structure** for law enforcement officers when they respond to a domestic and that asking the questions had improved the quality of the information that officers obtained. One supervisor stated "*I think that the implementation of the DA-LE with law enforcement has gone really week. We've seen some good DA-LEs and much better written reports than we have ever seen before*." However, the **process to train new officers** or those who missed roll call training is not systematic one reported that "if you missed role call when they did the training, it becomes word of mouth, and you really do not get trained."

Stakeholder Perceptions of the Domestic Violence High Risk Team Model

Members of the high risk team were asked for their thoughts about the functioning of the team. They reported that the training for the high risk team was **almost entirely focused on how to use forms to document the cases** presented in the meetings and to report data to the TA provider. **They reported not receiving much training on their roles at the meeting or how the process should unfold**. One member stated "*High Risk Team Operations training calls were spent going through their paperwork step by step. I think they put a lot of effort into those documents that we did not end up using. We never got to observe a high-risk team meeting, that would have been very helpful to have some insight, some perspective from the beginning*."

The **high risk team meeting content in this site was often limited to brief presentations on a case and then a vote** as to whether a victim should be followed by the team. One participant reported "*I stopped going because we only vote on cases and after going to a couple of meetings, I did not see the value in that*." And another noted "*you raise your hand if you think a case should be on the high risk team, I still don't know what happens after that*." Many stated that if **they wished they had received training on how to process a case** within the meeting as they often felt unsure of how to proceed, as one person noted "*maybe if there were specific guidelines of what to do in the meeting*…." Many were concerned that **only the cases where the victim had signed the high risk team release of information** were brought before the high risk team. One high risk team member from law enforcement noted "*reading the police reports there are some really scary cases that we did not end up talking about because the victim did not sign the release or no one brought it forward*."

All of the members of the high risk team noted **that the collaborative work done outside of the high risk team meetings by partners from multiple agencies was important and impactful**. When asked what the enabled this work to occur one team member noted "*comfort level, familiarity, I would even go as far as saying trust, an increased trust that the people on the high risk team have reinforced my level of trust in each of their abilities to do their jobs*." High risk team members noted that these **collaborations were possible because staff from multiple agencies attended the high risk team meeting together and built positive relationships**. In giving an example of the type of collaborative work occurring, one team member noted "*I gave the bond commissioner the information on the DA-LE and let her know that to the extent that we can, we are going to be asking you to keep bonds high when we think there's a risk of lethality. She has been receptive to that*."

Law enforcement officers, domestic violence providers and high risk team members were asked what they thought were the **impacts of the DVHRT model** in their community and four main themes arose from the data. First, they **appreciated that there was an enhanced response for victims** in the two police districts where the DVHRT was implemented as previously victims in these districts received little to no assistance in obtaining services and supports one individual noted "*there are several impacts one is that we are serving the victims in the districts that we've never served…we've heard from victims how different the response is from when they've called the police in the past*." Also noted was appreciation that **police incident reports had improved and saw that the DA-LE contributed** to that improvement, a detective stated that "*the quality of law enforcement incident reports have increased making it easier for me to know what is going on before I reach out to a victim.*" Staff from across agencies noted that **there was now a systemwide commitment to DV,** one person noted "*law enforcement, domestic violence providers, criminal justice system are all on the same page*." Finally, domestic violence service providers reported **appreciation that the Danger Assessment is now utilized by all DVSPs and some community partners.**

Impact of Implementing the DVHRT Model on Collaboration

Collaboration was assessed in two ways. First the high risk team members were asked about collaboration during the key informant interviews and second, members of the local team participated in a collaboration survey at three timepoints.

During the **key informant interviews, each member of the high risk team reported an increase in collaboration** across agencies indicating that the team meetings provided them with an opportunity to get to know one another around a shared agenda. This familiarity facilitated the collaborative work that they engaged in outside of the meetings. One team member noted *"communication gaps have closed even tighter than what there were before. We definitely have increased our communication between and amongst the players and strengthened those relationships cause now I have a specific probation officer I can call, a specific prosecutor…"* Another stated, *"The quality has improved with all of the members of the high risk team. The number of times that I reach out to ask for assistance for a victim has increased, the establishing who I can speak to if my contact is not available has increased so that has helped."* It is important to note that **law enforcement officers indicated that they experienced no change in the level or quality of collaboration** between the times before and after implementation of the DVHRT model.

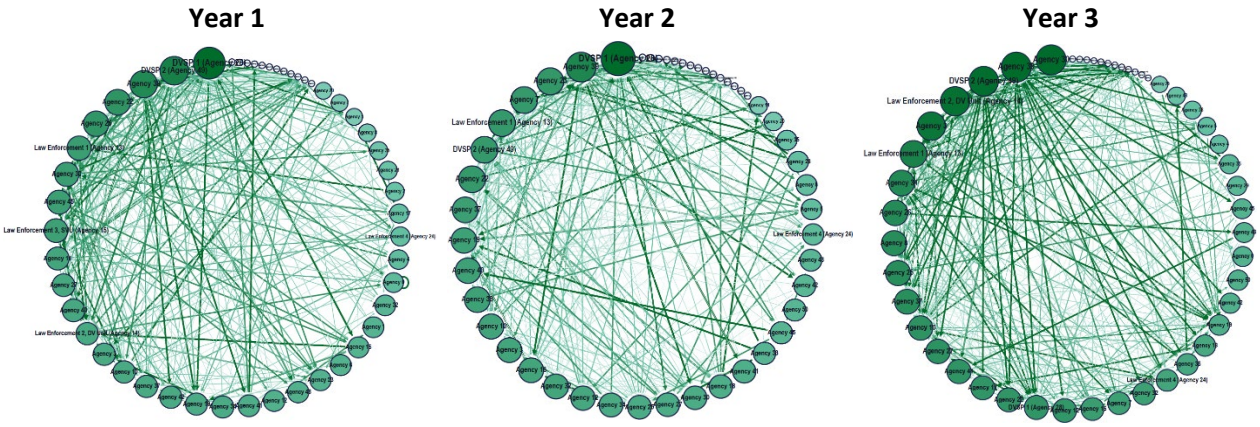
The Collaboration Survey was a web-based site-specific web-based survey distributed by local research teams to a list of agency/service providers who support domestic violence (DV) victims. The survey asked about characteristics of their collaboration with other providers. Survey administration occurred at three timepoints 4- (n=19). 16- (n=20) and 28-months (n=15) post-implementation. **Social Network Analysis (SNA)** was employed to analyze and visualize data that collectively define how the site's domestic violence service network was structured at the time of the survey administrations. In completing the survey agency representatives rated the type of collaboration they had with other agencies using the Collaboration Scale (Frey et al, 2006) displayed in Figure 33.

Figure 33. Collaboration Scale

None	Networking	Cooperation	Coordination	Coalition	Collaboration
► No interaction at all	► Aware of organization ► Loosely defined roles ► Little communication ► All decisions made independently	► Provide information to each other ► Somewhat defined roles ► Formal communication ► All decisions are made independently	► Share information and resources ► Defined roles ► Frequent communication ► Some shared decision making	► Share ideas ► Share resources ► Frequent and prioritized communication ► Advise each other on decision making	► Belong to same provider system ► Frequent communication characterized by mutual trust ► Consensus is reached on all decisions

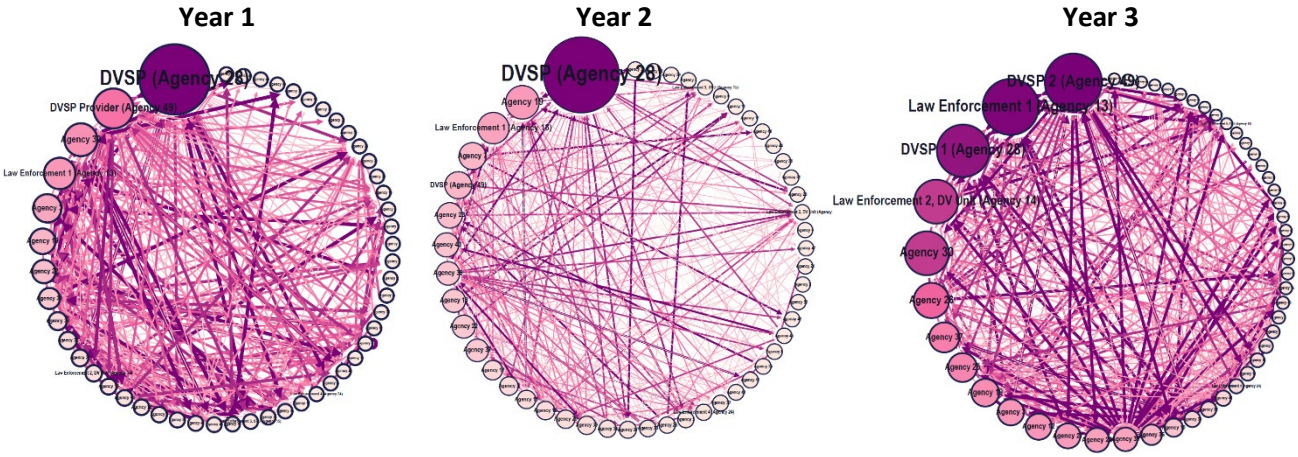
Social network analysis was used to assess **closeness centrality** where stakeholders that evidence high closeness centrality are connected to the rest of the network via shorter paths with fewer intermediary notes when compared to stakeholders with lower centrality scores. In Figure 34 below, the larger the circle the more agencies a given agency communicates with and darker lines indicate a higher level of collaboration on the collaboration scale. The level of closeness centrality remained consistent across the three survey administrations.

Figure 34. Closeness Centrality Over Time in the DVHRT Site



Betweeness Centrality was also assessed to determine the degree to which each stakeholder mediates connections between other stakeholders. In Figure 35 larger circles indicated that the agency mediates more communications in the network and the darker lines indicate that on average the agency higher has a level of collaboration as measured by the Collaboration Scale. In the DVHRT site two domestic violence provider agencies mediated most of the communication between other agencies across the three survey administrations however, the other agencies took on more of the mediation by Year 3 administration indicating that **more agencies became impactful in the network overtime**.

Figure 35. Betweenness Centrality Over Time at the DVHRT Site



Social network analysis was also used to assess whether the interaction strength or the number and impact of collaborative relationships changed over time and the analysis revealed an **increased level of interaction strength from Year 1 to Year 3** ($p<.05$). There was also an **increase in the rate of referrals sent** to other agencies from Year 1 to Year 3 ($p<.05$) but no change in the rate of referrals reported to be received. **Implementation of the DVHRT model in this site resulted in a strengthening across all aspects of collaboration.**

Outcome of the DA-LE Screen

LEA "Higher-risk" determination. Overall, the police officers scored 38 percent of the 2,429 screened victims as at "higher-risk." More females than male victims scored as high risk, as did more white than Black/African-Americans, and more intimate partner than any other relationship category. The rates by race and relationship status were not significantly different (see Table 22). Based on a multivariate logistic regression model, **officers scored significantly more female victims as "higher-risk" than males, White victims more often than African American victims, and those dyads with more prior incidents** (each additional prior incident raised the odds of a "higher-risk" determination by a factor of 13). In addition, regardless of the underlying nature of the assaults, incidents that involved criminal threats, a property crime, or a motor vehicle violation were more often scored by the officer as at "higher-risk". **Whether or not the officers arrested the perpetrator because of the incident was the only incident-specific factor that significantly lowered the odds of a "higher-risk" determination** (an arrest lowered the odds by 25%).

Table 22. Rate of "Higher-risk" score by Victim Demographics

	DA-LE	Total N
Victim's Sex *		
Female	40%	2,096
Male	26%	333
Victim's record race		
African American	37%	1,611
White	41%	775
Other	44%	43
Victim-Perpetrator Relationship		
Intimate Partner	39%	1922
Ex-Spouse	38%	113
Spouse	34%	358
Other	33%	36

Note: *= p-value < 0.05

Cases Reviewed by the High-Risk Team. During the evaluation period, 993 (41%) of the 2,429 screened cases were forwarded and reviewed by the high-risk team [HRT]. Of note, not all reviewed cases were either scored or assessed as at high risk by the LEA; in fact, 28 (2.2%) of the "lower-risk" cases were forwarded by the law enforcement authority (LEA) to the HRT. In addition, the HRT did not review every "higher-risk" case; over the two-year implementation period, 125 (13%) of the victims who scored as "higher-risk" were not reviewed, and another 74 (32%) of those assessed by the officer as at "higher-risk" were not forwarded to the HRT. Accordingly, because of the mix of "lower" and "higher-risk" cases reviewed, **we included all 2,429 screened cases in the analysis that focused on what factors led to a review**. Among these cases, the rates of review by the victim-perpetrator relationship status were not significantly different. However, the **review rates did differ by the victims' race**, ranging from a low of 38 percent for the 1,611 Black/African American victims to a high of 56 percent for the 43 "other" race victims. The HRT **review rates also differed substantially between cases involving male and female**

Table 23. Cases HRT Reviewed by Victim Demographics

	Male		Female		
	%	N	%	N	
Reviewed by HRT	19%	333	44%	2,096	
Victim's record race					
African American	19%	227	41%	1,384	***
White	17%	103	50%	672	
Other	33%	3	58%	40	
Victim-Perpetrator Relationship					
Intimate Partner	19%	249	44%	1,673	
Ex-Spouse	18%	17	49%	96	
Spouse	15%	60	43%	298	
Other	43%	7	41%	29	

Note: *= p-value < 0.001

victims (19% vs. 44%). Since these two review rates are so different with cases involving female victims are 2.3 times more likely to be reviewed than those involving males, the **subsequent analyses completed on the HRT review process were completed separately based upon the victims' reported gender** (see Table 23).

Among **the 333 male victims reviewed**, the **odds of a review were greater when the victim's preparators was a male** (same-sex). Conversely and as expected, **those who did not score as at "higher-risk" were significantly less likely reviewed**. However, no other factor influenced the odds that a review would take place, including the male victims' age, race, and relationship status, the number of prior incidents between the two parties, the type of crime, the nature of the event, or whether the police arrested the perpetrator.

As for the **2,096 screened female victims**, the odds that a case produced a review increased if the DA-LE **instrument scored them as at "higher-risk", the victim and perpetrator were not the same-sex, a threat or motor-vehicle violation was involved, and the incident took place on a weekend**. Of note, none of the following factors impacted the odds of a HRT review: the presence of any weapon, the number of prior incidents involving the same victim and perpetrator dyad, the victim-perpetrator relationship status, and the victims' race and age.

Selection for the High-Risk Team. Among the **993 cases reviewed over the two-year evaluation period by the HTR**, **22% (n=213) were selected for "ongoing" review**. Two-hundred and nine (98%) of the 213 selected cases involved female victims; the **selection rate of females was nearly four times greater than for male victims** (6 vs. 23%). This selection disparity resulted in just four males under the HRT's review. More "other" race, female victims were selected than either Black/African Americans or whites. **More ex-spouses were selected** than intimate partners, spouses and "other" relationships (see Table 24). **Because the HRT selected only four males over two years, the remaining analyses about the selection process and outcomes focus only on the female victims**.

Table 24. Cases selected by HRT for "Ongoing" Review by Victim Demographics

	Male		Female		
	%	N	%	N	
Ongoing Review	6%	63	22%	930	
Victim's record race					
African American	9%	44	19%	573	***
White	0%	18	26%	334	
Other	0%	1	48%	23	
Victim-Perpetrator Relationship					
Intimate Partner	4%	48	22%	744	
Ex-Spouse	0%	3	30%	47	
Spouse	22%	9	24%	127	
Other	0%	3	25%	12	

Note: *= p-value < 0.001

Among 2,096 reviewed females, the odds of selection for further review by the team rates were significantly (2.9 x) greater among those who were "other" race than those who were coded as Black/African American. In addition, the presence of an "other" offense type in contrast to only an aggravated assault offense, the presence of a weapon other than a knife or gun (2.5x), and the number of subsequent incidents that occurred involving the dyad that took place between the incident that produced the screen and when the HRT reviewed the case were more likely to be followed by the HRT. **Each subsequent incident raised the odds that the team selected the case by a factor of two**. Several factors also lowered the odds of selection, including the district where the incident occurred and the

number of months between the start of the HRT program and the incident (the passage of each month lowered the odds of selection by an average of three percent. In other words, **the selection odds declined by about 70 percent between the first and the last (24th) month of DVHRT implementation**. The remaining factors assessed included the nature of the victim-perpetrator relationship, the victims' age, White vs. African American victims, the presence of a firearm or knife at the incident, all other offense types besides the "other" offense type (noted above), the number of prior incidents before the screening incident, and if the incident took place during a "colder months."

DVHRT Recidivism Outcomes

The primary outcome analysis for this evaluation was incidents recorded by the police that involved the same victim-perpetrator dyad (i.e., the same two people in the same roles as they were recorded at the index offense). More specifically, the **evaluation team defined recidivism (e.g., a failure) as any subsequent complaint recorded by the LEA**, regardless of the offense type or the actions by the police officer (e.g., arrest) that involved the same perpetrator victimizing the same victim at any time after the last action taken by the police at the index incident. Because a single incident can generate multiple reports with different report numbers due to more than one 911 dispatcher sending officers to the same or related address, we needed to eliminate as another failure, reports filed within 12 hours of an earlier report involving the same dyad.[15] With the exception of this 12-hour exclusion criteria, all other incidents involving the same dyad, regardless of the offense action by the police, or time, were counted as a failure of the index incident.

The evaluation team defined **an index incident as the first incident involving the dyad that was eligible to produce a DA-LE screen after the beginning of the DVHRT program**. The presence of an index incident triggered the evaluation team to seek data to track each dyad with an index event through the system and over time to identify subsequent incidents (i.e., failures). The evaluation identified the "index" incident for each victim-perpetrator dyad to avoid a statistical analysis problem caused by including the same dyad as an independent case in the recidivism analysis. The following outcome analyses include only **the 3,179 female-victim-index cases** because there are too few cases to analyze involving male victims reviewed by the HRT (n=43) and selected for continued review (n=3). These 3,179 (76%) index-events represent **74% of the 4,304 incidents** that involved a female victim and met the evaluation's inclusion criteria (i.e., incidents eligible for a DA-LE).[16] The remaining incidents represent the "failures" or recidivism events that took place during the evaluation period. Some of these failure incidents may also have generated a DA-LE and an HRT review, but because they are not the primary

[15] The decision to combine incidents reports that were filed within 12 hours of the filing of an earlier report was decided in consultation with the LEA's applicable command staff. While the LEA data management staff take step to "flag" these duplicate reports, they acknowledge that the algorithms we use to identify failures had likely identified a number of records that did not meet their reporting policy. Together, the evaluation team and the LEA command staff decided that these dual reports should be combined into one record containing the values of key fields (e.g., offense, arrest flag, weapons) from the separate reports. The 12-hour long window represents a comprise between the FBI-UCR's 24-hour window and the possibility that within this period some duplicate reports may in fact constitute new crime offense that required another dispatch and report filing (e.g., the absconded perpetrator returned to the incident address after the police officers had closed the original incident to assault the victim). We did not find that these duplicate reports were more often found among one of our seven intervention groups.

[16] One index incident was excluded from the recidivism analysis because the Index offense was a homicide.

index events, we did not include them as independent cases to track separately. **Among the 3,179 female victims, 36% (n=1,157) had at least one recorded failure during the combined evaluation and follow-up period.** The number of failures per victim ranged from 1 failure (20% of victims) to one victim that had 16 recorded failures. The mean (or average) number of failures is 0.74 incidents per female victim.

The **primary intervention measure was the extent to which the DVHRT program was implemented following each index case.** This ordinal measure could range from a group of cases with no LE screen or HRT oversight to a group of cases with the full HRT's oversight (i.e., ongoing review) protocol. Among the 3,179 index cases, 50% (n=1,577) produced no DA-LE screen nor involved any HRT review nor oversight. Another 26% (n=813) of the cases were scored as "lower-risk" and had no HRT review, 1.6% (n=50) cases were scored as at "higher-risk" but were not subsequently reviewed by the HRT, 3.1% (n=97) were forwarded to the HRT, but the HRT did not record reviewing the case, 16% (n=503) were reviewed by the HRT but were not selected for "ongoing review," and 4.5% (n=139) of the index cases were selected by the HRT for "ongoing review." (see Table 25)

Table 25. Recidivism Outcomes by Highest level of DA-LE & HRT Intervention among Female Victims

		No score nor HRT review	Lower risk, no further review	Higher risk, nor further review	For further review, no HRT review	HRT Advisory Review	HRT Ongoing Review
	N=	1577	813	50	97	503	139
Any Failure	**%**	**26%**	29%	30%	24%	31%	34%
	% of HRT Ongoing	**-24%**	**-13%**	**-12%**	**-28%**	**-8%**	
	Exp (B)	**0.68**	0.82	0.83	0.63	0.88	
	Sig.	**0.041**	0.301	0.605	0.111	0.546	
Number of Failures	**Ave**	0.49	0.55	0.58	**0.38**	0.61	0.59
		-18%	**-7%**	**-1%**	**-36%**	**4%**	
	Exp (B)	0.82	0.93	0.99	**0.64**	1.04	
	Sig.	0.168	0.601	0.965	**0.045**	0.808	
Time-to-First Failure	**Ave. Hazard**	0.35	0.36	0.36	0.33	0.40	0.42
		-16%	**-14%**	**-14%**	**-21%**	**-4%**	
	Exp (B)	0.76	0.88	0.91	0.73	0.96	

In terms of whether the level or form of the DVHRT intervention is related to different failure rates, the evaluation team produced a **series of multivariate regression models that tested whether any of the six failure rates were different from the failure rate for the group of victims assigned by the HRT for "ongoing review."** In other words, the group of victims to which all other intervention groups are compared for this evaluation are the 139 victims selected by the HRT for "ongoing review." This

specification permits an independent assessment of how each of the 6 lesser-involved interventions compares to the most-involved intervention (total of 7 intervention levels). Besides specifying a measure for all but one of the 7 intervention levels, the multivariate regression models included the victim's race, age, and relationship status with the perpetrator, whether the relationship was same-sex or not, each offense type (felony assault was the reference offense because it was the most frequent offense in the data), whether the perpetrator was arrested, the number of prior incidents involving the victim-perpetrator dyad, the police district number, the number of months between the beginning of the program and the index event, the number of months since July (to determine seasonality), and whether or not the incident took place on the weekend. These additional measures were primarily added to the regression because the evaluation team did not control the intervention assignment and because these measures were likely correlated with the degree of the eventual intervention level or were likely related to recidivism, or they captured extraneous measures that due to time of the incident or caseloads might influence outcomes (e.g., day of the week, days since the program started). Because of these possibilities, **the addition of these "control" measures increases the probability but cannot assure that significant difference arising between the seven intervention groups are because of the intervention rather than because of another unmeasured process.**

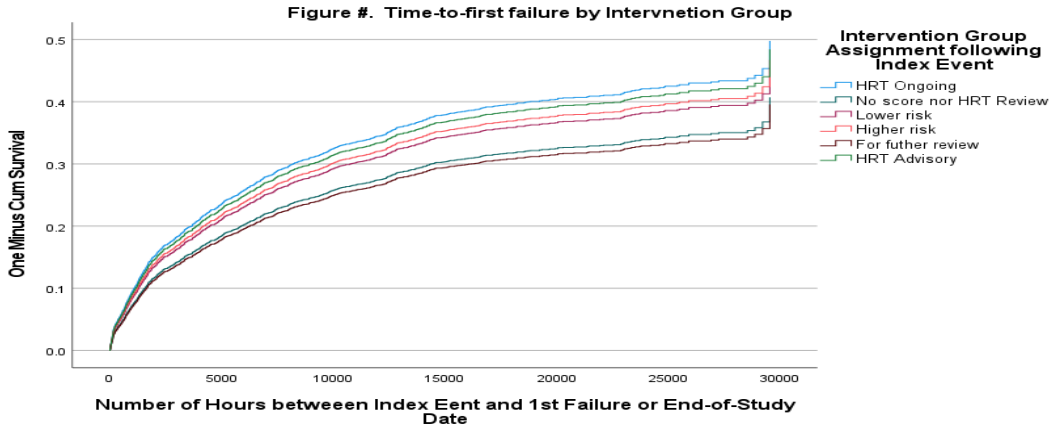
In addition to using highly specified multivariate regressions, **we calculated three versions of the outcome measure to look at the outcome somewhat differently**; each version has strengths and weaknesses, making no one measure perfect. The three outcome measures are whether the dyad had any failure (dichotomous), the number of failures recorded by the police any time after the index event (count between 0 and 16), and the likelihood of failure given that the dyad had no prior failure before that day (e.g., time-to-failure or survival models). **We used logistic regression to measure the dichotomous failure, a negative binomial regression to model the number of failures, and Cox regression to model the time-to-first failure**. All three regression routines use a maximum likelihood estimation procedure to calculate the regression parameters, the same set of independent measures, and the same set of cases. As such, the only difference between the three regression models is the metric of the dependent (failure) measure. Based on these data analysis specifications, the odds-ratio of any failure after the intervention protocol started **was only significantly different <u>from</u> those female victims selected by the HRT for "ongoing review" was the group of female victims who were neither scored at the index event nor later reviewed by the HRT**.

The odds of failure for the "not scored nor reviewed" group was 32% less than the odds for the "ongoing" review group. The relative odds of a failure (e.g., hazard rate) for the "not score nor reviewed" group was also 24% smaller on any given day following the index event (see Figure 35). However, in terms of the number of failures following the index event, while the "not score nor reviewed" group also had on average, fewer recorded incidents (0.49 vs. 0.61), this 12% difference fell short of reaching the traditional level for statistical significance (p-value = 0.168).

Besides the two significant differences between the "Not Score" and the "Ongoing Review" groups, the only other intervention group with a significant difference in an outcome rate was among the small group (n=97) of victims who were forwarded to but not reviewed by the HRT. This group of "screened but unreviewed victims" experienced significantly fewer incidents by nearly 36% than the "ongoing" review group". None of the other four intervention groups (tested across 12 comparisons) were

significantly different in terms of failure rates from those victims assigned to the “ongoing” review group.

Figure 36. Survival Curve for DVHRT Cases by Condition



Homicides as an Outcome

Besides assessing whether the program influenced the overall levels of recidivism, the evaluation team also assessed **whether the DVHRT protocols impacted the likelihood of IPV homicides**. The evaluation team included in these homicide analyses IPV incidents that took place in the district where the program was implemented as well as in police districts where the program was not implemented. The evaluation team also included homicides that took place in the pre-implementation period (e.g., a two-year-long observation period that began four years before the program started). By including all these data, the evaluation team **could compare not only whether a particular intervention group had a different homicide rate but also whether the overall program had a “global” impact when compared to areas of the municipality not covered by the program, and to years before the program was conceived.** This later analysis is about asking whether a coordinated-community-response-initiative like the HRT model has influenced the over level of homicides rather than just those whom the HRT directly assisted. Over four years, the municipality experienced 10 homicide incidents that involved a victim that met the evaluation team’s selection criteria. Six of them took place during the pre-implementation period, and four took place during the implementation period. **During the implementation period, each of the two areas of the city (the one with the DVHRT program and the one without DVHRT) experienced two homicides.** These four IPV homicides represented less than 0.001 percent of the 4,066 eligible IPV incident that the police recorded during this period.

Regarding the two homicide-like events within the implementation period and districts, one case began when the police screened the victim at the first incident. While the victim scored lower risk on the DA-LE the officer marked the DA-LE for further review, this is when LEA became aware that there was violence in this relationship. Within one month of the screen, the HRT reviewed and accepted the case. The victim was murdered 32 days after the HRT review decision -- or about two months after the police were first called to assist the victim. For the other (attempted) homicide, the victim was not screened, although the LEA had recorded two prior IPV incidents involving the same perpetrator and one subsequent incident after the incident where the attempted homicide took place. However, based upon a review of a news media report regarding the incident, it is not clear who the attempted homicide victim was in the third incident since it seems as if the suspect fled and then assaulted the officer.

Nevertheless, the police missed screening the victim multiple times even though there was evidence of the lethality of the perpetrator at the third incident.

Overall, whether one uses either the regularity of effects or a more traditional statistical significance of each effect criteria, **the most consistent finding is that the typical female victim assigned to the "ongoing review" group experienced more revictimization than those not selected for this level of intervention.** However, though the evaluation team used rigorous data analysis techniques to eliminate several possible alternative explanations for why differences existed between the groups, **the evaluation was not designed to conclude with a high degree of confidence that one of the intervention groups had caused different outcomes**. There are several possible explanations not explored by this evaluation as to why female victims followed by the HRT experience more revictimization than the victims in the other groups. First, the team may have identified those victims at highest risk for revictimization. It is also possible that the HRT process itself led to more calls-for-service than would have happened without the HRT's assistance. In addition, the victims who agreed to be followed by the HRT may not have been a random sample of those approached by the HRT and may have accepted the offer of assistance because they had a more heightened sense of the risk that they were facing. However, **without a study using an experimental design that focuses on those cases eligible for the HRT program and includes outcome measures collected independent of LEA data, the field will not have data to answer why the rates remain higher**. In other words, evaluation designs that systematically control the intervention assignment process via a random assignment protocol (e.g., RCT) reach a degree of rigor that permit investigators to responsibly claim that no other factor besides the intervention is what is causing differences in outcome rates to arise.

Overall Outcomes for the Evaluation of the DVHPDI

There were challenges to fidelity in the implementation of the LAP and the DA-LE assessments. Significant challenges were also reported by the local site in implementing the high risk team.

Stakeholders including law enforcement, domestic violence service providers and affiliated professionals had positive impressions of the LAP, and mixed perceptions of the DVHRT.

Administrative data demonstrates that the LAP high-risk group continues to experience rates of violence at or greater than victims not at high risk.

In the LAP program calling the hotline at the scene was not associated with less victimization among those assessed as high-risk.

There were no differences in revictimization between the LAP demonstration initiative and the typically implementing sites suggesting that the enhanced training and technical assistance provided to the demonstration initiative sites did not result in significant impact in the rate of revictimization.

Women participating in the longitudinal interviews who did not have a LAP screen administered were similar at the 6-month follow-up with regard to revictimization, use of some safety strategies and use of the DV hotline to those who were screened, determined to be high risk and called the hotline.

Implementation of the LAP in three (two demonstration initiative and one typically implementing) of the five LAP sites resulted in changes to the level of collaboration with other agencies. However, there were no changes in the number of active collaborations between agencies or the cohesiveness of the network. These findings are consistent across the demonstration initiative and typically implementing sites suggesting that the enhanced training and technical assistance provided to the demonstration initiative sites did not impact collaboration.

Of those victims referred to the HRT team, the rate of selection to be followed by the team was nearly four times greater for female victims then male victims.

Of the victims referred to the HRT team, those victims actively followed by the high risk team had significantly more episodes of revictimization than those the victims referred to the team but not followed.

Implementation of the DVHRT resulted in increases in all aspects of collaboration including the number of agencies actively participating in the network, the level of collaboration between agencies, and cohesiveness of the network.

Recommendations Regarding the LAP

Recommendations to Improve Implementation of the LAP Model

Key informant interview data informed recommendations to enhance LAP implementation. First, key informants asked that the protocol specifically **communicate the steps of the LAP to victims** – what the LAP is and that a call is made to the hotline when someone is classified as high risk. They also asked for enhanced training regarding **when to initiate a LAP assessment.** In addition, officers stated they would benefit from more specific guidance on **using the LAP in circumstances of mutual aggression,** as decisions about this varied by site. Qualitative data show it would be helpful for TA providers to **guide law enforcement agencies through developing training policies and procedures for new officers, those who missed the training** and those who need retraining. In addition, key informants noted that guidance **would be helpful regarding the development of policy decisions that impact LAP implementation including phones and transporting victims**. It was also suggested that the **TA providers deliver clearer guidelines regarding the hotline response and domestic violence service provider follow-up with victims after the call**. Finally, given that some differences emerged between TI and DI sites regarding fidelity (e.g., **TI sites implemented with higher fidelity**), it is important for TA providers to develop an understanding of the factors that contribute to these differences, such as the order of trainings or amount of training given in any one day/session so that all material presented can be absorbed.

In the focus group completed with the LAP TA providers after completion of the demonstration initiative, it was reported that **no changes to the LAP training and implementation process** had been made since the DI and TI sites had been trained.

Recommendations Regarding the LAP Model

This study revealed that the LAP assessment score is positively correlated with higher re-victimization rates. However, results regarding other key outcomes were not consistent across **intervention groups or types of data, and additional analyses are needed to comprehensively evaluate the LAP.** For example,

analyses from both the administrative data and from the longitudinal victim interview data revealed that victims **who were classified as high risk on the LAP assessment and spoke with the DV hotline were revictimized at levels similar to victims classified as high risk but did not speak to the hotline**. Separately, though there were no differences in revictimization between the intervention groups among the female victims who participated in the longitudinal victim interviews, **those who were classified as high risk and then spoke with the hotline had greater odds of using emergency shelter, hiding weapons to keep themselves safe, and creating a safety plan than those who were classified as high risk but did not connect with the hotline. The ways in which these factors influence victims' wellbeing is not yet know.**

In addition, implementing the LAP within these communities **positively influenced only one aspect of collaboration,** the strength of existing relationships, in three of the five sites. Finally, the **enhanced training and technical assistance offered to LAP sites in the demonstration initiative did not substantially impact results at the victim or systems level.**

To date the **analyses of the LAP administrative data collected as part of this evaluation has been completed with data pooled across the sites**. While we took steps to balance out the LAP intervention groups in terms of several critical variables related to recidivism before testing whether the intervention led to the intended outcome, there are **likely other factors that we did not measure that could account for our findings**. In addition, **there are other analyses using the data collected in this evaluation** that we were not able to complete due to time constraints that may provide additional clarity regarding the impact of the LAP at the individual and system levels.

In light of the findings from the analyses conducted to date, and the knowledge that a significant investment in training and technical assistance for the DI sites did not impact these outcomes, it is **recommended additional analyses be completed before a decision is made regarding further dissemination of this model.**

Recommendations Regarding the DVHRT

Recommendations to Improve Implementation of the DVHRT Model

Data collected during the key informant interviews yielded a number of recommendations for improving implementation of the DVHRT model. First, the **DVHRT implementation process needs to be manualized** so that communities have clearer guidance and expectations. Second, **HRT team members need to be trained about their roles** and the entire **team about what to do in the meetings**. Team members report that they would greatly **benefit from watching a video depicting a HRT meeting or observing an actual team meeting** to get a sense of the team process. Fifth, the TA providers **should enhance their ability to provide TA to communities of all sizes.** Finally, if the entry and referral partner component of the DVHRT model continues, given the experience in the DVHRT site where the entry and referral partners did not make referrals to the HRT, it is recommended that supporting the local **community to identify their partners** may enhance this aspect of the model implementation.

A focus group was conducted with the TA team after completion of the demonstration initiative the TA team reported that **some of these recommendations are already in the process of being integrated into the DVHRT model**. They note that going forward, DVHRT members will receive **training on their roles** and that **communities will select their entry and referral partners**. TA providers also reported that

while they have increased documentation about the HRT process **a manual has not been created.** The TA providers also reported that they have **implemented a DA-LE only program** for those communities not ready for the full DVHRT model.

Recommendations Regarding the DVHRT Model

Given that there was only one community implementing the DVHRT model, **this evaluation insufficient to predict the outcomes of this intervention in other communities**. In order to determine the effectiveness of the DVHRT model, **a more rigorous evaluation across multiple communities is needed.** It is **strongly recommended that the materials provided to communities involved in further evaluation and/or dissemination of the model be expanded** (e.g., development of an implementation manual) to ensure consistency across sites so that a more rigorous evaluation can be conducted.

It is important to note that **there are other assessments using the data collected in this evaluation** that we were not able to complete due to time constraints that may provide additional clarity regarding the impact of the DVHRT at the individual and system (e.g., court) levels.

Finally, this evaluation team suggests that the **lessons learned from the evaluation of the LAP model be considered in the development and dissemination of the DA-LE only model** as both models assess the victim for risk and connect them to the domestic violence service provider.

Limitations

Initially both the National Institute of Justice and the Office of Violence Against Women intended for six sites to be part of the demonstration initiative, three that would implement the LAP and three the DVHRT. For many reasons, including that some sites could not provide any administrative data needed for this evaluation, we were left with only one DVHRT site.

The administrative data that were available from the six sites participating in the evaluation varied significantly, and none of the sites provided all of data we sought, limiting our ability to conduct some of the analyses planned.

Data from domestic violence service providers in the LAP and DVHRT sites were available for few clients relative to the clients served and those eligible to be assessed in this evaluation precluding the evaluation team from answering a key question regarding domestic violence service uptake with the full sample of victims for whom administrative data were available. We were able to test the association of the LAP intervention on service uptake with subsample of victims who participated in the longitudinal interviews.

Given that there was only one site implementing the DVHRT model, the results of this evaluation cannot be generalized beyond this site.

Artifacts

Publications

Maxwell, CM; Sullivan, TP; Backes, BL; Kaufman, JS. Policing high risk domestic violence victims and offenders. *NIJ Journal*, 282, 2019. https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=277712

Conference Presentations

Kaufman, JS., Maxwell, CM, Sullivan, TP. Assessing collaboration among community providers working with victims of interpersonal violence. Paper presented in (A.M. Moore, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative at American Criminology Society Annual Conference, Atlanta, GA, October 2018.

Sullivan, TP, Maxwell, CM, Kaufman, JS, Gionteris, K, Medina, C. Factors that affect victims' willingness to engage in homicide risk assessment with police officers. Paper presented in (A.M. Moore, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative at American Criminology Society Annual Conference, Atlanta, GA, October 2018.

Maxwell, CM, Sullivan, TP, Kaufman, JK, Gionteris, K, Thompson, AS. The impact of assessing for lethal risk on victim's satisfaction and judgement of the police. Paper presented in (A.M. Moore, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative at American Criminology Society Annual Conference, Atlanta, GA, October 2018.

Bonner, H., Maxwell, CM, Kaufman, JS, Sullivan TP. Assessing how victim's voices regarding risk of violence influence pretrial release decisions. Paper presented in (A.M. Moore, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative at American Criminology Society Annual Conference, Atlanta, GA, October 2018.

Kaufman, JS. Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative. Symposium (chair) presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH, July 2018.

Sullivan, TP, Maxwell, CM, Kaufman, JS, Gionteris, K, Medina, C. Factors that affect victims' willingness to engage in homicide risk assessment with police officers. Paper presented in (J.S. Kaufman, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH, July 2018.

Maxwell, CM, Sullivan TP, Kaufman, JS, Gionteris, K, Thompson AS. The impact of assessing for lethal risk on victim's satisfaction and judgement of the police. Paper presented in (J.S. Kaufman, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH, July 2018.

Kaufman, JS., Maxwell, CM, Sullivan, TP. Assessing collaboration among community providers working with victims of interpersonal violence. Paper presented in (J.S. Kaufman, Chair) Evaluation of the Office of Violence Against Women's Domestic Violence Homicide Prevention Demonstration Initiative presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH, July 2018.

Kaufman, JS., Maxwell, CD, Sullivan, TP. Evaluation of the Domestic Violence Homicide Prevention Demonstration Initiative presented at The American Evaluation Association Meeting, Washington, DC, November 2017.

Invited Presentations

2021	National Institute of Justice, Office of Violence Against Women, Virtual Presentation: "Outcomes of the Evaluation of the Domestic Violence Homicide Prevention Demonstration"
2019	National Institute of Justice, Office of Violence Against Women, Miami, FL: "Local Utilization of the National Evaluation Data"
2018	National Institute of Justice, Office of Violence Against Women, Washington, DC: "Evaluation of the Domestic Violence Homicide Prevention Demonstration Initiative"
2018	Domestic Violence Homicide Prevention Demonstration Initiative All Sites Meeting, Cleveland, OH "Evaluation of the Domestic Violence Homicide Prevention Demonstration Initiative"
2017	Domestic Violence Homicide Prevention Demonstration Initiative All Sites Meeting, Greenville, NC: "Evaluation of the Domestic Violence Demonstration Initiative: Preliminary Outcomes"
2016	White House Briefing on the Domestic Violence Homicide Prevention Demonstration Initiative, Washington, DC: "Evaluation Methodology and Progress"
2016	Domestic Violence Homicide Prevention Demonstration Initiative All Sites Meeting, DeKalb, IL: "Evaluation of the Domestic Violence Homicide Reduction Demonstration Initiative"
2015	Domestic Violence Homicide Prevention Demonstration Initiative All Sites Meeting, Greenville, NC: "Evaluation of the Domestic Violence Homicide Reduction Demonstration Initiative"
2015	National Institutes of Justice meeting of the Domestic Violence Homicide Prevention Demonstration Initiative, Bethesda, MD: "Evaluation Progress and Processes"
2014	Domestic Violence Homicide Prevention Demonstration Initiative All Sites Meeting, Newburyport, MA: "Evaluation Design and Implications"

Data Sets Generated

The following datasets have been generated from this project and have been or are in the process of being archived with National Archive of Criminal Justice Data (NACJD).

- Transcripts from the key informant interviews
- Data from the assessment of collaboration that allows for social network analysis
- Longitudinal victim interview database
- LAP screen database
- DA-LE screen database
- Law enforcement contact database
- Criminal justice system database
- Jail and prison database

Dissemination Activities

Once this report is approved by the National Institute of Justice, we will begin to publish the results of the study. We have identified the following papers that we plan to develop within the next year:

- An overview of the evaluation plan for this project
- LAP outcomes across all sites
- LAP implementation fidelity
- Relationship between LAP implementation fidelity and outcomes
- DVHRT outcomes
- DA-LE implementation fidelity

Literature Cited

Bastian M., Heymann S., Jacomy M. (2009). *Gephi: an open source software for exploring and manipulating networks.* International AAAI Conference on Weblogs and Social Media.

Campbell, J.C., Webster, D. W., & Glass, N. (2009). The danger assessment: Validation of a lethality risk assessment instrument for intimate partner femicide. *Journal of interpersonal violence*, *24*(4), 653-674.

Damschroder, L., Aron, DC, Keith, RE, Kirsh, SR, Alexander, JA, Lowery, JC. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science* 4, 1-15.

Frey, Lohmeier, Lee, & Tollefson, (2006). Measuring Collaboration among Grant Partners, *American Journal of Evaluation*, 27 (3), 383-392.

Guba, E., Lincoln, YS (1994). *Handbook of qualitative research*. Sage Publications.

Hamby, S. (2013). Safety Planning for Domestic Violence: The VIGOR and other family-centered approaches. Retrieved from http://www.nationalcac.org/online- training/ate-safety-planning-for-domestic-violence-6-26- 2013.html

Jeanne Geiger Crisis Center Inc. (2013). Greater Newburyport Domestic Violence High Risk Team: Safety and Accountability Report 2005-2013 (pp. 17). Newburyport, Massachusetts, USA: Jeanne Geiger Crisis Center, Inc.

Jonathan-Zamir, T., Mastrofski, S. D., & Moyal, S. (2015). Measuring procedural justice in police-citizen encounters. *Justice quarterly*, *32*(5), 845-871.

Koss, Mary P.; Oros, Cheryl J. (1982). Journal of Consulting and Clinical Psychology, Vol 50(3), 455-457. http://dx.doi.org/10.1037/0022- 006X.50.3.455

Langhinrich-Rohling. J., Palarea. R. E.,Cohen, J. & Rohling, M. L. (2000). Breaking up is hard to do: Unwanted pursuit behaviors following the dissolution of a romantic relationship. Violence and Victims, 15, 73- 90.

Maryland Network Against Violence (2010). Lethality Assessment Program: Maryland Model for First Responders. Bowie, MD.

Mastrofski, S. D., Parks, R., Reiss Jr, A. J., & Worden, R. E. (1995-99). Project on Policing Neighborhoods: A study of the police and the community: Awarded by the National Institute of Justice.

Mastrofski, S. D., Parks, R. B., & McCluskey, J. D. (2010). Systematic social observation in criminology. In A. R. Piquero & D. Weisburd (Eds.), *Handbook of Quantitative Criminology* (pp. 225-247): Springer New York.

Mastrofski, S. D., Parks, R. B., Reiss, A. J., Worden, R. E., Dejong, C., Snipes, J. B., & Terrill, W. (1998). *Systematic observation of pulblic police: apply field research methods to policy issues*.

Mastrofski, S. D., Parks, R. B., Reiss Jr, A. J., Worden, R. E., DeJong, C., Snipes, J. B., & Terrill, W. (1998). *Systematic Observation of Public Police: Applying Field Research Methods to Policy Issues*. Retrieved from Washington, D.C.: https://www.ncjrs.gov/pdffiles/172859.pdf

Mastrofski, S. D., Parks, R. B., Worden, R. E., & Reiss, A. J., Jr. (2007). *Project on Policing Neighborhoods in Indianapolis, Indiana, and St. Petersburg, Florida, 1996-1997*. Retrieved from: http://doi.org/10.3886/ICPSR03160.v2

Messing, J. T., Campbell, J., Dunne, K., & Dubus, S. (2012). Development and testing of the danger assessment for law enforcement (DA-LE). Unpublished manuscript.

Messing, J. T., Campbell, J., Dunne, K., & Dubus, S. (2020). Development and testing of the danger assessment for law enforcement (DA-LE). Social Work Research, 44(3), 143-156.

Sampson, Robert J., & Bartusch, Dawn Jeglum. (1998). Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences. Law & Society Review, 32(4), 777-804. doi:10.2307/827739

Strauss, A., Corbin, J (1997). *Grounded theory in practice*. Sage Publications.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of family issues*, *17*(3), 283-316.

Swan, S. C., & Sullivan, T. P. (2002). Fear of Partner Scale (unpublished measure). Yale University.

Swan, SC., & Sullivan, TP. (2009). The Resource Utilization of Women Who Use Violence in Intimate Relationships. Journal of Interpersonal Violence, 24(6), 940-958. doi:10.1177/0886260508319365

Tolman, RM (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims*; 4(3): 159-177.

Final Patent and Inventions Report
For the National Institute of Justice, Office of Research and Evaluation

Grant #	2013-ZD-CX-001
Grantee Organization Name	Yale University School of Medicine
Grant Start Date and End Date	January 1, 2014 – June 30, 2021
Project Title	Evaluation of the Domestic Violence Homicide Reduction Demonstration Initiative (DVHPDI)
Principal Investigator (PI) Name	Joy S. Kaufman
PI e-mail address	joy.kaufman@yale.edu
PI phone number	203-789-7645

This project did not produce and patents or inventions.