The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title:	Sexual Assault Response Team (SART) Implementation and Collaborative Process: What Works Best for the Criminal Justice System?
Author(s):	Rebecca Campbell, Ph.D., Megan Greeson, Ph.D., Deborah Bybee, Ph.D., Jennifer Watling Neal, Ph.D.
Document No.:	243829
Date Received:	September 2013
Award Number:	2010-WG-BX-0010

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federallyfunded grant report available electronically.

> Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

# SEXUAL ASSAULT RESPONSE TEAM (SART) IMPLEMENTATION AND COLLABORATIVE PROCESS: WHAT WORKS BEST FOR THE CRIMINAL JUSTICE SYSTEM?

2010-WG-BX-0010

**Final Report** 

# August 27, 2013

Principal Investigator:	Rebecca Campbell, Ph.D. Professor, Department of Psychology Michigan State University East Lansing, MI 48824 Phone: (517) 432-8390, Fax: (517) 432-2945 Email: <u>rmc@msu.edu</u>
Project Director:	Megan Greeson, Ph.D. Assistant Professor, Department of Psychology DePaul University Chicago, IL 60614-3504 Phone: (989) 277-9609 Email: greesonm@gmail.com
Co-Investigators:	Deborah Bybee, Ph.D. Professor, Department of Psychology Michigan State University East Lansing, MI 48824-1116 Phone: (517) 353-5015, Fax: (517) 432-2945 Email: <u>bybee@msu.edu</u> Jennifer Watling Neal, Ph.D. Assistant Professor, Department of Psychology Michigan State University East Lansing, MI 48824-1116 Phone: (517) 432-6708, Fax: (517) 432-2945 Email: <u>ineal@msu.edu</u>

#### ABSTRACT

Historically, community services for sexual assault victims have been uncoordinated and inadequate (Martin, 2005). Sexual Assault Response Teams (SARTs) were created to coordinate efforts of the legal, medical, and mental health systems, and rape crisis centers, in order to improve victims' help-seeking experiences and legal outcomes. SARTs are espoused as best practice and have been adopted widely across the U.S. (DOJ, 2013; Ledray, 2001). Descriptive research (using convenience sampling) suggests that how SARTs are structured varies from community to community (Zajac, 2006). However, studies have not yet examined how differences in SARTs' structure relate to their effectiveness (Greeson & Campbell, 2013).

To address this gap, Study 1 sought to (1) use random sampling methods to identify a nationally representative sample of 172 SARTs; (2) understand the structure and functioning of U.S. SARTs; (3) identify patterns of SART implementation; and (4) examine how these patterns relate to SARTs' perceived effectiveness at improving victim and legal outcomes. Consistent with prior studies of domestic violence coordinating councils, this study examined SART members' *perceptions* of their SARTs' effectiveness. Specific features of SARTs' structure that were examined included: *membership breadth* (the number of different stakeholder groups that participated in the collaboration) and *implementation* (their formalization and use of recommended collaborative activities).

Findings confirmed that U.S. SARTs vary in their structure. Using cluster analysis, three types of SARTs were identified. SARTs in the "Low Adopters" cluster (38% of the sample) utilized fewer formal structures, were less likely to institutionalize multidisciplinary trainings and policy/protocol review into their collaboration, and did not engage in program evaluation.

ii

The "High Adopters except Evaluation" cluster SARTs (47%) used more formal structures and had greater institutionalization of multidisciplinary trainings and policy/protocol review; however, none of them engaged in program evaluation. The "High Adopters plus Evaluation" cluster (16%) also used more formal structures and had greater institutionalization of multidisciplinary trainings and policy/protocol review, and in addition, engaged in program evaluation.

These clusters, and other features of the SARTs and their communities, were examined as predictors of SARTs' perceived effectiveness. The "High Adopters plus Program Evaluation" cluster was perceived as more effective than the "Low Adopters" cluster on all four effectiveness measures. SARTs in the "High Adopters plus Program Evaluation" group perceive themselves as more effective on one of the four domain of effectiveness than SARTs in the "High Adopters except Evaluation" cluster. In addition, active membership from a greater number of sexual assault stakeholder groups was associated with higher perceived effectiveness on all three forms of legal effectiveness. These findings suggest that formalization, regular collaborative processes, and broad active membership from diverse stakeholder groups are key components of successful SARTs.

SARTs in the Study 1 "High Adopters plus Evaluation" cluster--the most effective cluster--were then selected to participate in a study of model SARTs. Specifically, in Study 2, we used social network analysis to examine the structure of inter-organizational relationships within model SARTs. Within each SART, all organizations were asked about their relationships with all other organizations that participated in their team (specifically, frequency of communication, the extent to which they felt that other organizations valued their role, and the extent to which they felt that other organizations were a resource to their own organization's work). Findings are based on the three SARTs that fully participated. Results revealed a high degree of connection between organizations both within and across sectors (criminal justice vs. not) in model SARTs. However, findings also revealed occasional stratification of relationships within SARTs. Finally, there was evidence that inter-organizational relationships tended to be mutual, and the three types of relationships were positively correlated with one another.

# **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	pp. vii
LIST OF TABLES	pp. xii
LIST OF FIGURES	pp. xiv
OVERVIEW	pp. 1
REVIEW OF RELEVANT LITERATURE	pp. 6
THE CURRENT PROJECT0000	pp. 12
STUDY 1: PATTERNS OF SART IMPLEMENTATION AND IMPLICATIONS FOR SARTS' LEGAL EFFECTIVENESS	pp. 16
Sampling	pp. 17
Procedures	pp. 18
Recruitment	pp. 18
Interviewer Training	рр. 20
Piloting	pp. 21
Interviewing Procedures	рр. 22
Measures	рр. 22
Contextual Variables	рр. 22
Membership Breadth (independent variable)	рр. 23
Formalization (independent variable)	рр. 24
Use of Collaborative Activities (independent variables)	рр. 24
Perceived Effectiveness (dependent variables)	pp. 25
Data Analyses	рр. 27
Cluster Analysis	рр. 27
Structural Equation Modeling	рр. 29
Results	рр. 32
Descriptives: Participant and SART Characteristics	рр. 32
Clustering SARTs on their use of Formal Structures and	рр. 34
Collaborative Activities	
Predicting SARTs' Perceived Effectiveness	pp. 40
STUDY 2: PATTERNS OF COLLABORATIVE RELATIONSHIPS WITHIN MODEL SARTS	pp. 48
Design	pp. 49
Sample	рр. 49
SART A	pp. 51

SART B	pp. 52
SART C	pp. 52
SART D	pp. 52
Measurement and Procedures	pp. 55
Inter-Organizational Communication	pp. 56
Values my Organization's Role	pp. 57
Is a Resource to my Organization's Work	pp. 58
Analyses	рр. 60
Nature and distribution of inter-organizational relationships	рр. 60
Associations between different types of inter-organizational relationships	pp. 66
Results	pp. 67
Nature and distribution of inter-organizational relationships	pp. 67
Associations between different types of inter-organizational relationships	pp. 121
DISCUSSION	pp. 123
Summary of Study 1 Findings and Integration with Prior Literature	pp. 123
Summary of Study 2 Findings and Integration with Prior Literature	pp. 130
Project Strengths, Limitations, and Implications for Future Research	pp. 135
Implications for Policy and Practice	pp. 139
APPENDICES	pp. 144
Appendix A: References	pp. 145
Appendix B: Data Collection Instruments	pp. 152
Appendix C: Project Staff	pp. 210
Appendix D: Dissemination	pp. 211

### **EXECUTIVE SUMMARY**

Historically, community services for sexual assault victims have been uncoordinated and inadequate (Martin, 2005). Sexual Assault Response Teams (SARTs) are interventions that were created to coordinate efforts of the legal, medical, mental health systems, and rape crisis centers, in order to improve victims' help-seeking experiences and legal outcomes. SARTs have been adopted by many communities across the U.S., and are widely espoused as best practice (DOJ, 2004, 2013; Ledray, 2001; Malefyt, Littel, & Walker, 1998; Pennsylvania Coalition Against Rape [PCAR], 2002). While SARTs may have the potential to improve legal outcomes through multidisciplinary coordination, the limited research on these interventions has yielded mixed findings (see Greeson & Campbell, 2013 for review). Descriptive research (using convenience sampling) has documented that SART interventions often look quite different across communities, meaning their structure and function vary considerably (Zajac, 2006), and this heterogeneity may explain why there are mixed findings regarding SARTs' legal effectiveness. However, to date, no studies have examined which ways of structuring SARTs are associated with SARTs' effectiveness.

To guide SART practice, the current project examined the relationship between SART structure and effectiveness. In Study 1 we used random sampling methods to identify a nationally representative sample of N = 172 SARTs. This study sought to (1) understand the structure and functioning of U.S. SARTs within a *representative* sample of teams; (2) identify patterns of SART implementation; and (3) examine how these different patterns relate to SARTs perceived effectiveness at improvements in victim and legal outcomes. Consistent with prior studies of domestic violence coordinating councils, this study examined SART members' perceptions of their SARTs' effectiveness at improving victim and legal outcomes. Although it would have been desirable to collect archival data to document changes in legal outcomes, such as prosecution rates, this was not a feasible strategy in a national scale study of nearly two hundred communities. For example, in a recent study, it took two years of data collection to obtain such information in only two counties (see Campbell, Greeson, Bybee, & Kennedy, 2011). Therefore, the current study asked SART members to report on their perceptions of their SART's effectiveness, which is a common strategy in studies that are interested in comparing collaboratives to understand the factors that are predictive of (perceived) collaborative effectiveness (Allen, 2005; Allen et al., 2010; Nowell, 2006). Consistent with prior studies of DVCCs, SART *leaders* were asked to act as key informants, by providing information about both their perceptions of the SARTs' effectiveness, and the structural characteristics of their SART (Allen, 2005; Allen et al., 2010; Nowell, 2006). Specific features of SARTs structure and functioning that were examined included: membership breadth (i.e., the number of different stakeholder groups that participated in the collaboration) and *implementation* (e.g., the degree of formality of their team, and their use of recommended collaborative activities, specifically multidisciplinary cross-trainings, policy and protocol development/review, case review, and formal program evaluation).

Findings confirmed that U.S. SARTs are quite heterogeneous in how they are structured. Using cluster analysis, three types of SARTs were identified. SARTs in the "Low Adopters" cluster (38% of the total sample) utilized fewer formal structures, were less likely to institutionalize multidisciplinary trainings and policy/protocol review into their group's collaboration, and did not engage in program evaluation. The other two clusters tended to utilize more formal structures and collaborative activities to organize their work. The SARTs in the "High Adopters except Evaluation" cluster (47% of the total sample) tended to use more formal structures, and engaged in more institutionalization of multidisciplinary trainings and policy/protocol review into their group's collaboration; however, none of the SARTs in this cluster engaged in program evaluation. The "High Adopters plus Evaluation" cluster (16% of the total sample) also used more formal structures and engaged in more institutionalization of multidisciplinary trainings and policy/protocol review; in addition, they also engaged in formal program evaluation to assess their collaborative efforts.

To examine the relationship between SARTs' structure and their effectiveness, SART cluster, membership breadth, and several contextual factors were examined as predictors of all four types of SARTs' perceived effectiveness: improvements in victims' help-seeking experiences, improvements in victims' participation in the criminal justice system, improvements related to the prosecution of sexual assault cases, and improvements in police processing of sexual assault cases. The "High Adopters with Program Evaluation" cluster was perceived as more effective than the "Low Adopters" cluster on all four types of effectiveness. SARTs in the "High Adopters plus Program Evaluation" group tended to perceive themselves as more effective at contributing to improvements in victims' participation in the criminal justice system than SARTs in the "High Adopters except Evaluation" cluster. The other aspect of SART structure—membership breadth—was also associated with effectiveness, such that active membership from a greater number of sexual assault stakeholder groups was associated with greater perceived legal effectiveness. These findings suggest that formalization, regular collaborative processes, and broad active membership from diverse stakeholder groups are key components of successful SARTs.

In Study 2, we sought to deepen our understanding of how SART structure relates to SART perceived effectiveness by examining the structure of inter-organizational relationships within SARTs. Therefore, social network analysis was used to study inter-organizational relationships within four model SARTs—SARTs that fell in the Study 1 "High Adopters plus Evaluation" cluster. Specifically, the aims of this study were: (1) to understand the nature and distribution of each of these types of inter-organizational relationships within model SARTs (e.g., are SARTs characterized by many or few inter-organizational relationships? do organizations in SARTs tend to have relationships that are reciprocated? Are relationships centered around a focal organization or group of organizations?); and (2) to understand the associations *between* these types of inter-organizational relationships within model SARTs.

Within each of these four high-functioning SARTs, all organizations were asked about three different types of relationships with all other organizations that participated in their team. Contacts from each organization reported on the frequency of their communication with other organizations (outside of official group discussion and individual cases), the extent to which they felt that other organization's valued their role, and the extent to which they felt that other organizations were a resource to their own organization's work in responding to sexual assault. Study 2 analyses and results focused on three of the four model SARTs (one was excluded due to a high degree of missing data).

Results revealed a high degree of connection between organizations within each SART. In each SART, most pairs of organizations had communicated in the past six months (outside of official group meetings and individuals cases), felt valued by one another, and perceived one another as a resource. In addition, model SARTs were also characterized by a high degree of relationships both within and across sectors (criminal justice vs. non-criminal justice sectors). However, findings revealed occasional stratification of relationships within model SARTs. In *some* instances (see results for details), there was a core group of organizations that drove relationships (a key, highly connected group of organizations), and a peripheral (less involved) group of organizations that tended to associate with the core group, and not one another. It may be that under some circumstances, it is not feasible for all team members to be equally involved, and more efficient for some organizations to be more peripherally involved.

Finally, there was also evidence that relationships among organizations tended to be mutual. For example, when organization A felt valued by organization B, organization B was also likely to feel valued by A. In addition, when organization A felt that organization B was a resource to their work, organization B was also likely to think that organization A was a resource to their work. Moreover, seeing another organization as a resource is related to feeling valued by them, and both factors contribute to communicating with the other organization more frequently outside of official group meetings.

Table 1	Bivariate Correlations among the Clustering Variables	pp. 35
Table 2	Cluster Analysis of SARTs' Use of Formal Structures and Collaborative Activities Results	pp. 37
Table 3	Correlations among Predictors of SARTs' Perceived Effectiveness from the Final Path Model	pp. 42
Table 4	Predictors of SARTs' Perceived Effectiveness from the Final Path Model	pp. 43
Table 5	Descriptive Information on SART Key Informants' Participation in Study 2 by SART	pp. 55
Table 6	Descriptive Information on Inter-Organizational Relationships Within SARTs	pp. 59
Table 7	Overview of Patterns of Communication Relationships within Model SARTs	pp. 73
Table 8	Variation in Freeman Degree Centrality for Communication Relationships (Yes/No) in Model SARTs	pp. 75
Table 9	Core-Periphery Results for Model SARTs' Communication (Yes/No)	pp. 80
Table 10	Overview of Patterns of the Relationship "Values my Organization's Role" (yes/no) within Model SARTs	pp. 91
Table 11	Organizational Variation in Out-Degree Centrality (Feeling Valued by Others)	pp. 93
Table 12	Organizational Variation in In-Degree Centrality (Making Others Feel Valued)	pp. 94
Table 13	Overview of Patterns of the Relationship "Is a Resource to My Organization's Work" (yes/no) within Model SARTs	pp. 108
Table 14	Organizational Variation in Out-Degree Centrality (Naming Others as a Resource)	pp. 110
Table 15	Organizational Variation in In-Degree Centrality (being Named by Others as a Resource)	pp. 111
Table 16	Summary of Findings Regarding the Nature and Distribution of Collaborative Inter-Organizational Relationships across Model SARTs	pp. 120

LIST OF TABLES

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 17	Within SART Correlations between Different Types of Collaborative Relationships	pp. 122
Table 18	Summary of Implications for Policy and Practice	pp. 143

# LIST OF FIGURES

Figure 1	Sampling Flow Chart	pp. 21
Figure 2	Cluster Analysis	pp. 28
Figure 3	Model of SART Structure and Perceived Effectiveness with Control Variables	pp. 29
Figure 4	Revised Full Path Model	pp. 31
Figure 5	Sociogram of Communication in the Past Six Months (Yes/No) for SART A	pp. 69
Figure 6	Sociogram of Communication in the Past Six Months (Yes/No) for SART B	pp. 70
Figure 7	Sociogram of Communication in the Past Six Months (Yes/No) for SART C	pp. 71
Figure 8	Sociogram of Communication in the Past Six Months (Yes/No) Core- Periphery for SART A	pp. 81
Figure 9	Sociogram of Communication in the Past Six Months (Yes/No) Core- Periphery for SART B	pp. 82
Figure 10	Sociogram of Communication in the Past Six Months (Yes/No) Core- Periphery for SART C	pp. 83
Figure 11	Sociogram of Values my Organization's Role (Yes/No) for SART A	pp. 86
Figure 12	Sociogram of Values my Organization's Role (Yes/No) for SART B	pp. 87
Figure 13	Sociogram of Values my Organization's Role (Yes/No) for SART C	pp. 88
Figure 14	Sociogram of Values My Organization's Role (Yes/No) Core-Periphery for SART A	pp. 100
Figure 15	Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART A	pp. 103
Figure 16	Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART B	pp. 104
Figure 17	Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART C	pp. 105
Figure 18	Sociogram of Is a Resource to My Organization's Work (Yes/No) Core- Periphery for SART A	pp. 118

#### **OVERVIEW**

Sexual assault is a pervasive problem in the United States. National prevalence studies have found that 18% of adult women have been raped during their lifetime (Black et al., 2011; Basile, Chen, Black, & Saltzman, 2007; Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Tjaden & Thoennes, 2006). Most victims/survivors<sup>1</sup> do not report to law enforcement (Bureau of Justice Statistics, 2007), and even when they do contact the police, previous research indicates that only 18%-44% of all reported incidents are referred to prosecutors; of those referred reports, prosecutors issue warrants in 46%-72% of the cases. Overall, approximately 18% of reported sexual assaults are prosecuted (Campbell, 2008; Chen & Ullman, 2010; Kilpatrick et al., 2007).

These low reporting and prosecution rates may be due in part to the way communities respond to sexual assault. Historically, the legal, medical, and mental health systems have operated in isolation from one another with minimal communication and collaboration across systems (Martin, 2005). Victims have carried the burden of identifying available resources and seeking help from each individual system (Campbell, 1998). Furthermore, survivors are often treated by legal and medical system personnel in ways that are hurtful and exacerbate their trauma (Logan, Evans, Stevenson, & Jordan, 2005; Maier, 2008; Ullman, 2010). As such, it is not surprising many victims do not report because they believe, perhaps quite accurately, that their

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>1</sup>The terms 'victim' and 'survivor' are used interchangeably in this proposal. The term 'victim' conveys the criminal nature of the assault, while 'survivor' recognizes the strengths of people who have been assaulted (see Koss & Achilles, 2008 for discussion).

communities will not be able to help them (Logan et al., 2005; Patterson, Greeson, & Campbell, 2009).

By contrast, a coordinated, community-wide response to sexual assault has the potential to improve legal outcomes (such as low reporting and prosecution rates) by fundamentally re-shaping victims' help-seeking experiences (Campbell, 2008). When the legal and medical systems coordinate with rape crisis centers so that advocates can support victims during the police report and medical/forensic exam, survivors rate these interactions much more favorably (Campbell, 2006). As victims' help-seeking experiences improve, fears of negative experiences may lessen, and reporting rates may increase. It is also important to remember that the legal system needs victims' continued participation in order to successfully prosecute cases (Martin, 2005). When victims receive the support and services they need, they are better able to withstand the lengthy court process (Patterson & Campbell, 2010), which may increase prosecution rates.

Coordinated care models may also affect legal outcomes by altering the professional relationships among system personnel. In uncoordinated communities, system personnel lack "a fundamental understanding of 'who does what' and 'who could do what'" (Campbell & Ahrens, 1998, pp. 562), which means that system personnel are largely unable to benefit from each other's' expertise. By contrast, coordinated trainings among forensic nurses, police, and prosecutors have been found to increase law enforcement investigational effort and efficacy, which in turn have contributed to increased prosecution rates (Campbell, Bybee, Ford, Patterson, & Ferrell, 2009). Building collaborative relationships among stakeholders can help systems work together to identify the complex, disparate elements necessary for successful prosecution of sexual assault cases.

Therefore, a promising strategy for improving legal outcomes (such as reporting and prosecution rates) is to strengthen coordination between multidisciplinary service providers. Sexual Assault Response Teams (SARTs) are such interventions. SARTs bring together key stakeholders (most often rape victim advocates, medical/forensic examiners, police officers, and prosecutors) to work together formally and/or informally to promote victims' healing, improve prosecution rates, and reduce the prevalence of sexual assault (Department of Justice [DOJ], 2004, 2013; Ledray, 2001; Oregon Attorney General's Sexual Assault Task Force [OAGSATF], 2009; Pennsylvania Coalition Against Rape [PCAR], 2002; Zajac, 2006, 2009). SARTs often facilitate cross-discipline trainings to foster understanding of others' roles and share specialized knowledge (Peterson, Green, & Allison, 2009; Zajac, 2006, 2009). SARTs may meet regularly as a team to address problems with their community's response to sexual assault, delineate the desired response, institutionalize this response through policies and procedures, and hold one another accountable through monitoring of individual cases (i.e., case review; DOJ 2013; Peterson et al., 2009; Zajac, 2006).

SARTs have been adopted by many communities across the U.S., and are widely espoused as best practice (DOJ, 2004, 2013; Ledray, 2001; Malefyt, Littel, & Walker, 1998; PCAR, 2002). In fact, some state policies now require the formation of SARTs (e.g., Indiana Code 16-21-8-1.5, 2012; Official Code of Georgia Act § 15-24-2, 2012; Oregon Revised Statutes 147.401, 2011). While SARTs may have the potential to improve legal outcomes through multidisciplinary coordination, the limited research on these interventions has yielded mixed findings. Two studies suggest SARTs can improve legal outcomes, including higher evidence collection, victim participation, and prosecution rates (Campbell & Ahrens, 1998; Nugent-Borakove et al., 2006), but other projects have found no effect on successful conviction rates (Nugent-Borakove et al., 2006; Wilson & Klein, 2005). Descriptive research has documented that, in practice, SART interventions often look quite different across communities, meaning their structure and function vary considerably (Zajac, 2006), and this heterogeneity may explain why there are mixed findings regarding SARTs' legal effectiveness. In addition, different patterns of structure and functioning are likely to result in differences in the quality of collaborative relationships between SART members. In turn, such differences in the quality of relationships may translate to differences in SARTs' effectiveness.

According to Diffusion of Innovation (DOI) theory (Rogers, 2003), as interventions are implemented in different contexts, changes are often made to their core components. Some variations may enhance the intervention's efficacy in a particular setting, while other adaptations may dilute critical elements and reduce the intervention's utility. Although SARTs may have the potential to improve legal outcomes (such as reporting and prosecution rates) through coordination, not all SARTs are the same. It is important to identify *which* combinations of intervention features and *which* patterns of collaborative relationships are associated with SARTs that are able to create improvements in legal outcomes. To this end, the current study had two primary objectives.

The first objective of this project was to conduct a national-scale study of SARTs to "map" the landscape of SARTs structure and functioning, identify patterns of SART implementation, and examine how these different patterns relate to perceived effectiveness at improvements in legal practice and outcomes. To achieve this objective, rigorous random sampling methods were used to obtain a national sample of N = 172 SARTs. Key informants (i.e., SART leaders) reported on their SARTs structure and functioning and their perceptions of its effectiveness with respect to legal outcomes. Specific features of SARTs structure and functioning that were examined were: membership breadth (i.e., the number of different stakeholder groups that participated in the collaboration) and *implementation*. Aspects of implementation that were captured included their formalization (i.e., their use of formal resources and structures to organize their work), and the extent to which they institutionalize various collaborative activities into their teamwork in order to promote change (e.g. multidisciplinary cross-trainings, case review). Based on these features, we empirically derived patterns of SART implementation (i.e., different combinations of formalization and collaborative activities) and then examined how membership breadth, implementation pattern, and community context related to SARTs effectiveness. By examining *patterns* of implementation, rather than individual variables, this study recognizes that collaboration is a complex dynamic process, and it is more likely that the *interplay* between a variety of collaboration features, rather than a set of individual features operating in isolation, relates to intervention effectiveness. Existing research suggests that sexual assault service providers do in fact desire such information. In a recent (convenience sample) survey of SART members, 60% indicated that they wanted information on successful SART models (Zajac, 2006).

The second objective of the study was to examine patterns of collaborative relationships within model SARTs. Therefore, Study 2 was designed to "unpack" the pattern of collaborative relationships between organizations in SARTs. Specifically, the study focused on

"model" SARTs that were prototypical with respect to how the field has suggested that SARTs should operate. Based on Study 1 results, four "model" SARTs—whose pattern of implementation was consistent with recommendations for how SARTs should be implemented—participated in Study 2. Given our interest in understanding the relationships between all groups within a given SART, Study 2 employed full network data collection, meaning *all organizations within each SART participated in the study* and provided data on their relationships with other organizations in their SART. Three types of collaborative relationships were assessed: *inter-organizational communication* about coordinating the response to sexual assault, believing that other organizations *value their organization's role* in the response to sexual assault, and believing that *other organizations are a resource to their organization's work* in responding to sexual assault. In this study, we examined the nature and distribution of each of these types of inter-organizational relationships within each "model" SART, as well as the associations *between* these different inter-organizational relationships.

### **REVIEW OF RELEVANT LITERATURE**

## The Heterogeneity of Sexual Assault Response Teams (SARTs)

Although SARTs have developed and spread rapidly throughout the U.S., there is minimal research on these interventions, and most work to date has been primarily descriptive in nature. These formative studies are quite useful, however, in that they have documented that SARTs are remarkably heterogeneous in practice. Key components that vary across SARTs include their membership, formalization, and the collaborative activities they engage in to promote change. Most often, SARTs' *membership* includes rape victim advocates, medical/forensic personnel, police, and prosecutors (Zajac, 2006, 2009); however, some SARTs may not be able to engage each of these groups, while other SARTs have much broader membership, and bring together even more stakeholder groups, such as representatives of the faith community, agencies serving marginalized populations (e.g., people with disabilities), and other social service agencies (such as drug treatment programs; Peterson et al., 2009; Zajac, 2006, 2009). SARTs also vary in their use of formal structures and resources to organize their work (i.e., their *formalization*). Some SARTs may have a variety of formalized structures in place, such as a leadership or coordinator role, a defined mission statement, and policies and procedures of operation, but some SARTs forgo such structures and instead rely on informal collaboration among members (Johnston, 2005; Peterson et al., 2009; Zajac, 2006). Finally, different collaborative activities are utilized by SARTs to pursue changes in their community. SART resource manuals recommend a variety of activities, including, but not limited to: case review (when a multidisciplinary team reviews the response to individual cases, what went well, and what should have been differently); multidisciplinary cross-trainings (stakeholders educate one another about issues related to their roles and areas of expertise); policy development, adoption, and/or review (written guidelines developed and/or adopted by the multidisciplinary team specifying the desired response to survivors by each system); and formal program evaluation (i.e., formal data collection/analyses to evaluate the group's process and effectiveness; DOJ, 2004; Malefyt et al., 1998; OAGSATF, 2009; PCAR 2002; Peterson et al., 2009; Zajac, 2006). Individual SARTs may engage in some or all of these activities and they may institutionalize these processes so that they occur on a regular basis, or they may used them on an as needed, more infrequent basis (Peterson et al., 2009; Zajac, 2006).

Given that SARTs vary so much in practice, it is not surprising that the limited literature on their effectiveness has produced murky results (see Greeson & Campbell, 2013 for formal review). The literature on their legal effectiveness will be reviewed briefly here. In a nationalscale study, Campbell (1998) utilized cluster analysis to identify patterns of victims' experiences with the legal, medical, and mental health systems. Victims in highly coordinated communities (all but one of which had a SART) were more likely to be in the cluster characterized by positive experiences across all systems, including a greater likelihood of prosecution of their case. In a more recent quasi-experimental study, Nugent-Borakove and colleagues (2006) found that SART cases that were also treated by a Sexual Assault Nurse Examiner (SANE) Program<sup>2</sup> (compared to SANE/no-SART and no-SANE/no-SART cases) had the most types of evidence collected and the highest victim participation in the legal process. However, there is also evidence that SARTs may not increase prosecution rates. In the same project, Nugent-Borakove and colleagues (2006) also reported that SANE-SART cases were not more likely to result in conviction of offenders. Similarly, Wilson and Klein's (2005) project was unable to find a difference in prosecution rates between SART and non-SART cases.

The equivocal findings regarding SART operation and effectiveness can be explained by the principles of Diffusion of Innovation (DOI) theory (Rogers, 2003). According to DOI, an intervention may go through re-invention as it is implemented, meaning it is modified or adapted for its new context, which is how different forms of the intervention emerge. Empirical research on intervention dissemination consistently shows that re-invention is quite common

<sup>&</sup>lt;sup>2</sup> Sexual Assault Nurse Examiner (SANE) programs are interventions in which highly-trained forensic nurses provide comprehensive medical care and forensic evidence collection for sexual assault patients. The majority of SANE programs engage in community collaboration through a SART (Logan et al., 2007).

(Mayer & Davidson, 2000), and in fact, community practitioners may even feel pressured to change an existing model simply to make their program unique relative to others in their field (Miller, 2001). On the one hand, re-invention may be deleterious if an adopter does not implement all parts of the innovation that are necessary for it to succeed. On the other hand, re-invention can be a way to tweak the innovation so that it better fits the local context, thereby enhancing the likelihood of its success (Miller & Shinn, 2005). In other words, DOI theory suggests that differential effectiveness is likely until it is possible to identify the critical features of an intervention essential to its success and develop strategies for ensuring adherence to those features during implementation. This begs the question then of which differences matter: What are the most critical elements of SARTs?

### Lessons Learned From Other Coordinated Community Interventions for Victims of Violence

To gain some insight into this question, we can turn to a related area of research on domestic violence coordinating councils (DVCC's), which are very similar in purpose, structure, and functioning to SARTs in that they seek to coordinate multidisciplinary systems to respond to the needs of victims of interpersonal violence (see Allen et al., 2010 and Allen, Watt, & Hess, 2008 for descriptive information on DVCCs). With respect to the structure and function of these interventions, the DVCC literature suggests that the sheer number of stakeholder groups is not particularly influential, but instead, breadth of *active* membership (i.e., number of stakeholder groups truly engaged) is associated with increased council effectiveness (Allen, 2005, Allen et al., 2010). In case studies of exemplar DVCC's, Allen et al. (2010) found that the presence of engaged leaders, committed members, and broad, active participation from particular stakeholder groups (particularly stakeholders who were well-positioned to influence change) was critical to a council's success in achieving its goals. The research regarding the most effective council organization is far less clear. Two studies have found that a highly formal, organized structure is preferable (Allen at al., 2010, Clark, Burt, Schulte, & Macquire, 1996), but another reported that degree of formality was not predictive of council effectiveness (Allen, 2005). Recent findings from Allen and colleagues (2010) indicated that perhaps degree of formality is not as important as the fit between the structure and the needs of the group at any particular time. An *adaptive* council structure that could change as needed given specific demands was optimal for success. To date, no studies have examined the specific collaborative processes that councils engage in and their relationship with collaborative effectiveness.

The DVCC literature also indicates that it is not just intervention features that matter; the *relationships between* stakeholders are critical to collaborative effectiveness. Allen and colleagues (2010) found that creating access to other stakeholders, particularly influential stakeholders, was a powerful part of the collaborative process for many DVCC members. In Clark and colleagues' (1996) qualitative work, they showed that effectiveness of coordinating councils was linked to creating routine communication and opening dialogue among diverse stakeholders, improving stakeholders' understanding of one another's roles, and creating positive relationships among stakeholders.

Clearly, the presence of collaborative relationships in a collaborative group is critical. However, does the pattern (i.e., the nature and distribution of the relationships within the group) of those relationships matter? Thus far, two studies have utilized social network analysis (SNA) to understand the patterns of relationships within DVCCs and their influence on collaborative effectiveness. SNA is a methodology that allows researchers to examine the underlying patterns of relationships within a network. A network is defined as a set of actors (i.e., individuals or organizations) within a bounded setting (e.g., a DVCC, SART, or other community coalition; Wasserman & Faust, 1994). This methodology is well-suited to studying collaboratives, as the driving force behind such coalitions is their ability to create relationships among a network of stakeholders that enable them to work cooperatively and achieve desired community changes (Allen et al., 2010; Nowell, 2006; Provan, Veazie, Staten, & Teufel-Shone, 2005). SNA can help identify patterns of relationships, and how those patterns relate to collaborative success.

In the first study, Nowell (2006) examined the importance of network density, which refers to the extent to which relationships are present, relative to the total amount of possible relationships. Simply put, density is a measure of how connected a network is (Scott, 2000). Specifically, she examined network density of five qualities of relationships among stakeholders: frequency of communication, trust in one another two follow through, perception of shared philosophy, belief in responsiveness to one another, and acknowledgement of one another's expertise. Nowell's (2006) results indicated that network density of each of these relationship qualities was correlated with perceived effectiveness at increasing coordination and creating systems change. In other words, when there was a greater ratio of relationships among stakeholders that were characterized by positive relationship qualities, council members perceived their councils were more effective. Similarly, in a second study by Allen and colleagues (2010) higher network density of information exchange was also correlated with greater perceived effectiveness, such that councils whose actors were more connected via information exchange were believed to be better at improving relationships, and

creating positive community change. Taken together, these findings suggest that the patterns of relationships among stakeholders are important elements to understand when trying to identify the features of effective coordinating interventions.

## THE CURRENT PROJECT

There is a pressing need for research that can help guide community practice in forming and sustaining effective SARTs (Greeson & Campbell, 2013). The minimal research that does exist has some notable limitations. First, descriptive research has illustrated that SARTs vary in how they are structured (i.e., they vary in their membership, formalization, and use of collaborative activities). However, a key limitation is that this research has utilized convenience sampling methods, and therefore may have over-or under-sampled some types of SARTs. As such, researchers, practitioners, and policy-makers do not have a representative picture of the SART landscape. Such information is necessary to help stakeholders decided how best to meet the needs of U.S. SARTs and advance the field as a whole. **Therefore, the current project used random sampling methods to "map the landscape" and understand how SARTs are currently structured (Study 1).** 

Second, although it is clear that SARTs are heterogeneous, it is unclear which variations of SARTs are most effective. Prior research and theory suggests that we would expect SARTs structure, as well as the patterns of collaborative relationships that exist among sexual assault stakeholders, to relate to SARTs effectiveness at creating improvements in their communities. **Therefore, the current project sought to examine the relationship between SART structure and SART effectiveness (Study 1 and 2).** In so doing, this research identified successful SART models, and provides practitioners and policy-makers with information on how to promote SARTs effectiveness.

In Study 1 we used random sampling methods to identify a nationally representative sample of N = 172 SARTs. In this study, sought to (1) understand the structure and functioning of U.S. SARTs (2) identify patterns of SART implementation, and (3) examine how these different patterns relate to SARTs perceived effectiveness at improvements in legal practice and outcomes. Consistent with prior studies of domestic violence coordinating councils, this study examined SART members' perceptions of their SARTs' effectiveness at improving victim and legal outcomes. Although it would have been desirable to collect archival data to document changes in legal outcomes, such as prosecution rates, this was not a feasible strategy in a national scale study of nearly two hundred communities. For example, in a recent study, it took two years of data collection to obtain such information in only two counties (see Campbell, Greeson, Bybee, & Kennedy, 2011). It also would have been desirable to collect data directly from survivors to understand whether SARTs that varied in their structure and functioning varied in their ability to improve victims' help-seeking experiences. Again, the national scale and scope of this study meant that this was not a feasible strategy. Prior research has required years to obtain reasonable sample sizes of survivor interviews for only one community (e.g., Campbell, Bybee, Ford, Patterson, and Ferrell, 2009). Therefore, the current study asked SART members to report on their *perceptions* of their SART's effectiveness, as a proxy measure of SARTs' effectiveness. This is a common methodological choice in studies that are interested in comparing collaboratives to understand the factors that are predictive of (perceived) collaborative effectiveness (Allen, 2005; Allen et al., 2010; Nowell, 2006). Consistent with prior

studies of DVCCs, SART *leaders* were asked to act as key informants, by providing information about both their perceptions of the SARTs' effectiveness, and the structural characteristics of their SART (Allen, 2005; Allen et al., 2010; Nowell, 2006). By measuring leaders' perceived effectiveness, we were able to collect data from a large number of SARTs; this was necessary to be able to identify variation in SARTs' structure and functioning and examine how this variation was related to SARTs' effectiveness; such aims would not have been possible in a small scale study.

Specific features of SARTs structure and functioning that were examined were: *membership breadth* (i.e., the number of different stakeholder groups that participated in the collaboration) and *implementation*. Aspects of implementation that were captured included their *formalization* (i.e., their use of formal resources and structures to organize their work), and the extent to which they institutionalize various collaborative *activities* into their teamwork in order to promote change (e.g. multidisciplinary cross-trainings, case review). Based on these features, we used cluster analysis to empirically derive patterns of SART implementation (i.e., different combinations of formalization and collaborative activities) and then examined how membership breadth and implementation pattern were related to SARTs effectiveness.

In order to understand the influence of SART structure (i.e., membership breadth and implementation pattern) on SART perceived effectiveness, it was necessary to control for factors that could confound the relationship between these factors. Specifically we controlled for *characteristics of the interview participant, the length of time the SART had been in continuous operation*, and *characteristics of the community served by the SART*. Due to the fact that SART leaders were reporting on their perceptions of their SARTs' effectiveness, the current study controlled for characteristics of the SART leader his/herself (such as their role in the response to sexual assault) that may have influenced their reports of effectiveness. Furthermore, prior work has shown that collaborations build their infrastructure over time; this suggests that older SARTs would be more likely to be highly structured than new SARTs (Butterfoss, Goodman, & Wandersman, 1993). Therefore, consistent with prior studies of DVCC's, the length of time the SART had been in continuous operation was controlled for in examining the relationship between SART structure and effectiveness.

In recognition that local community context is also relevant to an intervention's effectiveness (Rogers, 2003), two characteristics of the communities served by SARTs were examined as control variables: *the number of counties served by the SART*, and the *population density of the community served (rural vs. urban)*. We examined the number of counties served by the SART in order to capture whether the SART was collaborating across multiple prosecutorial jurisdictions. Whether the community the SART served was rural (sparse population density) or urban (densely populated) was also examined in relationship to SARTs' effectiveness. Prior research on non-profit collaboration suggests that on the one hand, rural communities may face unique challenges and problems that can detract from collaborative efforts (e.g., geographic distance; Snavely & Tracy, 2000, 2002). On the other hand, certain characteristics of the rural environment (e.g., it is easier for stakeholders to get to know one another on a personal level), may actually promote effective collaboration (Snavely & Tracy, 2000, 2002). Therefore, by controlling for these contextual features, these were eliminated as potential confounds of the relationship between SART structured and effectiveness.

Like Study 1, Study 2 also examined the relationship between SART structure and effectiveness. Specifically, In Study 2, we examined the structure of collaborative interorganizational relationships within SARTs. Whereas Study 1 obtained data from SART leaders on their SARTs structure and perceived effectiveness, Study 2 collected data from all SART members to explore the patterns of relationships within each SART. While SART leaders can be expected to provide more general information on their SARTs (such as its structure), we anticipated that they would not be privy to how relationships played out among all pairs of organizations within their SART. This led us to collect data from all organizations that belonged to each SART within a subsample of "model" SARTs that were prototypical with respect to how the field has suggested that SARTs should operate. Based on Study 1 results, four "model" SARTs — whose pattern of implementation was consistent with recommendations for how SARTs should be implemented—participated in Study 2. Three types of collaborative interorganizational relationships were assessed: inter-organizational communication about coordinating the response to sexual assault, believing that other organizations value their organizations role in the response to sexual assault, and believing that other organizations are a resource to their organization's work in responding to sexual assault. Similar relationships have been used as indicators of collaborative relationships and have also been associated with collaborative effectiveness (Clark et al., 1996; Nowell, 2006, 2009). In this study, we examined the nature and distribution of each of these types of inter-organizational relationships within each "model" SART, as well as the associations between these different inter-organizational relationships.

## **STUDY 1: PATTERNS OF SART IMPLEMENTATION AND IMPLICATIONS**

#### FOR SARTS' LEGAL EFFECTIVENESS

The objective of Study 1 was to conduct a national-scale study of SARTs using rigorous random sampling methods in order to (1) understand the structure and functioning of U.S. SARTs, (2) identify patterns of SART implementation, and (3) examine how these different patterns relate to perceived effectiveness at improvements in legal practice and outcomes.

## Sampling

The target population of this study was U.S. Sexual Assault Response Teams. At the inception of this project, there was no national list of U.S. SARTs to use as a sampling frame. Therefore, the initial task in this project was to develop a sampling frame through the use of five strategies. First, the research team was granted access to two national registries of organizations that are likely to participate in SARTs: the International Association of Forensic Nurses' (IAFN) registry of Sexual Assault Nurse Examiner programs and SANE-SART.com's registry of SANE-SART member organizations. Between these two registries 785 non-duplicative organizations were identified. By phone and email, the research team was able to successfully contact 99% (781) of these organizations (i.e., the team was able to determine whether a SART existed in their community or was able to verify from another source that the organization was no longer in existence). Second, the research team contacted subscribers to the National Sexual Violence Resource Center's SART list-serv. Individuals subscribed to this list-serv who could be matched to a SART that was already identified in the first step of sampling frame development (contacting members of the IAFN and SANE-SART registries) were not contacted. Of the remaining 126 subscribers, over 98% were successfully reached by the research team. Third, state sexual assault coalitions were contacted to find out if they had a list of SARTs in their

17

state. Forty-six of 51 possible coalitions were reached (90% success rate). Of these coalitions, 18 (39%) did not have a list of SARTs, 19 (41%) had a list of SARTs in their state, and 9 (20%) did not have a formal list of SARTs, but identified SARTs they were aware of in their state for the research team. Fourth, the research team conducted a search of the academic literature and practitioner SART manuals to identify published material on existing SARTs. Finally, a Google search was conducted to identify SARTs that were promoted on the Internet. As expected, many SARTs were identified by multiple strategies. After removing duplicate entries, a total of 858 SARTs were identified. During the interviewing process, an additional six SARTs were identified that should have been included in the initial sampling frame; these were added to the sampling frame and also had the opportunity to be selected for interviewing. Thus, a total of 864 unique SARTs comprised the study's sampling frame.

To be eligible for the interviews, the SART had to engage in multidisciplinary coordination in the response to sexual assault, meet regularly, and respond to adult sexual assault victims. SARTs that only served child sexual assault victims were excluded from the study. The target sample size for the study was 170 SARTs; ultimately interviews were completed with 172 teams. A power analysis revealed that this sample size would ensure reasonable statistical power (greater than 0.80; as recommended by Cohen, 1992) to detect a medium-sized effect of SART clusters on SARTs' perceived effectiveness (assuming a reasonably small number of clusters and reasonably evenly distributed cluster sizes). Simple random sampling was used to select SARTs for recruitment. See recruitment procedures (below) for information on response rates.

## Procedures

**Recruitment.** Similar to prior studies of domestic violence coordinating councils, the leader or coordinator of the sampled SART was selected to participate on behalf of their team as a "key informant." Leaders were presumed to be well placed to provide information about their team's structure and functioning. However, when the SART leader was either unavailable (e.g., one was on medical leave), had become a member of the SART so recently that they felt they would not be a good informant, or was unwilling to participate (because they were the leader of multiple independent SARTs and had already been interviewed about a different SART), the most recent leader or a long-term member of the SART was asked to participate. In 96% of the interviews, the participant was the current or former leader of the SART.

Recruitment contacts were made by phone, and when an email address was available, by email. To increase the likelihood of successfully contacting the SART key informant, recruitment attempts were made at different times of the day and different times of the week. Initially, recruitment numbers were low, so an additional recruitment strategy was added. Nonresponders (who had been contacted six or more times without responding) received a recruitment mailing with a \$5 incentive, a recruitment letter signed by the research team and the National Sexual Violence Resource Center, and a letter of support from the Director of the National Institute of Justice<sup>3</sup>.

When SARTs refused to participate or were ineligible for the study, more SARTs were sampled (using simple random sampling) in order to ensure the target sample size was reached. Out of a sampling frame of 864 teams, 268 were recruited to participate in the study. Of the 268 that were recruited, 81 were successfully reached and deemed to be ineligible, because

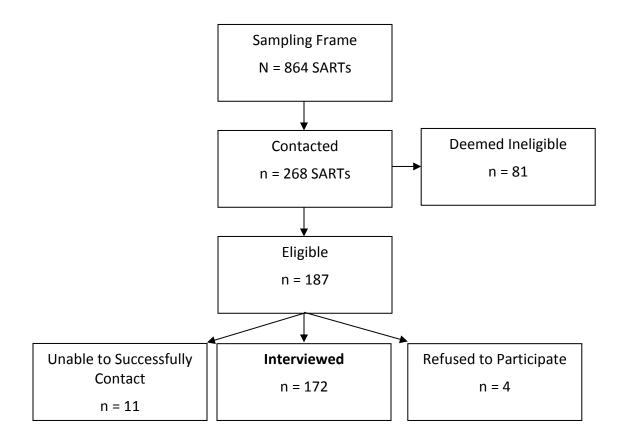
<sup>&</sup>lt;sup>3</sup> After that point, all interview participants received the \$5 incentive, either in the mailing or after the interview.

they did not serve adult victims, the SART did not exist, or the SART had stopped meeting<sup>4</sup>. Of the remaining 187 teams (268 recruited – 81 reached and ineligible to participate = 187), 11 were not reached successfully (6%; either they were never spoken to, or never able to schedule and complete an interview), four refused to participate (2%), and interviews were completed with 172 teams (92%). Thus, by defining the response rate as: [number of interviews completed]/number of potential interviews that were eligible and/or may have been eligible], the response rate in the current study was 92% (see Figure 1 on next page).

Interviewer training. To help the interviewers understand the context in which SARTs operate, interviewers read SART manuals and were trained in how different sexual assault stakeholder groups respond to sexual assault. Interviewers were also trained on the purpose of the study and each of the sections of the interview, administration of the interview (including probing and answer questions), building rapport with participants, and ethical considerations. In addition, interviewers were trained to administer the interview consistently, while still engaging on a personal level with the participants. This strategy balanced standardization with the need to build rapport with participants so that they would be motivated to complete the entire interview thoughtfully and honestly.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>4</sup> Sampling frame development was designed conservatively, in order to reduce the likelihood of non-coverage bias (i.e., sampling error due to not including SARTs that should have been part of the sampling frame). Due to these conservative procedures, it was expected that some teams that were identified in sampling frame development would not be eligible for interviews. As one example, the research team began screening out teams that only served children after sampling frame development had been completed. In addition, three of the five sampling frame development methods (contacting state coalitions, searching the academic and practitioner literatures for references to SARTs, and Google searching) did not involve contacting people who were potential members of the actual SART, and were therefore prone to identifying teams that had been in existence at one point, but may not have been in existence when the sampling frame was being developed.



After this initial formal training, interviewers reviewed the entire interview, and then observed a mock interview. The mock interview modeled appropriate administration of the interview and provided examples of how to respond to potential challenges (e.g., a participant that refuses to select an answer from the response set). Then, the trainees conducted mock interviews with a supervisor until they were cleared to begin interviewing. This training approach has been successfully utilized in prior studies of sexual assault victims and sexual assault service providers (Campbell, Adams, Wasco, Ahrens, & Sefl, 2009).

**Piloting.** Pilot interviews were conducted with 12 SART leaders. All interviews were reviewed to identify any measurement problems, such as questions that were difficult to

answer; missing filter questions or questions that led to a high degree of not-applicable responses; ambiguous or misunderstood terms; inadequate response sets, and indications of participant frustration and/or fatigue. Piloting was also used to address issues with the overall organization, flow, and timing of the interview and any issues with staff recruitment and administration of the interview. The revised interview protocol is provided in Appendix B1.

Interviewing procedures. During the structured interview, the interviewer read the introduction, transitions, and questions from the interview protocol word-for-word. The interviewer was also responsible for orienting the participant to choose an appropriate response from the response set as needed (e.g., "You said this is a goal of your team. Would you say it is somewhat important, very important, or a primary goal?"), and answering the participants' questions (i.e., clarifying the interpretation of an item). At the end of the interview, participants were offered the opportunity to receive a brief summary of results. Interviews typically lasted a little over one hour (M = 68.08 minutes, SD = 16.74). With permission, all interviews were audio-recorded. Weekly meetings were held to monitor interviewing quality and troubleshoot interviewing and data entry. All procedures were approved by the Michigan State University IRB.

#### Measures

In drafting the phone interview protocol and measures, project staff drew upon personal experience working with multidisciplinary community stakeholders in the response to sexual violence; SART practitioner manuals and guidelines; survey research and case studies of SARTs that described their implementation; prior studies of domestic violence coordinating councils (Allen, 2005; Allen et al., 2010; Nowell, 2006); and a national study that was conducted in order to assess the heterogeneity of SANE programs (Campbell et al., 2006). Feedback from the Associate Director of the National Sexual Violence Resource Center was solicited and incorporated into interview revisions.

The interview captured the independent (SARTs' membership breadth, formalization and utilization of various collaborative activities) and dependent variables (perceived effectiveness at improving legal outcomes and improving survivors' help-seeking experiences). Several contextual variables were also be captured and modeled as control variables in the analyses. Specifics regarding the measurement of each of the variables in the study are provided below. Descriptives for the measures of interest are provided in the results section.

**Contextual variables.** Contextual information was also be collected and modeled as control variables in analyses. During the interview, the participant was asked to report on *the length of time the SART has been in operation* (in years) their *stakeholder group* (e.g., whether they are a medical/forensic examiner, police officer, etc.), the *amount of time they have been a member of the SART* and their *race/ethnicity, gender, age,* and *education* level. Communitylevel demographics (specifically, *the number of counties/jurisdictions served, and whether the community classified as rural* (based on 2010 Census population density of less than 500 people per square mile) were also collected to be included in the analyses as control variables.

Membership breadth (independent variable). Participants were asked to indicate (yes/no) whether each of 18 different stakeholder groups were currently represented as an active member on their SART team. An active member was defined as "someone who attends SART meetings or other functions reasonably frequently." Stakeholder groups included rape crisis center staff, prosecutor, crime lab personnel, corrections, clergy, higher education, and others. *Membership breadth* was measured as the total number of stakeholder groups that are represented on the SART (the sum of the 18 yes/no items).

Formalization (independent variable). Formalization was measured by 13 yes/no questions. Participants were asked to report whether various formal structures and resources (e.g., subcommittees, meeting agendas, a formal leader, and formal procedures of conflict resolution) were in place in their SART (yes/no). Formalization was the sum of these 13 yes/no items. This measure drew from the work of both Butterfoss (1998) and Allen and colleagues (2010). Butterfoss's original measure was adapted for use with DVCC's by Allen and colleagues. In turn, their measure of DVCC formalization was adapted for this study to capture use of formal structures and resources in SARTs. In adapting the measure for this study, items that were irrelevant in the context of SARTs were cut, several items were clarified to ensure they would be clear to SART members, and several formal resources that are often used by SARTs were added to the measure.

Use of collaborative activities (independent variables). Participants were asked about SARTs' use of four key collaborative activities: *case review, multidisciplinary cross-trainings, adoption and/or review of policies/protocols, and program evaluation*. These specific activities were chosen based on a review of SART manuals and the team's experience with the community response to sexual assault. For each activity, SARTs were asked whether their SART engaged in that activity (yes/no), and if so whether the activity was utilized regularly or as needed. For the variable program evaluation, SARTs were coded as 0 = does not engage in *evaluation* or 1 = *engages in program evaluation*. For each of the other four activities (case review, multidisciplinary cross-trainings and adoption and/or review of policies/protocols) a SART was coded as 0 = *does not use that activity*, 1 = *uses activity on an as needed basis*, and 2 = *used on a regular basis*. Thus, each activity was represented with its own variable.

**Perceived effectiveness variables (dependent variables).** Participants were asked to rate the extent to which their SART's efforts led to a variety of improvements in their community on a five point Likert-type scale (1 = *Not all*; 2 = *A little bit*; 3 = *Somewhat*; 4 = *Quite a bit*; 5 = *To a great extent*). The response set, and the structure of the scale (i.e., asking participants to rate the extent to which the collaborative contributed to various improvements) are modified from Allen and colleagues' (2010) measure of perceived domestic violence coordinating council effectiveness. The specific aspects of SARTs' perceived effectiveness that were captured (e.g., asking about improving victims' willingness to participate in the criminal justice process throughout the entirety of their case) were developed specifically for this study by project staff based on their experience with the community response to sexual assault.

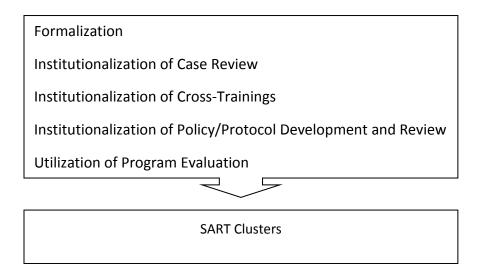
Perceived effectiveness at improving victims' experiences was assessed by a 10-item measure that captured improvements in survivors' post-assault interactions with legal, medical, mental health, and advocacy services related to the accessibility and responsiveness of these systems to rape victims. Sample items included "victims being more likely to receive referrals to mental health services" "responders being more sensitive toward victims" and "responders providing more comprehensive, higher quality services to victims." It was anticipated that the index was one-dimensional. An exploratory factor analysis (oblique) was conducted and visual inspection of the scree plot as well as the Kaiser rule confirmed one factor. Thus, future analyses were conducted based on the average of the ten items ( $\alpha = .92$ ; corrected item-total correlations ranged from .610 to .775).

Perceived legal effectiveness was assessed by 26 items that captured a variety of improvements related to the legal processing of sexual assault cases. Two items were dropped due to high levels of missing data (the extent to which fewer prosecuted cases were dismissed by a grand jury, judge, or prosecute, 16.3% missing; and the extent to which prosecutors' improved their education of juries, 11.0% missing). An exploratory factor analysis (EFA) using obligue rotation was used to determine the factor structure. Inspection of the scree plot suggested a two or three factor solution, and the Kaiser rule indicated three factors; therefore the three factor solution was chosen. Items were assigned to the factor that they loaded to the most strongly and subscale scores were created by averaging across the items that were assigned to each factor. This resulted in three subscales of perceived legal effectiveness. First, the "improvements in sexual assault victims' participation in the criminal justice system" subscale was assessed by nine items. Sample items included the extent to which the SARTs' efforts have led to "an increase in the number of assaults that are reported to the police" and "victims being more likely to continue participating during the entire case." ( $\alpha$  = .95; corrected item total correlations ranged from .693 to .853). Second, the improvements in police processing of sexual assault cases subscale consisted of six items, including included the extent to which the SARTs' efforts have led to "police being more likely to refer cases to the prosecutor's office" and "improvements in police utilization of medical/forensic evidence" ( $\alpha$  = .90; corrected item total correlation ranged from .624 to .792). The third subscale, *improvements related to the prosecution of sexual assault cases* was assessed by nine items. Example items include the extent to which the SARTs' efforts have led to "an increase in the number of prosecuted cases that result in conviction" and "improvements in medical forensic

personnel expert witness testimony" ( $\alpha$  = .95; corrected item total correlations ranged from .713 to .850).

# **Data Analyses**

**Cluster analysis.** Cluster analysis was used to identify clusters or sub-groups of SARTs with similar implementation of formal structures and collaborative activities. Cluster analysis is an analytic technique that is useful for identifying clusters or subgroups of cases based on their profile across multiple variables (Luke, 2005; Rapkin & Luke, 1993). Cluster analysis creates groupings of cases such that cases within a group are more similar to one another on the variables of interest than they are to cases in a different group. In this case, SARTs were grouped based on their scores on five variables: (1) formalization, (2) whether they used program evaluation, and their institutionalization of (3) case review, (4) multidisciplinary cross-training, and (5) policy and protocol development and review (see Figure 2 on next page).

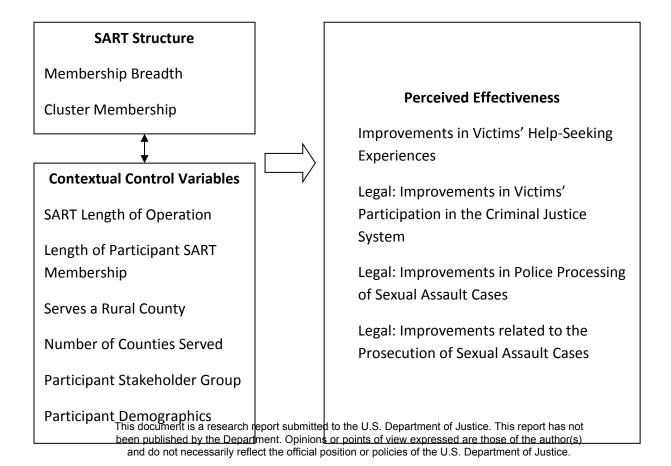


All five variables were standardized prior to clustering in order to ensure that some variables would not be artificially influential due to their scaling (Rapkin & Luke, 1993). High correlations among variables in a cluster analysis can also impact the results of the analysis and therefore correlations among the five variables to be clustered were examined. Correlations ranged from non-significant (r = .004, n.s.) to moderate (r = .395, p < .01) and therefore no modifications were needed.

In contrast to traditional hypothesis-testing statistical methods in which possible results are constrained to rejecting or not rejecting the null hypothesis, cluster analysis is more inductive. As is typical, this decision was informed by both statistical considerations (e.g., number of cases per cluster, number of clusters, degree of heterogeneity/homogeneity in the cluster solution) and conceptual considerations (e.g., are the clusters capturing groups that are conceptually meaningful and interpretable?; Rapkin & Luke, 1993). In this study, a two-step procedure utilizing both hierarchical (to determine the appropriate number of clusters) and optimization cluster analysis methods (to classify SARTs into clusters) was used. First, a hierarchical (agglomerative) cluster analysis using Ward's linkage method was conducted to determine the appropriate number of clusters. Squared Euclidean distances (which are appropriate for both categorical and continuous variables) were used to assess the degree of similarity/dissimilarity among clusters (Rapkin & Luke, 1993). An inverse scree plot of the heterogeneity coefficients and dendogram were inspected to determine the appropriate number of clusters to input into the optimization cluster analysis. Next, optimization cluster analysis was conducted and centroids from the corresponding hierarchical cluster analysis were used as cluster start values. The results of the optimization cluster analysis were used to classify SARTs into clusters.

**Structural equation modeling.** Structural Equation Modeling (SEM) was conducted to examine predictors of SARTs' effectiveness. The original version of the model that we set out to test is shown in Figure 3.

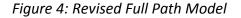
Figure 3: Model of SART Structure and Perceived Effectiveness with Control Variables

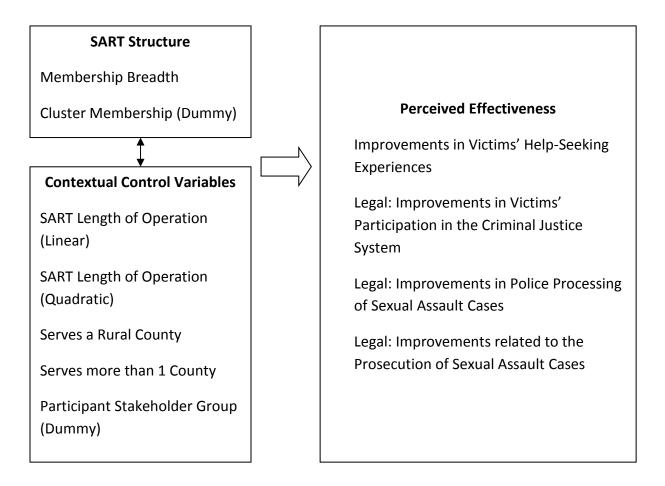


The two multinomial variables (SART cluster membership and the participant's stakeholder group) were dummy coded. The interview participant's stakeholder group was coded into three groups: rape crisis center staff (55%), medical/forensic examiners (24%), and other (20%), with rape crisis center staff (the largest group) coded as the reference group.

To prepare for modeling, bivariate associations between the variables were examined, and data were screened for outliers, non-normality, multicollinearity among the independent variables, and non-linear relationships between the independent and dependent variables (as recommended by Tabachnik & Fidell, 2007). This led to several modifications. First, none of the participant demographics (age, gender, race, and education level) were correlated with any of the four measures of perceived effectiveness and therefore these were not included as control variables in the path model. Second, the length of time the participant had been involved in the SART was strongly correlated with the length of time the SART had been in operation (r = .70, p < .01); this correlation would cause multicollinearity if both variables were modeled as predictors of the perceived effectiveness variables. The literature suggests the importance of the length of time that a collaborative has been in operation as fundamental to its ability to succeed. Therefore, the SARTs' length of continuous operation was retained, and the participant's length of membership in the SART was dropped. Third, the distribution of the "number of counties served" variable was non-normal. Therefore, the variable was dichotomized into whether the SART served more than 1 county (yes/no). Fourth, the length of time the SART had been in operation exhibited a non-linear relationship with each of the dependent variables. Inspection of the bivariate scatter plots revealed that a quadratic line was a good fit for the data. Therefore, the original variable (length of time in operation, centered)

and the variable squared (length of time in operation centered, squared) were modeled as predictors of the dependent variables. Finally, four outliers were identified. Analyses were conducted with and without these cases to assess their influence on the results. The revised model is pictured in Figure 4. In the initial path model, all nine independent variables were modeled as predictors of each of the four dependent variables and correlations were allowed between all independent variables and between the error terms of the dependent variables. Full information maximum likelihood estimation (FIML) was used to address the missing data in these analyses.





This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Overall model fit was assessed by significance of the Chi-square test of misfit (a statistically significant Chi-Squared indicates a significant amount of misfit between the observed and modeled matrices) and by the CFI and RMSEA indices of model fit (see Hu & Bentler, 2003 for discussion and benchmarks). To conserve statistical power and increase parsimony, non-significant parameters were sequentially trimmed from the model (see Hosmer & Lemeshow, 2000). Chi-square difference tests were conducted to ensure the model trimming process did not introduce a significant amount of misfit.

### Results

Descriptives: Participant and SART Characteristics. The first aim of the study was to document SARTs' structural characteristics in practice, specifically their membership breadth, formalization, and use of collaborative activities. In addition to presenting this information, this section provides additional contextual information on the SART key informants who participated in the interviews, the SARTs themselves and the communities they serve, and SARTs perceived effectiveness.

SART key informants who participated in interviews were typically female (95% female, 5% male), White (89% White, 5% African-American, 2% Hispanic/Latino(a), 2% Native American or Alaskan Native, 1% Multiracial, and 0% Asian-American), middle-aged (*M* = 42.46 years old, *SD* = 10.89), and college educated (84% had completed a bachelor's degree or higher). Over half were rape crisis center advocates/staff (55%), while approximately one-fourth were medical/forensic examiners/SANEs (24%); 5% were advocates employed in the victim's witness unit of the prosecutor's office, 5% were prosecutors, 4% were police, and 7% identified as another stakeholder group (e.g., prevention educator, child advocacy center director). On average, participants had been involved in their SART for five years (M = 5.08, SD = 4.40).

On average, SARTs had been in operation continuously for eight years (M = 8.08 years, SD = 5.63). Approximately one-fifth served more than one county (19%), while two-thirds (66%) served a rural community (with a 2010 census population density of less than 500 people per square mile). As to geographic region, 31% of the SARTs were located in the South, 29% in the Midwest, 25% in the West, and 15% in the Northeast. The majority of SARTs' active membership included police (98%), rape crisis center advocates/staff (95%), Sexual Assault Nurse Examiners (90%), and prosecutors (85%). Three-quarters of SARTs (75%) had active members from all four of these groups.

In regards to *membership breadth*, out of 18 possible stakeholder groups, SARTs averaged 8.50 different stakeholder groups as active members of their team (*SD* = 2.65; minimum = 2, maximum = 15). SARTs were moderately *formalized*, utilizing an average of 6.26 out of 13 possible formal structures from the modified formalization index (*SD* = 2.28, minimum = one, maximum = 12). SARTs varied in *their use and institutionalization of collaborative activities*. The majority of teams engaged in case review (74%), multidisciplinary cross-trainings (76%), and policy/protocol development and review (82%). However, these collaborative activities were not typically institutionalized as a *regular* SART process: 42% engaged in case review regularly, 38% had multidisciplinary cross-trainings regularly, and 31% engaged in policy/protocol development or review on a regular basis. Only 15% engaged in program evaluation to assess their SART's functioning. SART key informants reported relatively high levels of perceived effectiveness. Average effectiveness ratings were highest for perceived effectiveness at improvements in victims' help-seeking experiences (M = 3.72, SD = .81), followed by improvements related to police processing of sexual assault cases (M = 3.50, SD = .94), improvements related to increasing victims' participation in the criminal justice system (M = 3.40, SD = .86), and improvements related to the prosecution of sexual assault cases (M = 3.28, SD = 1.02).

Clustering SARTs on their use of formal structures and collaborative activities. *The* second primary aim of the study was to employ cluster analysis to derive groups of SARTs with similar profiles based on their use of formal structures and collaborative activities. More specifically, SARTs were clustered on their formalization; their institutionalization of case review, policy/protocol development, and multidisciplinary trainings; and whether or not they engaged in program evaluation. Bivariate correlations among these five clustering variables are presented in Table 1 (see next page).

	1	2	3	4
Formalization				
Institutionalization of Case Review	.115			
Institutionalization of Cross-Trainings	.245**	.106		
Institutionalization of Policy/Protocol Development and Review	.105	.079	.395**	
Utilization of Program Evaluation	.203**	.004	.238**	.015

### Table 1: Bivariate Correlations among the Clustering Variables

\*\* *p* < .01

A hierarchical analysis was conducted to determine the appropriate number of clusters for optimization cluster analysis. In order to choose the number of clusters, the inverse scree plot and dendogram were inspected; these results were taken into consideration, along with the desire to maintain a reasonable number of clusters. Based on these considerations, a three or four cluster solution seemed best. Therefore, optimization cluster analysis was conducted for both three and four clusters. Results of the three and four cluster solutions were compared to evaluate their conceptual and statistical merits. Both the three and four cluster solutions had reasonable cluster sizes, and clear differences between clusters. The three cluster solution was chosen based on interpretability because it provided a more meaningful, interpretable picture of different patterns of SARTs' utilization of formal structures and collaborative activities.

SARTs were then classified into one of the three clusters according to their profile on the five clustering variables, representing SARTs' use of formal structures and specific collaborative activities. See Table 2 for descriptive information on SARTs' formalization and use of various collaborative activities by cluster. Table 2 also presents ANOVA/Chi-Squared results for each of the five clustered variables; the ANVOAs/Chi-Squared tests assessed whether there were statistically significant differences between clusters on each of the variables. Four of the five clustering variables (with the exception of case review) varied by cluster, suggesting the clusters did capture meaningful variability in SARTs' use of formal structures and collaborative activities. Next, the features of the three clusters will be described; for each cluster, a case example will be discussed to illustrate the salient features of that cluster.

	"Low Adopters"	"High Adopters except Evaluation"	"High Adopters plus Evaluation"	ANOVAs/Chi- Squared Tests <sup>4</sup>
Cluster size	n=65	n=80	n=27	
Formalization (0-13)	Low $M = 4.98^{a^3}$ SD = 1.74	High <i>M</i> = 6.90 <sup>b</sup> <i>SD</i> = 1.98	High <i>M</i> = 7.44 <sup>b</sup> <i>SD</i> = 2.83	F(2,169) = 21.08**
Institutionalization of case review (0-2) <sup>1</sup>	Average $M = 1.00^{a}$ SD = .79	Average M = 1.28 <sup>a</sup> SD = .81	Average $M = 1.19^{a}$ SD = .83	F(2,169) = 2.10, n.s.
Institutionalization of multidisciplinary cross- trainings (0-2) <sup>1</sup>	Low $M = .48^{a}$ SD = .61	High <i>M</i> = 1.54 <sup>b</sup> <i>SD</i> = .53	High <i>M</i> = 1.58 <sup>b</sup> <i>SD</i> = .64	F(2,168) = 68.72**
Institutionalization of policy/protocol development and review (0-2) <sup>1</sup>	Low M = .64 <sup>a</sup> SD = .54	High <i>M</i> = 1.53 <sup>b</sup> <i>SD</i> = .53	Medium <i>M</i> = 1.15 <sup>c</sup> <i>SD</i> = .67	F(2,167) = 44.61**
Program evaluation (0-1) <sup>2</sup>	Low $M = 0^{a}$ SD = 0	Low $M = 0^{a}$ SD = 0	High $M = 1^{b}$ SD = 0	χ <sup>2</sup> (2) = 170.00**

Table 2: Cluster Analysis of SARTs' Use of Formal Structures and Collaborative Activities Results

<sup>1</sup>0 = activity not utilized; 1 = used as needed; 2 = used regularly; <sup>2</sup>0 = does not use program evaluation; 1 = uses program evaluation; <sup>3</sup>Within a row, means with the same letter superscript indicate no statistically significant differences between groups based on Tukey's HSD post-hoc tests. Within a row, means with different superscripts indicate statistically significant differences between groups based on Tukey's HSD post-hoc tests. Within a row, means with different superscripts indicate statistically significant differences between groups based on Tukey's HSD post-hoc tests; <sup>4</sup>Cluster analysis selects for low variation within clusters and high variation across clusters. Therefore, results of ANOVAs/Chi-Squared should be interpreted in the context of describing the results of the cluster analysis only. \*\* p < .01

**Cluster one.** Cluster one comprised 38% of the sample and was named "Low Adopters" due to generally lower use of formal structures and institutionalization of collaborative activities than the other two clusters.

The sample "Low Adopter" SART serves two adjacent urban counties in the Western/Rocky Mountain region. The group was formed in 2005 to expand help strengthen the SANE program and create teamwork between various groups that respond to sexual assault. At the time of the interview, five different stakeholder groups participated in the team, including rape crisis center staff, SANEs, police, and advocates from the victim's witness unit in the prosecutor's office (sample M = 8.50). They do not have a regular meeting schedule; instead, they hold collaborative meetings on an as needed basis. Out of a possible 13 formal structures and resources, this SART utilizes only four: a formal mission statement, meeting agendas, meeting sign-in sheets, and meeting minutes. The team does not have a formally elected leader, but a representative from the SANE program calls their collaborative meetings. The team uses policies and protocols, which are reviewed on an as needed basis and they also engage in multidisciplinary case review on an as needed basis. They do not engage in multidisciplinary cross-trainings and they do not engage in evaluation of their coordinated efforts.

**Cluster two**. Cluster two, the largest cluster, included 47% of the sample of SARTs and was termed "High Adopters except Program Evaluation" due to generally high use of formal structures and institutionalization of collaborative activities, but no utilization of program evaluation.

The sample "High Adopters except Program Evaluation" SART serves a rural Midwestern county. Their SART formed in 1999, but stopped meeting for quite a few years. They reformed, and at the time of the interview had been in operation continuously for three years. The SART involves eight different stakeholder groups, including the primary stakeholder groups (SANEs, police, prosecutors, rape crisis center staff) as well as the local child advocacy center for child abuse and neglect victims, the local domestic violence program, advocates from the victims' witness unit in the prosecutor's office, and representatives from other social service agencies (sample M = 8.50). They utilize seven out of 13 possible formal structures/resources to organize their team: the team has a formal leader position, a mission statement, structured meetings (with agendas, sign-in sheets, and meeting minutes), subcommittees, and a formal mechanism for holding SART members accountable to the groups. On a quarterly basis, they engage in multidisciplinary case review and review their policies/protocols, and twice a year they conduct cross-trainings. This SART does not engage in program evaluation of their coordinated efforts.

**Cluster three.** Finally, cluster three (16% of the sample) was called "High Adopters plus Program Evaluation." SARTs in this group had generally high use of formal structures and institutionalization of collaborative activities and all engaged in program evaluation<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> A defining characteristic of this cluster was that—as a multidisciplinary team—they engaged in formal program evaluation of their collaboration's efforts. SARTs that did program evaluation were asked to describe their evaluation efforts. Generally, the SARTs varied quite a bit in their evaluation efforts, but the most typical were needs assessment/asset mapping and process evaluations. Some conducted formal needs assessments (e.g., community members' awareness of services for rape victims) to help guide the development of their SART. Others collected simple process evaluation or outcome monitoring data, such as counting the number of persons who received trainings, the demographics of survivors served by various systems, or the amount of cases that reached certain legal outcomes (i.e., conviction). Other process evaluations documented whether appropriate response

A sample "High Adopters plus Program Evaluation" SART serves a rural Southwestern county. The group has been in operation continuously since 2003, and has 15 different active stakeholder groups. Their members range from primary sexual assault responders (police, rape crisis center staff, SANEs, and police) to clergy, judges, local schools, and staff from corrections. They utilize nine formal structures and resources to organize their team (out of 13 possible). They have a formal leader, a mission statement, bylaws, and structured meetings (with meeting agendas, sign-in sheets, and meeting minutes). In addition, they also organize their SART through formal procedures for decisionmaking, conflict resolution, and holding SART members accountable to the broader group. They engage in case review quarterly, multidisciplinary trainings twice a year, and review their policies/protocols on an annual basis. They also utilize program evaluation: after each sexual assault case, survivors and sexual assault responders complete surveys about services that were provided, and their accessibility.

Predicting SARTs' perceived effectiveness. The third aim of the study was to examine the relationships between SARTs' structural characteristics (membership breadth and SART cluster based on their use of formal structures and activities) and SARTs' perceived effectiveness at achieving improvements in legal outcomes and victims' help-seeking experiences. An SEM path model was tested to assess these relationships, after controlling for contextual variables (SART length of continuous operation, characteristics of the community served by the SART, and the sexual assault stakeholder group the interviewee belonged to). To test the effect of

standards were/were not met (e.g., responders arrived within their designated response time); evaluated survivors' or responders' (e.g., advocates) perceptions of the systems they interacted with. Some SARTs evaluated responders' perceptions of their collaborative process and relationships. No true impact evaluations with a rigorous comparison group were discussed. SARTs were not directly asked about their evaluation use.

SART cluster membership on perceived effectiveness, SARTs in the "Low Adopters" cluster and SARTs in the "High Adopters except Program Evaluation" cluster were compared to the reference group: SARTs in the "High Adopters plus Program Evaluation" cluster. The characteristics of this cluster are the most similar to what the practitioner literature characterizes as best practice for SARTs. Therefore, the dummy coding was designed allowed for comparisons against this cluster.

The full, saturated model (with the nine independent variables predicting all four dependent variables, correlations modeled allowed between the independent variables and between the error terms of the dependent variables; see Figure 4 on pp. 31) was tested. Then, the model was trimmed such that non-significant paths were sequentially cut from the model to increase model parsimony and conserve statistical power.<sup>6</sup> Paths, that when trimmed altered the pattern of results, were retained. Tables 3 and 4 give the results of the final, trimmed model. The model exhibited excellent fit and model trimming did not introduce a significant amount of misfit based on the likelihood ratio test ( $\chi^2$  (21) = 28.13, *n.s.*; CFI = .995, RMSEA = .045). Modeled correlations among the independent variables are presented in Table 3. Standardized regression coefficients for predictive relationships between the independent variables and the four dependent variables are provided in Table 4.

<sup>&</sup>lt;sup>6</sup> A power analysis was conducted and determined that a sample of 172 would provide reasonable statistical power to detect an effect of SART cluster membership on perceived effectiveness.

	1	2	3	4	5	6	7	8
Membership Breadth								
High Adopters except Evaluation Cluster <sup>1</sup>	0 <sup>3</sup>							
Low Adopters Cluster <sup>1</sup>	0 <sup>3</sup>	727						
SART Length of Operation (Linear)	0 <sup>3</sup>	.157	265					
SART Length of Operation (Quadratic)	0 <sup>3</sup>	.063	021	.400				
Serves a Rural County	0 <sup>3</sup>	129	.242	177	108			
Serves more than 1 County	0 <sup>3</sup>							
Participant Stakeholder Group: Medical/ Forensic Examiner <sup>2</sup>	0 <sup>3</sup>	179	.162					
Participant Stakeholder Group: Other <sup>2</sup>	0 <sup>3</sup>	.055	088	286				

*Table 3: Correlations among Predictors of SARTs' Perceived Effectiveness from the Final Path Model* 

*Italicized* = significant at p < .05; <sup>1</sup> Reference group = "High Adopters plus Program Evaluation" Cluster; <sup>2</sup> Reference group = Participant Stakeholder Group: Rape Crisis Center Staff; <sup>3</sup> Parameter was non-significant and then constrained to zero in the model.

	Perceived Effectiveness at Improving Victims' Help-Seeking Experiences Perceived Effectiveness at Improving Victim Participation in t Criminal Justice System		eness at g Victims' tion in the Il Justice	Perceived Effectiveness at Improving Police Processing of Sexual Assault Cases		Perceived Effectiveness at Improvements Related to Prosecution of Sexual Assault Cases		
	в	p value	в	p value	в	p value	в	p value
Membership Breadth	.105	n.s.	.181	р < .01	.243	р < .01	.293	<i>p</i> < .01
Cluster: High Adopters except Program Evaluation <sup>1</sup>	104	n.s.	285	p < .01	031	n.s.	128	n.s.
Cluster: Low Adopters <sup>1</sup>	340	р < .01	497	p < .01	210	р < .05	219	p < .05
SART Length of Operation (Linear)	.273	р < .01	.264	p < .01	.299	p < .01	.303	p < .01
SART Length of Operation (Quadratic)	235	р < .01	222	p < .01	214	p < .01	196	p < .01
Serves a Rural County	.004	n.s.	.056	n.s.	.155	р < .05	.124	n.s.
Serves more than 1 County	.021	n.s.	.146	p < .01	.139	р < .05	.129	n.s.
Participant Stakeholder Group: Medical/Forensic Examiner <sup>2</sup>	.133	n.s.	.082	n.s.	.218	p < .01	.236	p < .01
Participant Stakeholder Group: Other <sup>2</sup>	082	n.s.	012	n.s.	.072	n.s.	.078	n.s.

Table 4: Predictors of SARTs' Perceived Effectiveness from the Final Path Model

<sup>1</sup>Reference group = High Adopters plus Program Evaluation Cluster; <sup>2</sup> Reference group = Participant Stakeholder Group: Rape Crisis Center Staff.

The dependent variable, "improving victims' help-seeking experiences," captured perceptions of SARTs' effectiveness with respect to creating improvements related to victims' experiences of seeking help from the legal, medical, mental health, and advocacy systems postassault. After controlling for the contextual variables of interest, membership breadth was not related to SARTs' perceived effectiveness at improving victims' help-seeking experiences. SARTs in the "Low Adopters" cluster were perceived as less effective at contributing to improvements in victims help-seeking experiences than SARTs in the "High Adopters plus Program Evaluation" cluster ( $\beta = -.349$ , p < .01); however, there was not a statistically significant difference between SARTs in the "High plus Evaluation" and the "High except Evaluation" clusters on this dependent variable. Both the linear and quadric terms for SARTs' length of continuous operation were related to perceived effectiveness at improving victims' help-seeking experiences ( $\beta = .273$ , p < .01;  $\beta = .235$ , p < .01). This indicates a curvilinear relationship, such that generally SARTs that had been in operation for a longer period of time were perceived as more effective, with the effect declining for the oldest SARTs. Calculations conducted using the unstandardized coefficients in the predictive regression equation indicate that the effect of the length of time the SART has been in operation on victims' help-seeking experiences becomes zero when SARTs reach approximately 17.74 years of operation. The two community context variables (whether the SART served multiple counties and whether the SART served a rural county) were not related to perceived effectiveness at improvements in victims' help-seeking experiences. Finally, the stakeholder group the SART key informant belonged to was not related to their perceptions of the SART's effectiveness at improving victims' help-seeking experiences.

The dependent variable captured SARTs' perceived effectiveness at improvements related to increasing sexual assault victims' participation in the criminal justice system. After controlling for the other variables in the model, membership breadth was significantly positively associated with SARTs' perceived effectiveness at contributing to improvements related to victims' participation in the criminal justice system ( $\beta = .181, p < .01$ ). Results indicated that SARTs that had more different types of stakeholder groups actively involved in the team were perceived as more effective in this domain. Both SARTs in the "Low Adopters" cluster and SARTs in the "High Adopters except Evaluation" cluster were perceived as significantly less effective at contributing to improvements in victims' criminal justice system participation than SARTs in the "High Adopters plus Evaluation" cluster ( $\beta = -.497$ , p < .01;  $\beta = -$ .285, p < .01). Both the linear and quadric terms for SARTs' length of continuous operation were related to perceived effectiveness at improvements related to victims' participation in the criminal justice system ( $\beta$  = .264, p < .01;  $\beta$  = -.222, p < .01). Generally SARTs that have been in operation for a longer period of time are perceived as more effective on this domain, with the effect declining for the oldest SARTs. Calculations conducted using the unstandardized coefficients in the predictive regression equation indicate that the effect of the length of time the SART has been in operation on victims' participation becomes zero when SARTs reach approximately 17.74 years of operation. As to community context, whether or not the SART served a rural community was not related to perceived effectiveness; however, SARTs that served more than one county were perceived as more effective at improvements to victims' participation in the criminal justice system ( $\beta$  = .146, p < .01). Finally, the stakeholder group the

SART key informant belonged to was not related to their perceptions of the SART's effectiveness at improving victims' participation in the criminal justice system.

A very similar pattern of results existed for the last two dependent variables: perceived effectiveness related to improvements related police processing and prosecution of sexual assault cases. Therefore, the two are presented together. One captured SARTs' perceived effectiveness at making improvements in police processing of sexual assault cases through the criminal justice system, while the other captured SARTs' perceived effectiveness and making improvements related to the criminal prosecution of sexual assault cases.

After controlling for the other variables in the model, membership breadth was associated with SARTs' perceived effectiveness at contributing to improvements in both police processing and the prosecution of sexual assault cases, with SARTs that had a greater number of different active stakeholder groups perceived as more effective ( $\beta$  = .243, p < .01;  $\beta$  = .293, p < .01). SARTs in the "Low Adopters" cluster were perceived as less effective at contributing to improvements in both the police processing and prosecution of sexual assault cases than SARTs in the "High Adopters plus Evaluation" cluster ( $\beta$  = -.210, p < .05;  $\beta$  = -.219, p < .05); however, there was not a statistically significant difference between SARTs in the "High Adopters plus Evaluation" clusters ( $\beta$  = -.031, n. s.;  $\beta$  = -.128, n. s.). Both the linear and quadric terms for SARTs' length of continuous operation were related to perceived effectiveness at improvements in police processing and prosecution of sexual assault cases (police:  $\beta$  = .299, p < .01;  $\beta$  = -.214, p < .01; prosecution:  $\beta$  = .303, p < .01;  $\beta$  = -.196, p < .01). SARTs in operation for a longer period of time tended to be perceived as more effective, with the effect declining for the oldest SARTs. Calculations conducted using the unstandardized

coefficients in the predictive regression equations indicate that the effect of the length of time the SART has been in operation on police processing of cases becomes zero when SARTs reach approximately 19.99 years of operation and the effect on improvements related to prosecution becomes zero when the SART has been in operation for 21.24 years. Both aspects of community context was related to perceived effectiveness in improvements related to police work, such that SARTs that served a rural community, and SARTs that served more than one county were perceived as more effective ( $\beta = .135$ , p < .05.;  $\beta = .139$ , p < .05). However, neither community context variable was related to SARTs' perceived effectiveness at improvements related to the prosecution of sexual assault cases. The key informant's stakeholder group was also associated with their perceptions of the SARTs' effectiveness at improvements related to both police and prosecution, with medical/forensic examiners rating the SARTs' effectiveness more highly than rape crisis center staff ( $\beta = .218$ , p < .01;  $\beta = .236$ , p < .01). There were no significant differences between rape crisis center staff and key informants classified in the "other" category (i.e., neither a medical/forensic examiner nor rape crisis center staff;  $\beta$  = .072, *n.s.*;  $\beta$  = .078, *n.s.*). Findings are discussed further on pp. 123 (Discussion).

#### STUDY TWO: PATTERNS OF COLLABORATIVE RELATIONSHIPS WITHIN MODEL SARTS

While Study 1 examined structural characteristics of SARTs and key informants perceptions of effectiveness within a broad-based sample of 172 teams and key informants, the purpose of Study 2 was to examine a subsample of SARTs in greater depth. Specifically, Study 2 examined the *structure of inter-organizational relationships* within a subsample of "model" SARTs. We focused on "*model*" *SARTs* that were prototypical with respect to how the field has suggested that SARTs should operate. It is clear that multidisciplinary relationships are critical to SARTs effectiveness. But, it is less clear what those relationships really look like within highfunctioning SARTs. In order to inform practice and resource for SARTs, we wanted to understand the structure of the relationships within the SARTs that are the most effective what characteristics of inter-organizational relationships are associated with successful SARTs? Therefore, we chose SARTs that fell in the "High Adopters plus Program Evaluation Cluster" in Study 1—the cluster that, on average, had the highest perceived effectiveness ratings.

The study utilized a social network analysis approach to examine relationships within SARTs. In social network studies, the researcher examines patterns of relationships between all *actors* within a *bounded network*. In this study, we examined patterns of relationships between all *organizations* (the actors) within a given *SART* (the network). More specifically, we employed a "global" network approach, meaning we examined patterns of relationships between all *actors* within a *bounded network* by collecting data from each actor on the presence or strength of their relationships with all of the other actors in the network Within each SART, three types of inter-organizational relationships were assessed: the *frequency of communication* about coordinating the response to sexual assault (outside of formal collaborative meetings and communicating about specific cases), the extent to which organizations reported that other organizations valued their role in the response to sexual assault, and the extent to which organizations reported that the work of other organizations was valuable to their own work in responding to sexual assault. Specifically, the aims of this study were: (1) to understand the nature and distribution of each of these types of inter-organizational relationships within model SARTs (e.g., are SARTs characterized by many or few inter-organizational relationships? do organizations in SARTs tend to have relationships that are reciprocated? Are relationships centered around a focal organization or group of organizations?); and (2) to understand the associations *between* these types of inter-organizational relationships. In other words, within SARTs, do inter-organizational relationships tend to be similar across networks of communication frequency, feeling valued by other organizations, and valuing other organizations' work?

# Design

The study employed a multiple case study design, which has all the advantages of a single case design (e.g., capturing depth and real-world context), but by repeating the procedures on multiple cases, enhances the validity and generalizability of the findings (Yin, 2003). Each case can be viewed as if it were a separate study, rather than a single sampling unit, and consequently, multiple case designs can be viewed as following the same logic as cross-experiment designs (Yin, 2003).

#### Sample

In Study 1, SARTs were clustered into groups based on their implementation of formal structures and collaborative activities to organize their SARTs. For Study 2, we focused on SARTs

that were classified into the "High Adopters plus Evaluation" Cluster in Study 1 (see pp. 17 for Study 1 sampling information and pp. 39 for characteristics of this cluster), which was characterized by high use of formal structures and high institutionalize of collaborative activities. This cluster was chosen for further study because the operations of the SARTs in this cluster were most similar to national guidelines/recommendations regarding how SARTs *should* operate and this cluster had the highest perceived effectiveness across all four domains of effectiveness.

To ensure that we were studying SARTs that were representative of the "High Adopters plus Program Evaluation" cluster, we sampled SARTs that were typical of that cluster on key variables. Specifically, we sampled SARTs within this cluster that were typical based on the number or organizations involved in their team and their implementation of formal structures and activities to organize their team (within one standard deviation of the cluster average).<sup>7,8</sup> At the end of the Study 1 interview, all SART leaders were thanked by the research staff for their participation and had been informed that a small number of SARTs would be re-contacted at a later date to participation in a brief follow-up study. When Study 2 recruitment began, SART leaders were re-contacted by trained graduate research assistants via phone and/or email to verify eligibility and recruit the team to participate. SARTs had to continue to have regular

<sup>&</sup>lt;sup>7</sup> To be selected, a SART had to be within 1 standard deviation of the average number of organizations that belonged to High Adopter plus Evaluation SARTs.

<sup>&</sup>lt;sup>8</sup> In Study 1, SARTs were clustered on five variables representing their implementation of formal structures (one variable) and institutionalization of collaborative activities (four variables). 27 SARTs were classified into the "High Adopters plus Program Evaluation" cluster. The centroid of this cluster represents the multivariate center across all SARTs that were classified into that group (akin to an average across all cases across all clustering variables), while distance from the centroid represents how far an individual case in the cluster is from the centroid. To be selected as typical of this cluster, a SART had to be within one standard deviation of the average distance from the cluster centroid.

multidisciplinary coordinating meetings between sexual assault response organizations in order to be eligible to participate in Study 2.

Of the ten SARTs that were sampled, two were successfully contacted but were ineligible to participate. One was ineligible because they no longer met on a regular basis. The other had a highly unique collaborative system due to an extremely large number of organizations that responded to sexual assault in their community; in their particular system, our social network design that analyzed inter-organizational relationships between SART members would have been inappropriate and therefore was also ineligible for the study.<sup>9</sup> Of the remaining eight *eligible* SARTs, two were contacted but the team was unable to reach an agreement to participate before data collection ended (25%), one was never successfully contacted (12.5%), one declined participation (12.5%), and four participated in the study (50%). Consistent with a global SNA approach, we sought data from each of the actors (organizations) that belonged to each network (each of the four SARTs). SART leaders were asked to provide a roster of all of the organizations that were "actively involved"<sup>10</sup> in the SART. Descriptive information on the make-up of each of the four teams is provided below.

**SART A.** SART A consisted of 15 different sexual assault response organizations that serve three rural counties in a Midwestern state. The team was made up of a rape crisis center,

<sup>&</sup>lt;sup>9</sup> In their SART, organizations from the same stakeholder group would meet with one another (within discipline meetings), and then representatives from each the different stakeholder groups would meet (multidisciplinary meetings) and information would be passed back and forth between the different groups. Thus, the focus of the formal collaborative multidisciplinary meetings was on interdisciplinary, but not inter-organizational, relationships. As such, the team did not meet Study 2's eligibility criteria of holding regular collaborative multidisciplinary/inter-organizational meetings.

<sup>&</sup>lt;sup>10</sup> Active participation was defined as "participating in SART meetings and other activities reasonably frequently."

three SANE programs, ten police departments, and the local crime laboratory. The SART had been in operation for 11 years. The SART was led by the local rape crisis center.

SART B. Ten organizations from one rural county in a Midwestern state actively participated in SART B. The team was made up of a rape crisis center, a SANE program, the victim's witness unit of the county prosecutor's office, child protective services, three police departments, probation/parole, the local correctional facility, and an organization that serves a special population in the community. The team had been working together for three years. The SART was co-led by the rape crisis center and the victim's witness advocacy unit in the prosecutor's office.

SART C. SART C served one rural county in a Midwestern state, and is composed of nine organizations that respond to sexual assault. Active organizations included the rape crisis center, two police department, the prosecutor's office, corrections, three organizations that provide health services (one of which provides SANE exams), and two organizations that provide mental health/social services. The team was 14 years old. The SART was led by the rape crisis center.

**SART D.** SART D served a college (and only people affiliated with the college, not the broader community) in a Northeastern state. Nine organizations that represent different organizations within the college actively participated in the SART. Three groups that provide various services specific to sexual assault survivors participated in the team (including the prevention program, an advocacy group, and a crisis line), as well as the campus health organization, the campus counseling service program, campus police, the student association, residential life, and an organization that serves a special population within the campus

community. The team had existed for 16 years. The SART was led by the campus sexual assault program.<sup>11</sup>

Notably, three of the four SARTs that participated in Study 2 were located in the Midwest, and all four were led or co-led by the rape crisis center/sexual assault program. However, these four SARTs are quite similar to the other four SARTs that were eligible (but did not participate in Study 2) based on geographic location, length of operation, number or organizations actively involved in the SART, and organizational leadership.<sup>12</sup> In fact, six of the eight eligible SARTs were located in the Midwest, and seven of the eight eligible SARTs were led or co-led by the rape crisis center.

Consistent with our global social network approach, we asked all organizations in each of the participating SARTs to take part in the study. Contacts from each organization served as "key informants" for the study by providing information on behalf of their organization. The leader was asked, for each organization, to provide the name and contact information for the individual from that organization who was the most actively involved in the SART.<sup>13</sup> If the SART

<sup>&</sup>lt;sup>11</sup> Three of the four SARTs that participated in the study were located in the Midwest. This is representative of the SARTs that were eligible to participate, as six of the eight SARTs that met eligibility criteria were from the Midwest (one was from the West and one was from the Northeast). Eligibility criteria were: fell in the Study 1 High Adopter

<sup>&</sup>lt;sup>12</sup> Eligibility criteria were: classified in the Study 1 High Adopters plus Evaluation cluster, within one standard deviation of the cluster centroid, within one standard deviation of the cluster's average number of organizations involved in their team, and continues to have multidisciplinary meetings to coordinate the response to sexual assault. A total of eight SARTs met these criteria. Of the four SARTs that were eligible but did not participate, three were located in the Midwest and one was located in the West. One SART was in continuous operation for ten years and had active participation from 14 different organizations (led by a police department), one was in continuous operation for ten years and had active participation from seven organizations (led by the rape crisis center), two were in continuous operation for eight years and had active participation from ten organizations (both were led by the rape crisis center).

<sup>&</sup>lt;sup>13</sup> SART D was a university/college SART. Due to turnover in individual SART members at the start of the academic year, several individuals who were *currently* the most active participants from their organization in the SART had

leader was unable to choose a person that was "the most" involved, they were allowed to nominate more than one contact person for that organization. This method has been used effectively to measure organizational relationships in several past social network studies (e.g., Foster-Fishman, Salem, Allen, & Fahrbach, 2001; Galaskiewicz, 1979; Provan, Huang, & Mildward, 2009).

Key informants were recruited by phone and/or email by trained graduate research assistants. Interviews were attempted with 45 participants from 44 organizations;<sup>14</sup> interviews were conducted successfully with 44 participants from 43 organizations across the four SART (overall response rate = 98%). SART specific response rates were 100%, 100%, 89%, and 100%. Descriptive information on the SARTs' participation in the study is provided in Table 5.

only been part of the team for a short period of time and felt they were unable to provide accurate information about inter-organizational relationships. Therefore, rather than bounding the SART based organizations that were currently a part of the team, we selected the ten organizations that had been active members in the team in the prior academic year to participate, and asked individuals that were the most actively engaged in the SART for that organization in the past year to participate.

<sup>14</sup>SART leaders were allowed to nominate multiple key informants per organization if they were unable to identify one individual that was the most active participant in the SART from that organization. One SART leader nominated two key informants for one organization, which is why interviews were attempted with 45 participants from 44 organizations.

	Number of Organizations Actively Involved in the SART	Number of Key Informants Recruited	Number of Key Informants Interviewed	Response Rate
SART A	15	16 <sup>15</sup>	16	100%
SART B	10	10	10	100%
SART C	10	10	10	100%
SART D	9	9	8	89%

Table 5: Descriptive Information on SART Key Informants' Participation in Study 2 by SART

## **Measurement and Procedures**

Recruitment began in August of 2012 and data collection ended in February of 2013. Participants were recruited by phone and email. Phone interviews were conducted by trained graduate research assistants, and with the participant's permission, were audio-recorded. The interviews typically lasted 10-15 minutes (N = 44; M = 11.52, SD = 4.82). During the interview, key informants reported on their organization's relationships with the other organizations that were actively involved in their SART and also provided some basic demographics and information on their role in the response to sexual assault (e.g., advocate, police officer, etc.) and the amount of time they had participated in their team. On average, interview participants had been involved in their SART for approximately five and a half years (N = 44; M = 5.63, SD = 4.04, *Minimum* = .5 years, *Maximum* = 15 years). The interview template is provided in Appendix B2.

<sup>&</sup>lt;sup>15</sup> In this SART, one organization had two key informants who were equally active in the SART. Both completed interviews and contributed data to the study. See measurement section for how the multi-informant organizational data was handled.

Inter-organizational communication. Inter-organizational communication in the past six months was assessed by the following question: "How often in the past six months has your organization communicated (whether by email, phone, written, or face-to-face) with [name of reference organization] about coordinating the response to sexual assault?" Participants were instructed to focus on communication that happens outside of group discussion at official SART meetings, and to exclude discussion of specific cases. Responses were coded as: 0 = nocommunication in the past six months; 1 = 1-2 times (in the past 6 months); 2 = at least every other month (3-5 times in the past 6 months); 3 = at least monthly (6-11 times in the past 6 months); 4 = at least twice a month (12-25 times in the past 6 months); 5 = at least weekly (26 times in the past six months, but less than 4 times a week); 6 = At least most days or daily (4 *times a week or more*).<sup>16,17</sup> Two versions of the communication variable were used in analyses: the raw, continuous version (on a scale from 0 = no communication to 6 = daily or almost daily communication) will be referred to as "Communication Frequency" and the dichotomous version (coded as 0 = no communication in the past six months, 1 = any communication in the past six months) will be referred to as "Communication" (yes/no). Communication frequency

<sup>&</sup>lt;sup>16</sup> For the organization from SART A that had two key informants, the highest number reported by the two participants was used in analyses. Due to the fact that individuals were reporting on the communication based on their entire organization (not just their own communication as an individual) it was anticipated that when the two informants gave differing accounts of the frequency of communication with another organization the maximum score was more accurate.

<sup>&</sup>lt;sup>17</sup> As noted previously, for SART D (the university SART), individuals and organizations that had been actively involved in the SART over the *previous* academic year were sampled to participate. Out of the nine key informants that participated in the study, two had been part of the SART in the previous academic year, but were no longer a part of the SART at the time of data collection. Therefore, they were unable to report on the frequency of interorganizational communication over the past six months. This contributed to a great deal of missing data on this variable for this SART, and therefore, SART D was ultimately excluded from analyses because social network analysis is exceptionally sensitive to missing data (Stork & Richards, 1992).

was posited as a undirected relationship (an undirected relationship means that when organization A has a relationship with B then B must also have the same relationship with A; in this instance, if A has been in communication with B, then B must also have been in communication with A). Therefore, both "communication frequency" and "communication" (yes/no) were symmetrized prior to analyses by taking the maximum score reported for each pair of organizations<sup>18</sup> (Hanneman & Riddle, 2005). Descriptive information on interorganizational communication within all four SARTs is provided in Table 6.

**Values my organization's role.** To assess the degree to which the participant believed their organization's role was valued by the other organizations in their SART, they were asked: "To what extent do you agree with the following statement: "[Name of reference organization] values my organization's role in responding to sexual assault in our community" (-3 = *strongly disagree*, -2 = *disagree*, -1 = *somewhat disagree*, 0 = *neutral*, 1 = *somewhat agree*, 2 = *agree*, 3 = *strongly agree*; based on Nowell, 2006)?<sup>19</sup> Two versions of this variable were used in analyses: the raw, continuous version (on a scale from -3 = *strongly disagree* to 3 = *strongly agree*) will be referred to as "*Extent of Values my Organization's Role*" and the dichotomous version (coded as 0 = *strongly disagree to neutral*, 1 = *somewhat agree* to as "*Values my Organization's Role*" (*yes/no*). Descriptive information on the extent to which

<sup>&</sup>lt;sup>18</sup> As is common with undirected relationships in social network studies, the data were symmetrized (Hanneman & Riddle, 2005; Scott, 2000), meaning that one consistent score for the A/B relationship was created from organization A's and organization B's independent reports. Due to the fact that individuals were reporting on the communication based on their entire organization (not just their own communication as an individual) it was anticipated that when A and B gave differing accounts of the frequency of communication between A and B that the maximum score was more accurate. Therefore, maximum symmetrization was used.

<sup>&</sup>lt;sup>19</sup> For the organization from SART A that had two key informants, the two participants' scores were averaged, and this number was used in analyses.

organizations perceived themselves to be valued by other organizations within their SART is provided in Table 6.

Is a resource to my organization's work. To assess the extent to which organizations perceived other SART member organizations to be valuable in their own work, key informants were asked "To what extent do you agree with the following statement: "[Name of reference organization] is a resource to my organization's work in responding to sexual assault" (-3 = strongly disagree, -2 = disagree, -1 = somewhat disagree, 0 = neutral, 1 = somewhat agree, 2 = agree, 3 = strongly agree; based on Nowell, 2006)?<sup>20</sup> Two versions of this variable were used in analyses: the raw, continuous version (on a scale from -3 = strongly disagree to 3 = strongly agree) will be referred to as "*Extent of Is a Resource to my Organization's Work*" and the dichotomous version (coded as 0 = strongly disagree to neutral, 1 = somewhat agree to strongly agree) will be referred to as "*Is a Resource to my Organization's Work*" (yes/no). Descriptive information on the extent to which organizations perceived other organizations to be a resource in their own work is provided in Table 6.

<sup>&</sup>lt;sup>20</sup> For the organization from SART A that had two key informants, the two participants' scores were averaged, and this number was used in analyses.

	Number of Organizations in the SART	% Missing	Range	Communication Frequency <sup>1</sup>		Extent of Values my Organization's Role <sup>2</sup>		Extent of Is a Resource to my Organization's Work <sup>2</sup>	
				М	SD	М	SD	М	SD
SART A	15	0%	0-5	.59	.85	1.88	1.04	1.91	1.10
SART B	10	0%	0-5	1.17	1.21	2.49	.81	2.21	1.26
SART C	10	3.33%	0-5	1.01	1.23	1.90	1.34	1.97	1.31
SART D	9	33.33% <sup>3</sup>	0-4	1.46	1.22	2.48	.65	2.34	1.07

Table 6: Descriptive Information on Inter-Organizational Relationships Within SARTs

*Note.* Inter-actor relationships in social network analysis studies vary depending on network size (a high degree of strong relationships between all actors is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution;  ${}^{1}0 = no$  communication in the past six months, 1 = 1-2 times, 2 = at least every other month, 3 = at least monthly, 4 = at least twice a month, 5 = at least weekly, 6 = daily or almost daily (4 times a week or more);  ${}^{2}-3 = strongly disagree, -2 = disagree, -1 = somewhat disagree, 0 = neutral, 1 = somewhat agree, <math>2 = agree$ , 3 = strongly agree;  ${}^{3-1}$  As noted previously, for SART D (the university SART), individuals and organizations that had been actively involved in the SART over the previous academic year were sampled to participate. Out of the nine key informants that participated in the study, two had been part of the SART in the previous academic year, but were no longer a part of the SART at the time of data collection. Therefore, they were unable to report on the frequency of inter-organizational communication over the past six months. This contributed to a great deal of missing data on this variable for this SART, and therefore, SART D was ultimately excluded from analyses because social network analysis is exceptionally sensitive to missing data (Stork & Richards, 1992).

#### Analyses

Inter-organizational relationships were examined *within* SARTs. Social network analysis is extremely sensitive to missing data (Stork & Richards, 1992); therefore, analyses focused on the three SARTs with minimal missing data (SARTs A-C). The study sought to (1) understand the nature and distribution of inter-organizational relationships within SARTs, and (2) examine the associations between different inter-organizational relationships (e.g., is being valued related to communication frequency between organizations?). All analyses were conducted in UCINET 6.0 (Borgatti, Everett, & Freeman, 2002).

Nature and distribution of inter-organizational relationships. Several sets of complementary analyses were used to understand the nature and distribution of the existence of the three inter-organizational relationships in model SARTs.<sup>21</sup> *Sociograms* were created to allow visual exploration of how different organizations were or were not connected to one another in model SARTs. In this report, each sociogram depicts the existence of a particular type of collaborative relationship (i.e., whether the relationship exists or does not exist) between pairs of organizations in a SART. In a sociogram, *shapes* represent *actors* in the network (in this case organizational members of SARTs). *Lines* connecting the shapes represent *relationships* between organizations. For undirected relationships (that are inherently reciprocal, such as inter-organizational communication in this study), a line represents the

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>21</sup> Therefore, all analyses on the nature and distribution of these relationships were conducted based on the dichotomized versions of these variables. For communication frequency, a relationship = inter-organizational communication in the past six months; no relationship = no inter-organizational communication in the past six months. For "values my organization's role" and "is a resource to my organization's work" a relationship was coded as existing if the organization agreed with the statement (i.e., a positive response) and a relationship was coded as not existing if they disagreed or felt neutral about the statement (i.e., a negative or neutral response).

existence of a relationship. For directional relationships (that may or may not be reciprocal, such as "values my organization's role" and "is a resource to my organization's work" in this study) lines represent relationships, and *arrows* represent the *direction* of the relationship. The arrow points *away* from the actor that *reported* the relationship and points *to* the actor that *they reported a relationship with*; lines with arrows in both directions indicate that both actors reported the relationship with each other. For example, if a sociogram for the relationship "values my role" shows an arrow pointing from organization 1 to organization 2 (but not vice versa), then organization 1 reported that organization 2 valued their role (and 2 did not report the same about 1). If the same sociograms had a line with arrows pointing in both directions connecting organizations 1 and 2, then both organizations reported that the other valued their role. Spring embedding was used to position organizations within each sociogram, which places organizations with similar patterns of relationships closer together in the physical space of the graph (Borgatti, Everett, & Freeman, 20002).

To understand the degree of connectedness between organizations in model SARTs, *Density* was examined. Density is a measure of how connected a network is and is a measure of the total *existing* relationships between pairs of actors relative to the total *possible* relationships between pairs of actors (Hanneman & Riddle, 2005). Density ranges from 0 (no inter-organizational relationships) to 1 (every organization is connected to every other organization in the SART; Scott, 2000). To understand the extent to which inter-organizational relationships within model SARTs are mutual, reciprocity was examined. *Reciprocity* refers to the extent to which relationships are reciprocated: if organization 1 reports that organization 2 values their role, does 2 report that 1 values their role?; Hanneman & Riddle, 2005).<sup>22</sup> Reciprocity ranges from 0% (none of the inter-organizational relationships that were reported are reciprocal) to 100% (all of the inter-organizational relationships that were reported were reciprocated; Scott, 2000). The dyad method was used to calculate reciprocity (dyad-based reciprocity = the proportion of dyads with a reciprocated relationship out of all dyads in which either organization reported a relationship exists; Hanneman & Riddle, 2005).

To assess the distribution of relationships across different organizations within model SARTs, several complementary analyses were conducted. *Freeman Degree Centrality* is the number of direct relationships each actor has with the other actors in the network (ranging from 0 to the number of actors in the network minus 1; Scott, 2000) and was examined to understand how, within a given SART, organizations varied in the number of other organizations they were connected to. *Sociograms were inspected for evidence of within-sector relationships* (relationships between criminal justice and other criminal justice organizations or relationships between two non-criminal justice organizations), *as well as across-sector relationships* (relationships between criminal justice and non-criminal justice organizations. *Sociograms were also inspected for "isolates" or organizations that were not connected to any others organizations in their SART and "cliques" or mutually exclusive subgroups of organizations that were connected to organizations in their clique, but were never connected to organizations and core-periphery analyses were conducted to understand whether the inter-organizational relationships within SARTs were dependent* 

<sup>&</sup>lt;sup>22</sup> In this study, we used dyad-based reciprocity, which examines the proportion of dyadic relationships that are reciprocal out of all dyadic relationships that exist (Hanneman & Riddle, 2005).

upon one key organization (centralization) or a group of key organizations (core-periphery structure). *Centralization* examined the extent to which a network fits a perfectly centralized network of the same network size (i.e. the same amount of actors). In a perfectly centralized network, relationships are completely dependent upon one actor: the central organization is involved in all of the relationships that exist and no relationships that do not involve that organization exist. Centralization is the extent to which a network (in this case, a SART) is similar to such a perfectly centralized network, and ranges from 0% (no centralization; relationships are diffused and not at all centered around one focal organization in the SART) to 100% (perfect centralization; all inter-organizational relationships in the SART involve the focal organization; Hanneman & Riddle, 2005). A perfectly centralized SART would indicate complete dependence upon one organization, whereas a minimally centralized SART would indicate very little dependence upon one single organization. In other words, centralization examined the extent to which relationships in model SARTs tended to center around one organization (i.e., they were highly dependent on one key organization; high centralization) or were more diffusely spread throughout organizations in the SART (i.e., relationships were not highly dependent on one key organization; low centralization).

While centralization analyses examined whether relations were dependent upon one *individual* organization in a given SART, we were also interested in examining whether there was a key *group* of organizations that drove relationships in the SART. *Core-periphery* analyses examined the extent to which SARTs fit a perfect core-periphery structure. In a perfect core-periphery network, relationships are driven by a group of core actors, and a second group is more tangentially involved in the relationships. Specifically, a perfect core-periphery structure

has two distinctive traits: (1) there is a "core" group of actors that are all connected to one another (i.e., within-core density = 1); and (2) there is a "periphery" group of actors that are not at all connected to one another (i.e., within-periphery density = 0; Borgatti & Everett, 2000). Often in core-periphery structures, periphery and core members report relationships with one another; the density (or extent of relationships) between periphery and a core member does not have to be pre-determined (and was not in the current study; Borgatti & Everett, 2000). A perfect core-periphery structure indicates a tiered structure to the relationships in a network; relationships are driven by a core group of organizations and peripheral organizations are more tangentially involved in relationships within the team.

A perfectly core-periphery structure in a SART would mean that there is a core group of key organizations that are all connected to one another and a second tier of organizations (the periphery) that have fewer relationships with others in the SART. The periphery may relate to some of the key players, but do not coordinate or have relationships with one another. As an example, imagine a core-group consisting of the rape crisis center, SANE program, prosecutor's office, and a police department; these core organizations all have relationships with one another. In addition to this group, imagine a group of more marginal organizations who are less involved in the SART and therefore have fewer relationships, such as child protective services, a drug abuse treatment program, the crime laboratory, and a couple of police departments that are less involved in the team. These organizations do not tend to associate with one another, but they do relate to members of the core group. This tiered relationship structure, with a key group that drives the relationships, and a more marginal group of SART organizations, would indicate a core-periphery structure.

Core-periphery analyses were conducted in UCINET<sup>23</sup> to examine the extent to which the distributions of inter-organizational relationships in the focal SARTs were similar to a coreperiphery structure (Borgatti, Everett, & Freeman, 2002). In other words, these analyses were conducted to understand whether this core-periphery pattern was a reasonable way of summarizing the relationships in these SARTs (close fit to a perfect core-periphery structure), or whether this really did not match the way that organizations were distributed within SARTs (low fit to a perfect core-periphery structure). In core periphery analyses, any given network could theoretically have a core that ranged from 2 actors to the total number of organizations in the network minus 1. UCINET derives a core size (and membership) that creates the highest correlation between the observed data matrix and an idealized core-periphery network (i.e., a within-core density of 1 and a within periphery density of 0; Borgatti, Everett, & Freeman, 2002). The resultant output provides the core size, the different actors that belong to the core vs. the periphery, and a "fitness" statistic, which is the correlation between the observed data and a perfect core-periphery structure (with 0 = no correlation and 1 = a perfect correlation; Borgatti, Everett, & Freeman, 2002). Fitness statistics indicate the correlation between the observed data and a perfect core/periphery structured (from 0 = no correlation, to 1 = perfectcore-periphery structure; Borgatti, Everett, & Freeman, 2002). In this study, core-periphery

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>23</sup> The categorical core-periphery analyses "CORR" algorithm was used, which examines the correlation between the existing data matrix, and a data matrix of a perfect core-periphery network of the same network size (with a density of 1.0 within the core and a density of 0.0 with the periphery, and core-periphery relationships ignored) to evaluate the extent to which a network exhibits a core/periphery structure (Borgatti, Everett, & Freeman, 2002). This is a common algorithm for assessing core-periphery structures in social network data and works best when researchers are searching for a structure with a well-defined single core and single periphery. It should be noted that social network analysts are still actively developing network methods to identify core-periphery structures when networks have multiple cores.

analyses examined the extent to which model SARTs fit a perfect core-periphery structure of a core, highly connected group of organizations, and a more peripheral group of organizations that only tend to associate with the core group, and not one other.

Associations between different types of inter-organizational relationships. To assess the associations between the strength of the three types of inter-organizational relationships, within-network correlations were conducted.<sup>24</sup> These correlations examined the extent to which the patterns of three collaborative relationships of interest were associated with one another within a given SART. In the current study, correlations assessed whether in model SARTs, community frequency, valuing one another's role, and perceiving others as a valuable resource were related. Specifically, whole network matrices were correlated for each type of relationship within SART. To assess associations between these network data, Pearson Correlations (which are appropriate for valued data) were used. Because the relational nature of the data violates assumptions of independence, significance was assessed using the quadratic assignment procedure (a permutation based approach to testing significance). Quadratic Assignment Procedure (QAP) correlations compare the inter-organizational relationships across two different networks (Hanneman & Riddle, 2005; Krackhardt, 1988). Here, the Pearson correlations are interpreted in the traditional sense, with large positive values approaching 1 indicating a highly positive association, negative values approaching -1 indicating a highly negative association, and values close to zero indicating a minimal association. However, because network relationship data is non-independent, it is necessary to use QAP to test the statistical significance of the correlations. In QAP, the rows and columns of

<sup>&</sup>lt;sup>24</sup> Therefore, these correlations were conducted on the valued data.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

one of the network matrices are randomly permuted and the Pearson correlation is calculated over a number of trials (in this study, 10,000). Then, a p-value is calculated as the proportion of randomly permuted trials where the Pearson correlation met or exceeded that found in the observed data (Hanneman & Riddle, 2005). This allowed for appropriate statistical significance testing of the correlations.

#### Results

Findings were quite similar across the three models SARTs. We begin with results on the nature and distribution of inter-organizational relationships within model SARTs. Specifically, for each relationship we examined (1) the extent to which organizations are connected by that relationship; (2) whether relationships between two organizations tend to be mutual (or reciprocated);<sup>25</sup> and (3) the distribution of these relationships in SARTs. Finally, we present the associations *between* the different types of relationships within the model SARTs.

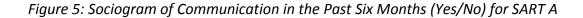
### Nature and distribution of relationships.

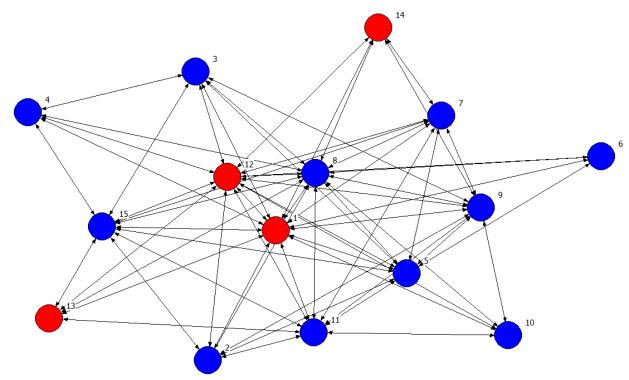
*Communication frequency.* A series of complementary analyses were conducted to examine the nature and distribution of the presence of *inter-organizational communication* relationships (yes/no) within model SARTs.<sup>26</sup> Sociograms for the relationship "communication in the past six months" (yes/no) are presented for each SART in Figures 5-7. In these sociograms, *shapes* represent *organizations* in the SART. *Lines* connecting the shapes represent

<sup>&</sup>lt;sup>25</sup> Inter-organizational communication was conceptualized as inherently mutual; therefore, reciprocity was not examined for this relationship.

<sup>&</sup>lt;sup>26</sup> To understand the pattern of the *existence* of inter-organizational relationships, these analyses were conducted on the dichotomized variable (any communication in the past six months = yes, inter-organizational communication relationship exists; no communication in the past six methods = no, inter-organizational communication did not exist).

*relationships* between organizations. In this report, red shapes represent organizations that are part of the criminal justice system, while blue shapes represent non-criminal justice system organizations that provide medical or social services. In this series of sociograms, a line connecting two organizations indicates that they communicated in the past six months, while two organizations that are not directly connected by a line did not communicate in the past six months. Organizations that are closer together in the graph have more similar patterns of interorganizational communication relationships, while organizations that are farther apart are less similar.





Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 values 1's role.  $2 \rightarrow 1 = 2$  reported that 1 values 2's role.  $1 \leftarrow \rightarrow 2 =$  Both reported that the other organization valued their organization's role. No arrow = neither reported that the other valued their organization's role. Red = social or medical service organization; blue = criminal justice system organization.

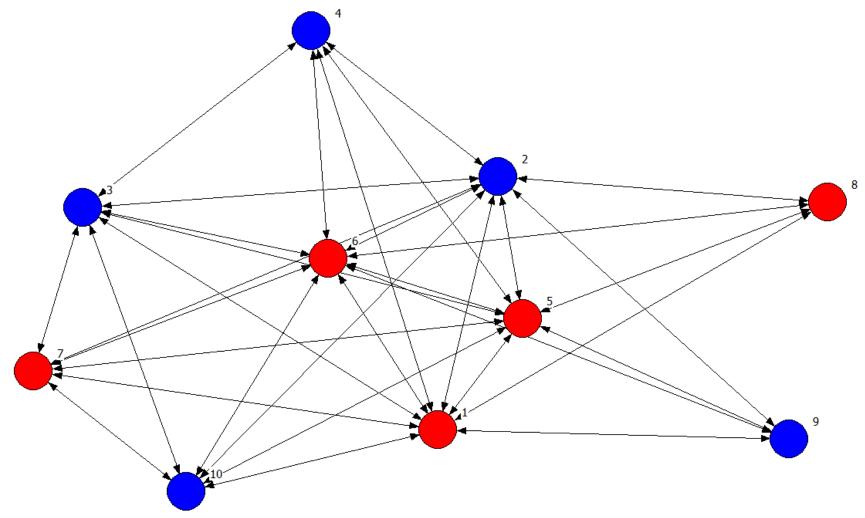
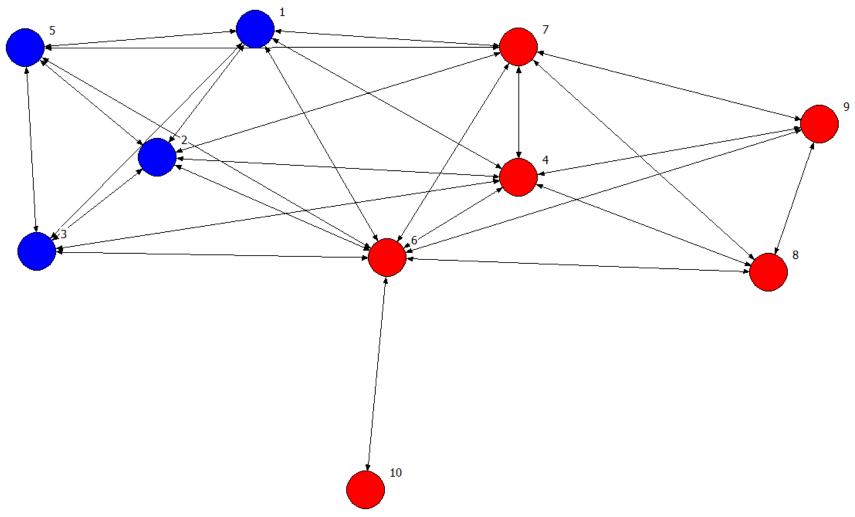


Figure 6: Sociogram of Communication in the Past Six Months (Yes/No) for SART B

Circles = Organizations; Line connecting two organizations = the organizations communicated outside of official team meetings and individual cases in the past six months; No line = the organizations did not communicate with one another in the past six months. Red = social or medical service organization; blue = criminal justice system organization.



# Figure 7: Sociogram of Communication in the Past Six Months (Yes/No) for SART D

Circles = Organizations; Line connecting two organizations = the organizations communicated outside of official team meetings and individual cases in the past six months; No line = the organizations did not communicate with one another in the past six months; Red = social or medical service organization; blue = criminal justice system organization.

Connectedness. All three sociograms show many lines connecting shapes, indicating a high degree of inter-organizational communication in all three model SARTs. In other words, in each SART, many pairs of organizations communicated with one another (outside of group discussion at official meetings and outside of individual sexual assault cases) in the past six months. Density analyses also confirmed a high degree of connection via inter-organizational communication. Each SART received its own density score, capturing the extent to which organizations in that SART are connected by communication in the past six months. Model SARTs exhibited high density on inter-organizational communication: within each of the model SARTs 60-76% of the potential relationships between pairs of organizations involved communication in the past six months (density SART A = .6095, SART B = .7556, SART C = .6000.<sup>27</sup> In other words, in each model SART, most organizations communicated with one another in the past six months to coordinate the response to sexual assault outside of SART meetings and individual cases. The communication was not particularly frequent (we only captured whether they communicated outside of official group discussion and individual cases in the past six months), but it does suggest that occasional coordination between a variety of different pairs of organizations may be beneficial for SARTs.

*Mutuality.* Communication was conceptualized as inherently mutual (if organization 1 communicated with organization 2, then organization 2 also communicated with organization 1) and therefore reciprocity was not examined for this relationship.

<sup>&</sup>lt;sup>27</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

*Distribution of relationships across different organizations.* How are inter-organizational communication relationships distributed in model SARTs? An overview of the findings regarding the distribution of these relationships is provided in Table 7. This is followed by a thorough explanation of the findings and the evidence supporting those findings.

Pattern regarding the Distribution of	Finding
Relationships within SARTs	, mang
Presence of Cross-Sector Communication?	
(relationships between criminal justice and medical/social service organizations)	Yes (in all three SARTs)
Presence of Within-Sector Communication?	
(relationships between two criminal justice or two medical/social service organizations)	Yes (in all three SARTs)
Number of Organizations that do not Communicate with Others in their SART?	None (in all three SARTs)
Evidence of Communication Cliques? (mutually exclusive groups in which organizations communicate with others in their clique, but do not communicate with others outside their clique)	No (for all three SARTs)
Degree to Which Communication is Dependent on One Focal Organization? (vs. relationships are diffused across all organizations in the SART; known as "centralization")	Moderate (for all three SARTs); A moderate amount of relationships in each SART involve one key organization. However, quite a few relationships also exist outside of this key organization
Evidence that a Core and a Peripheral Group of Organizations Exists? (such that relationships are dependent upon a core group of organizations; there is a high degree of relationships among core organizations and a low degree of relationships among peripheral organizations; known as "core-periphery structure")	Yes (for all three SARTs)

Sociograms reveal that in each "model" SART, there is evidence of cross-sector communication (across criminal justice vs. social/medical service organizations; indicated by lines connecting red shapes to blue shapes), as well as within-sector communication (between criminal justice organizations and between social/medical service organizations; indicated by lines connecting red to red and blue to blue). In addition, there is evidence that in each model SART, some organizations communicated with a larger number of organizations in the past six months than others did. Sociograms illustrate this by some shapes having more lines connecting them to other shapes than others do. Freeman degree centrality analyses confirmed this, due to variation in organizations Freeman degree centrality scores, which are the number of other organizations each organization directly communicated with in their SART. These findings reveal that, within each model SART, some organizations communicated with a larger number of team members than others did. See Table 8 for detailed evidence. Table 8: Variation in Freeman Degree Centrality for Communication Relationships (Yes/No) in

# Model SARTs<sup>28</sup>

	М	SD	Max.	Min.
	The average	Variation in the	The organization	The organization
	number of other	number of other	that	that that
	organizations they	organizations they	communicated	communicated
	communicated	felt communicated	with the most	with the least
	with:	with	other	other
			organizations	organizations
			communicated	communicated
			with:	with:
SART A	8.53 organizations	3.40	14 other	5 other
	(out of 10 possible)		organizations	organizations
			(out of 14 possible)	(out of 14 possible)
SART B	6.88 organizations	1.99	9 other	4 other
	(out of 8 possible)		organizations	organizations
			(out of 9 possible)	(out of 9 possible)
SART C	5.40 organizations	2.06	9 other	1 other
	(out of 9 possible)		organizations	organizations
			(out of 9 possible)	(out of 9 possible)

Additional analyses were conducted to further understand patterns regarding the distribution of relationships across different organizations in each model SART. The sociograms and degree centrality analyses showed that there are no "isolates" in any of the model SARTs, meaning there are no organizations that had not communicated with any other organization in their team in the past six months (indicated by no shapes that are not connected to any other shapes). Furthermore, none of the "model" SARTS's sociograms suggested the presence of "cliques" or isolated subgroups of organizations that communicated with other organizations in their own "clique" but did not communicate with organizations outside their "clique" (this

<sup>&</sup>lt;sup>28</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

would have appeared in the sociogram as multiple isolated blocks of organizations that had lines connecting shapes within a block, but no lines between shapes that were in different blocks).

Centralization and core-periphery analyses were conducted to follow-up on these findings and understand whether the inter-organizational relationships involving communication within SARTs were dependent upon one key organization (centralization) or a group of key organizations (core-periphery structure). First, centralization examined the extent to which SARTs' inter-organizational communication fit a "perfectly centralized" network in which one key organization was involved in all inter-organizational communication (i.e., relationships were completely dependent upon one key organization). In such a network, one organization is the linchpin—every time that two organizations communicated, they were one of the two organizations; there are no pairs of organizations that communicated that they are not involved in. As an example, imagine a SART in which the rape crisis center communicates outside of group meetings with all of the other SART members, but no one else communicates with each other. If a SART fit this pattern, it would indicate a high reliance on one key organization within the SART to create and maintain relationships. Each SART received a centralization score, capturing the extent to which each SART is similar to such a (hypothetical) perfectly centralized SART,<sup>29</sup> in which all communication centered around one key organization. A centralization score of 0% represents no centralization (meaning inter-organizational communication is diffuse and not at all centered around one focal organization in the SART) and 100% represents perfect centralization (i.e., the SART is perfectly centralized and there is no

<sup>&</sup>lt;sup>29</sup> Consisting of the same number of actors

communication between two organizations if one of them is not the focal organization; Hanneman & Riddle, 2005).

Analyses revealed that inter-organizational communication was moderately centralized within all three model SARTs: a moderate proportion of the inter-organizational communication that occurred involved one key organization in each SART (SART A = 45.05%, SART B = 30.56%, SART C = 50.00%).<sup>30</sup> In other words, each model SART has a key organization that is involved in a fairly high proportion (31-50%) of the relationships that involve inter-organizational communication, but communication also exists between other pairs of organizations; there is moderate dependence on one organization that fuels relationships within the team.

Next, core-periphery analyses were examined to understand whether organizational communication was dependent on a key subgroup of organizations. While centralization examined the extent to which SARTs relationships fit a perfectly centralized network (perfectly dependent upon one key organization), core-periphery analyses examined the extent to which communication relationships fit a perfect core-periphery structure (relationships are driven by a core group of organizations). In a perfect core-periphery structure, there are two distinctive traits: (1) all organizations that belong to a key, "core" group communicate with one another; and (2) none of the organizations that belong to the more marginal "periphery" group communicate with one another. In a perfect core-periphery network, some of the time organizations on the periphery may communicate with organizations that belong to the core. If a SART were similar to a perfect core-periphery structure, it would indicate that communication

<sup>&</sup>lt;sup>30</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

is tiered, with some core organizations that are highly involved in coordination, and other peripheral organizations that check in to coordinate with some of the core group, but do not coordinate with one another. In other words, relationships are dependent upon a core group of organizations. Core-periphery analyses were conducted to examine whether communication relationships in model SARTs were similar to a perfect core periphery structure—whether this core periphery pattern was a reasonable way of understanding SARTs relationships. Each SART received a fitness score that indicates the extent to which patterns of inter-organizational communication in model SARTs were similar to a perfect core-periphery structure (with 0 = not at all like a core-periphery structure, and 1 = a perfect core periphery structure). Based on the pattern of inter-organizational communication, the analyses also assigned organizations within each SART to belong to either the core or the periphery.

The pattern of inter-organizational communication in all three model SARTs was quite similar to a core-periphery structure: they all communicated in such a way that within each model SART there were two distinct groups of organizations, a core and a periphery, that varied in their communication with other organizations in their SART outside of individual cases and outside of group discussion. Most communication occurred between the key groups of core organizations, little communication occurred between peripheral organizations, but peripheral organizations did communicate fairly frequently with organizations that belong to the key group of core organizations. In other words, in each SART, communication was driven by a key subgroup of organizations, while other organizations were more tangentially involved; they tended to communicate with the core group, but not one another (see Table 9 for evidence). In each SART, both criminal justice and social/medical service organizations were a part of the core group of organizations that drove the relationships, and both criminal justice and social/medical service organizations were part of the periphery that were more tangentially involved.

Figures 8-10 provide sociograms of communication relationships (yes/no) within SARTs. By indicating which organizations are a part of the core and which are part of the periphery, the sociograms allow for visual inspection of how relationships are distributed across core and periphery organizations. In the sociograms, core organizations are represented by circles, and periphery organizations are represented by squares. Lines connecting circles with circles represent relationships between core organizations, lines connecting squares with squares represent relationships between periphery organizations, and lines connecting squares with circles represent relationships between core and periphery organizations.<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> Consistent with the finding that relationships within these SARTs are similar to a core-periphery structure, we find a high degree of connection among core organizations (indicated by a high proportion of lines connecting circles to other circles), and a low degree of connection among periphery organizations (indicated by a low proportion of lines connecting squares to squares) in each of the sociograms.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

	Fitness Correlation <sup>32</sup>	Core and Periphery Sizes	Core Density <sup>33</sup>	Periphery Density <sup>34</sup>	Core-Periphery Density <sup>35</sup>
	(extent to which the SARTs' relationships were similar to a perfect core-periphery pattern)		(how connected core organizations were to other core organizations)	(how connected core organizations were to other core organizations)	(how connected core and periphery organizations were to one another)
SART A	.770 Communication	Core = 10 organizations	.889 Core organizations	0.00 Periphery	.480 Core and periphery
	within this SART fits a core- periphery pattern quite well.	Periphery = 15 organizations	were highly connected to one another via communication	organizations never communicated with other periphery organizations	organizations were moderately connected to each other via communication
SART B	1.00	Core = 6 organizations	1.00	0.00	.792
	Communication within this SART is a perfect fit to a core-periphery pattern.	Periphery = 4 organizations	All core organizations communicated with all other core organizations	Periphery organizations never communicated with other periphery organizations	Periphery organizations and core organizations were highly connected with each other via communication
SART C	.767 Communication	Core = 6 organizations	.933 Core organizations	.167 Periphery	.500 Periphery
	within this SART fits a core- periphery pattern quite well	Periphery = 4 organizations	were highly connected to one another via communication	organizations were minimally connected to other periphery organizations	organizations and core organizations communicate with one another about half of the time

### Table 9: Core-Periphery Results for Model SARTs' Communication (Yes/No)

 $<sup>^{32}</sup>$  0 = not at all similar to a core periphery structure, 1 = an exact match to a perfect core periphery structure.

 $<sup>^{33}</sup>$  0 = no core organizations communicated with any other core organizations; 1 = all core organizations communicated with all other core organizations

 $<sup>^{34}</sup>$  0 = no periphery organizations communicated with any other periphery organizations; 1 = all periphery organizations communicated with all other core organizations.

 $<sup>^{35}</sup>$  0 = no periphery organizations communicated with any core organizations; 1 = all periphery organizations communicated with all core organizations.

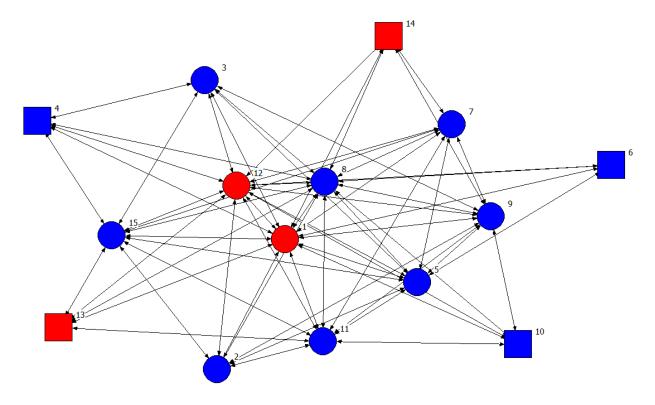


Figure 8: Sociogram of Communication in the Past Six Months (Yes/No) Core-Periphery for SART A

*Circles* = Organizations that belong to the core; *Squares* = Organizations that belong to the periphery. A double-headed arrow connecting two organizations = communication in the past six months. No arrow connecting two organizations = no communication in the past six months; Red = social/medical service organization; blue = criminal justice system organization. Red = social/medical service organization; blue = criminal justice system organization.

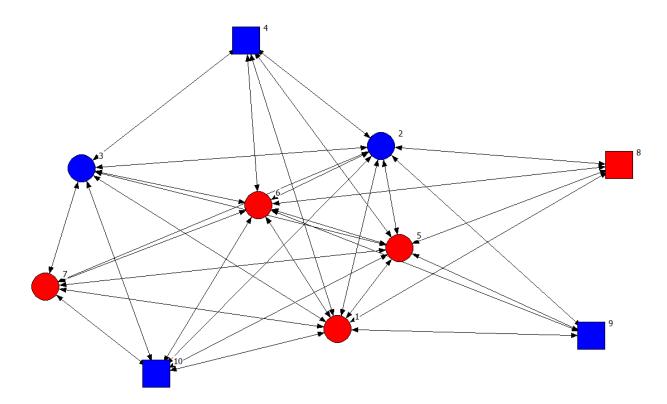


Figure 9: Sociogram of Communication in the Past Six Months (Yes/No) Core-Periphery for SART B

*Circles* = Organizations that belong to the core; *Squares* = Organizations that belong to the periphery. A double-headed arrow connecting two organizations = communication in the past six months. No arrow connecting two organizations = no communication in the past six months. Red = social/medical service organization; blue = criminal justice system organization.

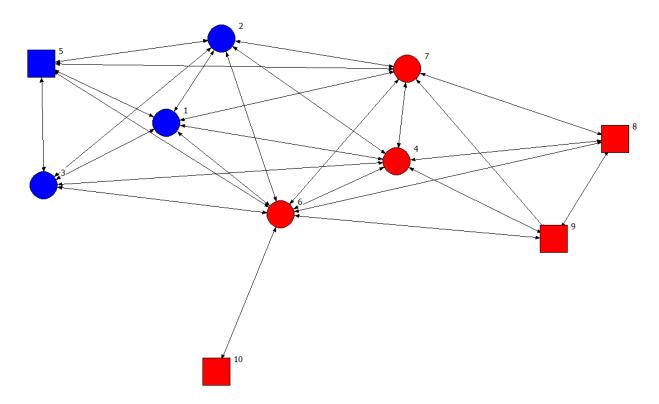


Figure 10: Sociogram of Communication in the Past Six Months (Yes/No) Core-Periphery for SART C

*Circles* = Organizations that belong to the core; *Squares* = Organizations that belong to the periphery. A double-headed arrow connecting two organizations = communication in the past six months. No arrow connecting two organizations = no communication in the past six months. Red = social/medical service organization; blue = criminal justice system organization.

Overall, the findings on the distribution of inter-organizational communication relationships in model SARTs have interesting implications. They suggest that interorganizational communication does not need to be equal across all organizations that belong to a SART. In fact, such a pattern of relationships may not be sustainable. Rather, some lead organizations can drive a fair amount of the coordination that occurs outside of group meetings and outside of individual cases. See page 126 for further discussion of these findings.

*Values my organization's role.* As with communication frequency, a series of complementary analyses were conducted to examine the nature and distribution of the existence of the inter-organizational relationship "values my organization's role" (yes/no)<sup>36</sup> within model SARTs. Sociograms for this relationship are presented for each SART in Figures 11-13. In these sociograms, *shapes* represent *organizations* in the SART. Blue shapes represent organizations that are part of the criminal justice system, while red shapes represent non-criminal justice system organizations that provide medical or social services. For directional relationships (that may or may not be reciprocal), like "values my organization's role"), *lines* represent relationships, and *arrows* represent the *direction* of the relationship. The arrow points *away* from the organization that *reported* the relationship and points *to* the organization that *they reported a relationship with*; lines with arrows in both directions indicate that both organization reported the relationship with each other. For example, if the sociogram shows an arrow pointing from organization 2 valued their role (and 2 did not report the same about 1). If the

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>36</sup> To understand the pattern of the *existence* of inter-organizational relationships, these analyses were conducted on the dichotomized variable (somewhat agree or strongly agree = yes, values my organization's role exists; neutral, somewhat disagree, or strongly disagree = no, values my organization's role does not exist).

sociogram had a line with arrows pointing in both directions connecting organizations 1 and 2, then both organizations reported that the other valued their organization's role. If there is no line connecting organization 1 and 2, then neither reported that the other valued their role.

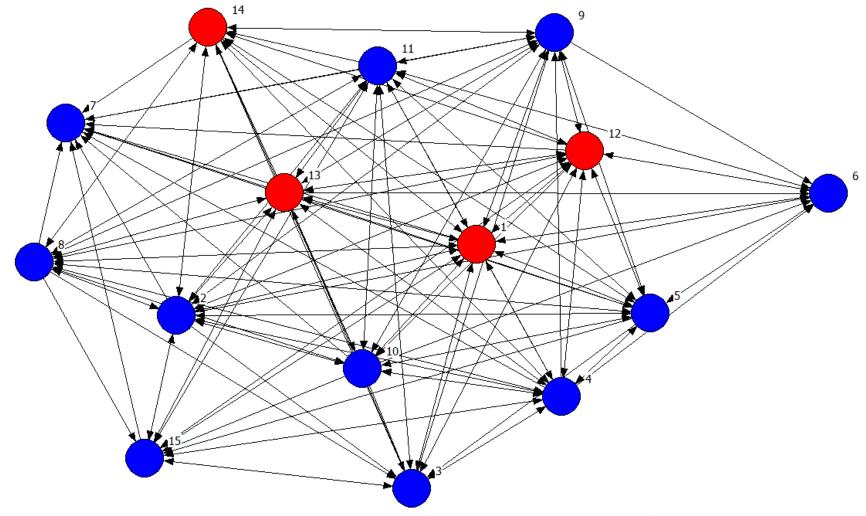
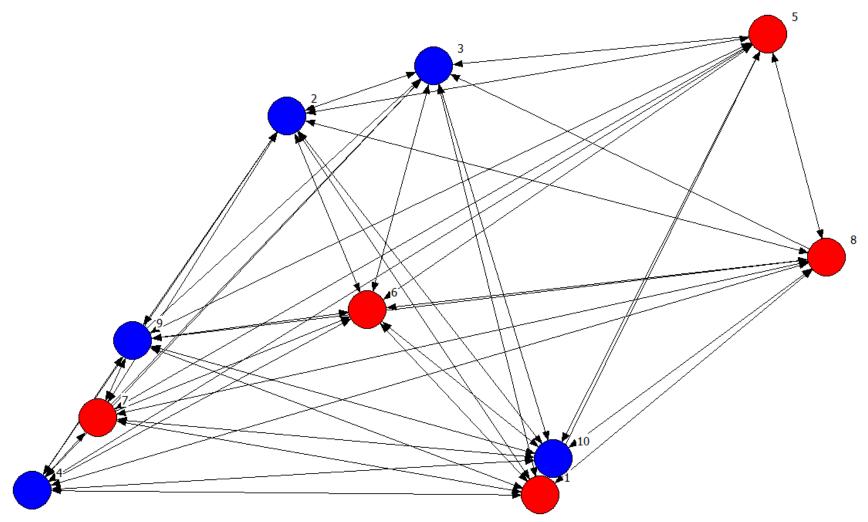


Figure 11: Sociogram of Values my Organization's Role (Yes/No) for SART A

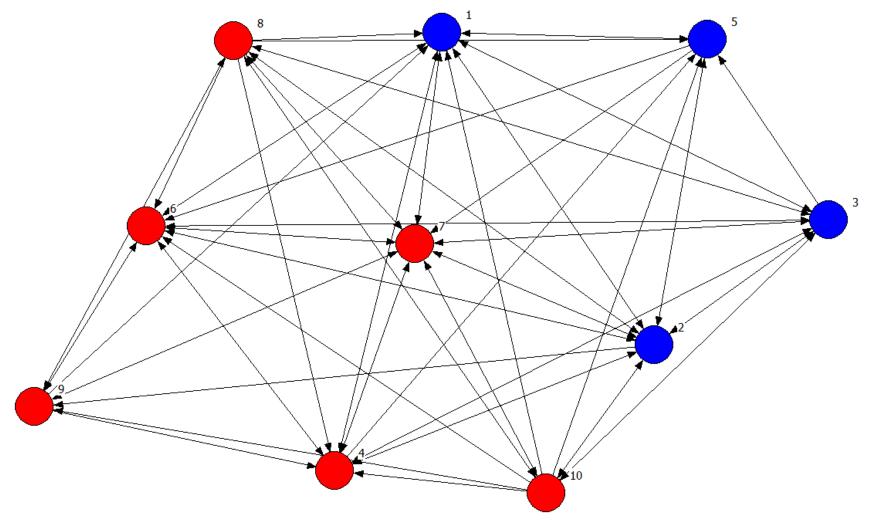
*Circles* = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 values 1's role.  $2 \rightarrow 1 = 2$  reported that 1 values 2's role.  $1 \leftarrow 2 = 3$  Both reported that the other organization valued their organization's role. No arrow = neither reported that the other valued their organization's role. Red = social or medical service organization; blue = criminal justice system organization.

Figure 12: Sociogram of Values my Organization's Role (Yes/No) for SART B



Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 values 1's role.  $2 \rightarrow 1 = 2$  reported that 1 values 2's role.  $1 \leftarrow \rightarrow 2 =$  Both reported that the other organization valued their organization's role. No arrow = neither reported that the other valued their organization's role. Red = social or medical service organization; blue = criminal justice system organization.

Figure 13: Sociogram of Values my Organization's Role (Yes/No) for SART C



Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 values 1's role.  $2 \rightarrow 1 = 2$  reported that 1 values 2's role.  $1 \leftarrow 2 = 3$  Both reported that the other organization valued their organization's role. No arrow = neither reported that the other valued their organization's role. Red = social or medical service organization; blue = criminal justice system organization.

*Connectedness.* All three sociograms show a great deal of lines connecting the different shapes, indicating a large amount of relationships. In other words, organizations within these model SARTs appear to be highly connected to one another by feeling that other organizations valued their organization's role. Density analyses also confirmed a high degree of connection to other organizations through feeling their role was valued. Each SART received a density score, capturing the extent to which organizations were connected by feeling other organizations in their team valued their role. Model SARTs exhibited very high density on the relationship "values my organization's role" with 81% to 98% of pairs of organizations connected by this relationship (density SART A = .8079, SART B = .9770, SART C = .8434;<sup>37,38</sup> In other words, organizations in model SARTs reported that most other organizations in their team valued their role.

*Mutuality.* In directed relationships (that are not inherently reciprocal), like "values my organization's role" (yes/no), it is possible to examine the extent to which inter-organizational relationships are mutual. If organization 1 reports that organization 2 values their role, does organization 2 report that organization 1 values 2's role? For the relationship "values my organization's role," sociograms reveal that in all three SARTs there are reciprocated relationships (indicated by lines with double-headed arrows) as well as relationships that are not reciprocated (indicated by lines with an arrow in only one direction). Dyad-based reciprocity analyses indicate that there is a fairly high degree of reciprocity on this relationship

<sup>&</sup>lt;sup>37</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

within model SARTs. Reciprocity was calculated as the proportion of pairs of organizations with a mutual relationship (in which both felt valued by the other) out of all pairs of organizations in which either organization reported the other valued their role. Each SART received a reciprocity score. In theory, reciprocity can range from 0% (none of the relationships that exist are mutual) to 100% (all of the relationships that exist are mutual). In all three model SARTs, the majority of relationships that existed were mutual (reciprocity of SART A = .6907, SART B = .8889, SART C = .6279). In other words, in model SARTs, when one organization reports that another organization values their role, most of the time the other organization also feels valued by them. This suggests that an extremely high degree of feeling valued by other organizations, and a great deal of reciprocity in feeling valued is helpful in SARTs.

Distribution of relationships across different organizations. Next, we sought to understand: how is the relationship "valued my organization's role" distributed across different organizations within model SARTs? An overview of the findings regarding the distribution of this relationship is provided in Table 10 (see next page). This is followed by a thorough explanation of the findings and the evidence supporting those findings. Table 10: Overview of Patterns of the Relationship "Values my Organization's Role" (yes/no) within Model SARTs

Pattern regarding the Distribution of Relationships within SARTs	Finding
Do Any Organizations Feel Valued by an Organization from a Different Sector? (relationships between criminal justice and medical/social service organizations)	Yes (in all three SARTs)
Do Any Organizations Feel Valued by an Organization from the Same Sector? (relationships between two criminal justice or two medical/social service organizations)	Yes (in all three SARTs)
Number of Organizations that do not Feel Valued by Others in their SART?	Very Low (one in SART A; none in the rest)
Number of Organizations that do not make Others Feel Valued in their SART?	None (in all three SARTs)
Evidence of Cliques based on Feeling Valued by Other Organizations? (mutually exclusive groups in which organizations feel valued by others in their clique, but do not feel valued by others outside their clique)	No (in all three SARTs)
Degree to Which Feeling Valued is Dependent on One Focal Organization? (vs. relationships are diffused across all organizations in the SART; known as "centralization")	Low (in all three SARTs) One key organization is not primarily responsible for reports of feeling valued.
Degree to Which Making Others Feel Valued is Dependent on One Focal Organization? (vs. relationships are diffused across all organizations in the SART; known as "centralization")	Low (in all three SARTs) One key organization is not primarily responsible for making others feel valued.
Evidence that a Core and a Peripheral Group of Organizations Exists? (such that relationships are dependent upon a core group of organizations; there is a high degree of relationships among core organizations and a low degree of relationships among peripheral organizations; known as "core-periphery structure")	No for SART A&B Yes for SART C (the largest, multi- county SART)

Sociograms reveal that in each model SART, organizations reported that other organizations from the same sector valued their role (relationships existed between criminal justice organizations and relationships existed between social/medical service organizations; indicated by lines connecting blue and blue shapes and red with red shapes); additionally, organizations also reported that organizations from the other sector valued their role (across criminal justice vs. social/medical service organizations; indicated by lines connecting red to blue shapes). The sociograms also suggest that within each model SART, organizations vary in the number of relationships they have with other team members. Some organizations report feeling valued by more organizations than others did (akin to their organization being the "popular one" that everyone values; indicated by some shapes having more arrows extending outward than others) and some organizations were more likely to have made others feel valued (akin to their organization being the one that makes everyone else feel special; indicated by some shapes having more arrows pointing toward them). Freeman degree centrality analyses confirmed that within each model SART, organizations varied (somewhat) in the number of other organizations that valued their role (called "out-degree centrality") and organizations varied in the number of other organizations they made feel valued (called "in-degree centrality").<sup>39</sup> Tables 11 and 12 present information on the variation of out-degree and indegree centrality within the three model SARTs.

<sup>&</sup>lt;sup>39</sup> Due to the small number of organizations in each SART, further analyses to determine which organizations were more likely to feel values, or make others feel valued, were not possible.

	М	SD	Max.	Min.
	The average	Variation in the	The organization	The organization
	number of other	number of other	that felt valued by	that felt valued by
	organizations they	organizations they	the most other	the least other
	felt valued by	felt valued by	organizations was	organizations was
			valued by:	valued by
SART A	<i>M</i> = 10.93	<i>SD</i> = 4.36	14 other	0 other
	organizations		organizations	organizations
	(out of 14 possible)		(out of 14 possible)	(out of 14 possible)
SART B	<i>M</i> = 8.50	<i>SD</i> = 1.20	9 other	4 other
	organizations		organizations	organizations
	(out of 9 possible)		(out of 9 possible)	(out of 9 possible)
SART C	<i>M</i> = 7.00	SD = 1.73	9 other	4 other
	organizations		organizations	organizations
	(out of 9 possible)		(out of 9 possible)	(out of 9 possible)

Table 11: Organizational Variation in Out-Degree Centrality (Feeling Valued by Others)<sup>40</sup>

<sup>&</sup>lt;sup>40</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

	М	SD	Max.	Min.
	The average	Variation in the	The organization	The organization
	number of other	number of other	that made the	that made the
	organizations they	organizations they	most other	least other
	made feel valued	made feel valued	organizations feel	organizations feel
			valued made:	valued made
SART A	<i>M</i> = 10.93	<i>SD</i> = 1.06	13 other	9 other
	organizations		organizations feel	organizations feel
	(out of 14 possible)		valued	valued
			(out of 14 possible)	(out of 14 possible)
SART B	M = 8.55	SD = .67	9 other	7 other
	organizations		organizations feel	organizations feel
	(out of 9 possible)		valued	valued
			(out of 9 possible)	(out of 9 possible)
SART C	<i>M</i> = 7.00	<i>SD</i> = 1.78	9 other	4 other
	organizations		organizations feel	organizations feel
	(out of 9 possible)		valued	valued
			(out of 9 possible)	(out of 9 possible)

Table 12: Organizational Variation in In-Degree Centrality (Making Others Feel Valued)<sup>41</sup>

These findings reveal that, within each model SART, some organizations felt valued more than others did, and some organizations were more likely to make others feel valued. Due to the limited number of organizations in each SART, it was not possible to examine which types of organizations tended to feel valued by more of their team members, or to make more of their team members feel valued.

Additional analyses were conducted to further understand patterns regarding the distribution of this type of relationship across different organizations in each model SART. The sociograms and degree centrality analyses showed there were minimal "isolates" or

<sup>&</sup>lt;sup>41</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

organizations that either did not feel valued by others or did not make others organizations feel valued within their SART. Only one organization (organization 6 in SART A) reported that no other organizations in their SART valued their role (indicated by no arrows extending outward from that shape), and all organizations were nominated by at least one other organization as having valued their role (indicated by all shapes having at least one arrow pointing to it). Furthermore, none of the model SARTS's sociograms suggested the presence of "cliques" or isolated subgroups of organizations that felt valued by other members of their clique, but did not feel valued by organizations outside their group (this would have appeared in the sociogram as multiple isolated blocks of organizations that had arrows connecting shapes within a block, but no arrows between shapes that were in different blocks).

Centralization and core-periphery analyses were conducted to follow-up on these findings and understand whether this relationship was dependent upon one key organization (centralization) or driven by a group of key organizations (core-periphery structure) within model SARTs. Centralization analyses examined the extent to which the relationship "values my organization's role" (yes/no) in each SART fit a perfectly centralized network in which all relationships were dependent on one key organization. For directed relationships, like values my organization's role, there are actually two different type of perfectly centralized networks. One is a perfectly central *out-degree* network in which one focal organization was the only organization to ever *report* that others valued their role; the SART depends on that organization to report the existence of that relationship. As an example, imagine a SART with a prosecutor that reported that every other organization valued their role, but no other organization's ever felt valued by the prosecutor, or anyone else. If a SART fit this pattern, it would indicate an extreme amount of inequality in the SART, with only one organization that ever feels valued. Out-degree centralization scores were calculated for each SART. Scores provide a numeric value of the extent to which each SART is similar to a perfectly out-degree centralized network, with 0% representing no centralization (meaning reports of feeling valued are diffused equally across all organizations in the SART) and 100% = perfect out-degree centralization (meaning the SART fits the perfectly out-degree centralized structure exactly, and one focal organization is the only one that ever reports feeling valued by others in their team). The model SARTs in this study had low out-degree centralization, ranging from 6% to 24% centralization (SART A = 23.47%, SART B = 6.17%, SART C = 17.19%). This indicates that within these SARTs there was not one key organization that was typically the one to feel valued by others; rather a variety of organizations reported feeling valued by other team members. The existence of this relationship was not dependent on one key organization.

Analyses also examined the second type of perfectly centralized network: a perfectly central *in*-degree network in which one focal organization is the only organization that ever *makes others feel valued*. Such a network depends entirely on the one organization to make others feel valued. As an example, picture a SART with a prosecutor who makes every other member of the team feel valued, but none of the other organizations ever makes the prosecutor, or any other organizations, feel valued. If a SART had perfect in-degree centralization on this relationship, it would indicate complete dependence on one key organization within the SART to make others feel valued. In-degree centralization scores were calculated for each model SART, capturing the extent to which each SART fit the perfectly in-degree centralized network. An in-degree centralization score of 0% represents no in-degree

centralization (meaning that a variety of organizations make others feel valued) and 100% represents perfect in-degree centralization (i.e., the network fits the perfectly central in-degree network exactly, and there is one organizations that is solely responsible for making other organizations feel valued). The model SARTs in this study had low in-degree centralization, ranging from 6% to 25% centralization (SART A = 15.82%, SART B = 6.17%, SART C = 24.69%). This indicates that within these SARTs there was not one key organization that was typically the one to make others feel valued; rather a variety of organizations made other team members feel valued. The existence of this relationship was not dependent on one key organization.

While centralization examined whether relationships depended on *one* key organization, core-periphery analyses examined whether relationships were driven by a key *group* of organizations. Specifically, core-periphery analyses examined the extent to which the patterns of the relationship "values my organization's role" (yes/no) in model SARTs fit a perfect core-periphery structure. In a perfect core-periphery structure network, there are two distinctive traits: (1) all organizations that belong to a key, "core" group feel valued by one another; and (2) none of the organizations that belong to the more marginal "periphery" group feel valued by one another. In a perfect core-periphery network, some of the time organizations on the periphery may feel valued by organizations that belong to the periphery. If a SART were similar to a perfect core-periphery structure, it would indicate that feeling valued is stratified within the SART, with some core organizations that are highly connected, and other peripheral organizations that may feel valued by core organizations, but do not feel valued by other peripheral organizations. In other words, relationships are driven by a core group of organizations. Core-periphery analyses were conducted to examine whether the "values my organization's role" (yes/no) relationships in model SARTs were similar to a perfect core periphery structure—whether this core periphery pattern was a reasonable way of understanding SARTs relationships. Each SART received a fitness score that indicates the extent to which patterns of this relationship in model SARTs were similar to a perfect core-periphery structure (with 0 = not at all like a core-periphery structure, and 1 = a perfect core periphery structure). Based on the pattern of relationships, the analyses also assigned organizations within each SART to belong to either the core or the periphery.

The model SARTs varied in the extent to which they were similar to a core-periphery structure. SARTs B and C were not very similar to a core-periphery pattern.<sup>42</sup> In other words, relationships between organizations in two of the model SARTs did <u>not</u> indicate the presence of a key core group of organizations that felt valued by one another and a peripheral group that did not feel valued by one another. Rather in these two SARTs, most organizations felt valued by most other organizations.

On the other hand, "values my organization's role" in <u>SART A</u> was very similar to a perfect core-periphery structure. SART A had a fitness correlation of .808, indicating that patterns of feeling valued by other organizations were quite similar to a perfect-core periphery structure (a correlation of 1.00 would have indicated a perfect core-periphery pattern of relationships; .808 indicates overall, there was a high amount of similarity to a perfect core-periphery pattern). Ten of the network's 15 organizations were a part of the core, and five were

 $<sup>^{42}</sup>$  SART B fitness score =.701, core size =8; fitness score of SART C = .581, core size = 6; A fitness score of 0 = not at all like a core-periphery structure and 1 = perfectly fits a core-periphery structure, with fitness scores of .701 and .581 indicating that this pattern does not explain the distribution of this relationship within these SARTs.

located in the periphery.<sup>43</sup> Figure 14 provides a sociogram of "values my organization's role" (yes/no) in SART A, with core organizations represented by circles and periphery organizations represented by squares. Core organizations were extremely likely to feel valued by other core organizations (99% of the time; actual within-core density = .989; in a perfect core periphery structure, this would be = 1, indicating a great deal of similarity to a core periphery structure on this characteristic).<sup>44</sup> Five peripheral organizations were fairly unlikely to report one another as valuing their organization's role. That is, only 25% of time peripheral organizations felt valued by other peripheral organizations (actual within-periphery density = .250; within-periphery density = 0 in a perfect core periphery structure, indicating a fairly good match to a core periphery structure on this characteristic).<sup>45</sup> Periphery organizations reported core members valued their role fairly often (density of periphery nominating core members as valuing their role = .440),<sup>46</sup> while core organizations reported that peripheral organizations valued their organization's role the vast majority of the time (density of core nominating peripheral members as valuing their role = .960).<sup>47</sup> Thus, within SART A (the largest model SART, which consisted of 15 organizations from three counties), the patterns of relationships revealed two

<sup>&</sup>lt;sup>43</sup> Theoretically, the core could have ranged from 2 to 14 organizations; a core of ten organizations is neither "good" nor "bad;" it simply shows how the relationships were stratified in this particular SART.

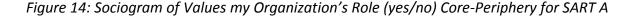
<sup>&</sup>lt;sup>44</sup> Evidence of high communication between core organizations can be seen visually in the sociogram, based on the high proportion of lines connecting core organizations (circles) to other core organizations).

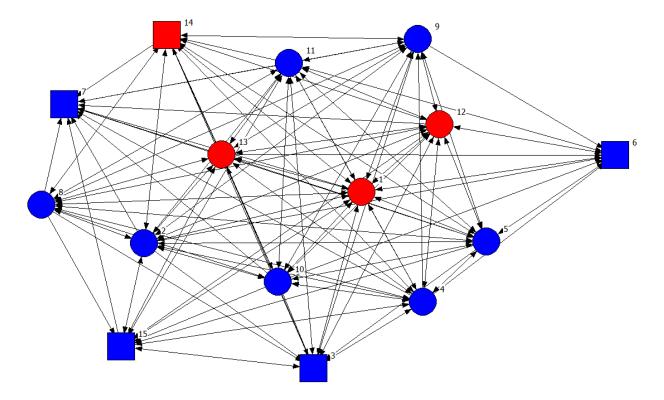
<sup>&</sup>lt;sup>45</sup> Evidence of the low communication between periphery organizations can be seen visually in the sociogram, based on the low proportion of lines connecting periphery organizations (squares) to other periphery organizations.

<sup>&</sup>lt;sup>46</sup> Density of relationships between core and periphery organizations is unspecified in a core-periphery structure and should not be taken as an indication of the degree to which this SART fits the core-periphery structure.

<sup>&</sup>lt;sup>47</sup> Density of relationships between core and periphery organizations is unspecified in a core-periphery structure and should not be taken as an indication of the degree to which this SART fits the core-periphery structure.

distinct groups of organizations (a core and a periphery) that varied in how they felt valued by other organizations in their SART. In SART A, there was a core group of organizations that tended to feel valued by one another and tended to feel valued by organizations on the periphery; however, there were also more marginalized organizations on the periphery that sometimes felt valued by core organizations, but were unlikely to feel valued by other peripheral members. This indicates that a subgroup of organizations help to drive this relationship within this team.





*Circles* = Organizations that belong to the core; *Squares* = Organizations that belong to the periphery. *Arrows* = relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 values 1's role.  $2 \rightarrow 1 = 2$  reported that 1 values 2's role.  $1 \leftarrow 2 = 3$  Both reported that the other organization valued their organization's role. No arrow = neither reported that the other valued their organization's role. Red = social/medical service organization; blue = criminal justice system organization.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Overall, the findings on the distribution of the inter-organizational relationship "values my organization's role" (yes/no) have interesting implications. They suggest that organizations should feel valued by most of the other organizations in their SART, and that these relationships should not rely on one key organization in each team. Interestingly, there were somewhat mixed findings in regards to role of subgroups of organizations. We found that in small SARTs, there were not subgroups of peripheral organizations that do not feel valued by one another, but in the largest model SART, this did exist. It may be that once SARTs reach a certain size, or when SARTs serve multiple counties, it is not important for all organizations to feel valued by every other single member of the team. In fact, such a set-up may not be very sustainable across a large number of organizations that serve distinct jurisdictions. These more peripheral members may represent less central groups that may naturally have less contact, and therefore not necessarily feel valued, or need to feel valued, by one another. See page 126 for further discussion of these findings.

*Is a resource to my organization's work (yes/no).* The same analyses were conducted to examine the nature and distribution of the existence of the inter-organizational relationship "*is a resource to my organization's work*" (yes/no)<sup>48</sup> within model SARTs. Sociograms for this relationship are presented for each SART in Figures 15-17. In these sociograms, *shapes* represent *organizations* in the SART. Blue shapes represent organizations that are part of the criminal justice system, while red shapes represent non-criminal justice system organizations that provide medical or social services. *Lines* represent relationships, and *arrows* represent the

<sup>&</sup>lt;sup>48</sup> To understand the pattern of the *existence* of inter-organizational relationships, these analyses were conducted on the dichotomized variable (somewhat agree, or strongly agree = yes, values my organization's role exists; neutral, somewhat disagree, or strongly disagree = no, values my organization's role does not exist).

*direction* of the relationship. The arrow points *away* from the organization that *reported* the relationship and points *to* the organization that *they reported a relationship with*; lines with arrows in both directions indicate that both organizations reported the relationship with each other. For example, if a sociogram shows an arrow pointing from organization 1 to organization 2 (but not vice versa), then organization 1 reported that organization 2 is a resource to their work (and 2 did not report the same about 1). If the sociogram had a line with arrows pointing in both directions connecting organizations 1 and 2, then both organizations reported that the other is a resource to their own work. If there is no line connecting organization 1 and 2, then neither reported that the other is a resource to their work.

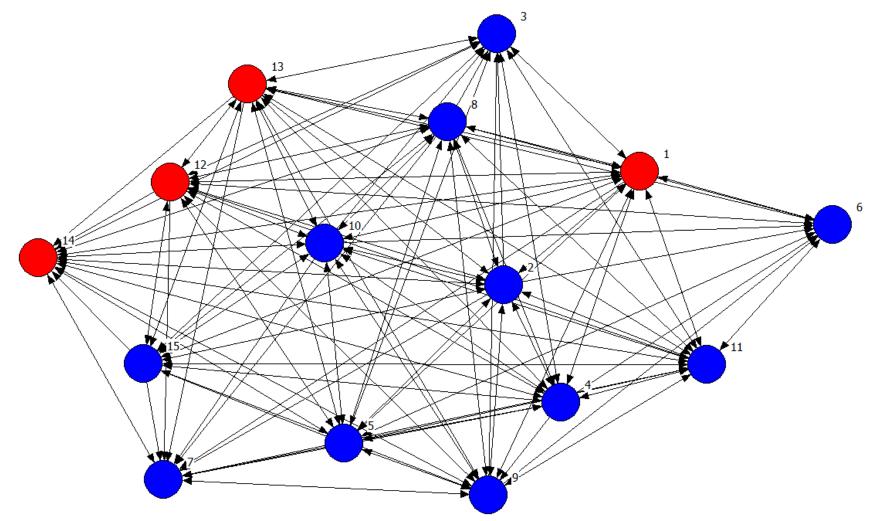


Figure 15: Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART A

Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 is a resource to 1's work.  $2 \rightarrow 1 = 2$  reported that 1 is a resource to 2's work.  $1 \leftarrow 2 = 3$  Both reported that the other organization is a resource to their own organization's work. No arrow = neither reported that the other is a resource to their own work. Red = social or medical service organization; blue = criminal justice system organization.

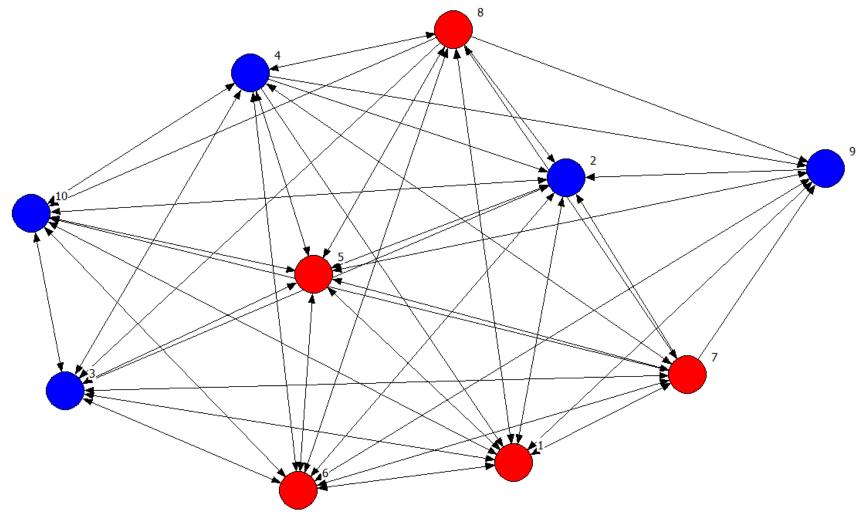
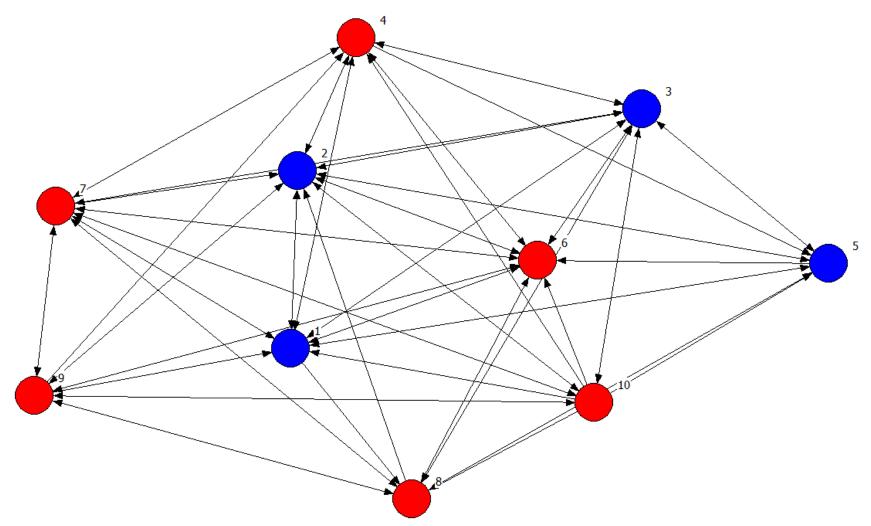


Figure 16: Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART B

Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 is a resource to 1's work.  $2 \rightarrow 1 = 2$  reported that 1 is a resource to 2's work.  $1 \leftarrow 2 = 1$  Both reported that the other organization is a resource to their own organization's work. No arrow = neither reported that the other is a resource to their own work. Red = social or medical service organization; blue = criminal justice system organization.

Figure 17: Sociogram of Is a Resource to My Organization's Work (Yes/No) for SART C



Circles = Organizations, Arrows = Relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 is a resource to 1's work.  $2 \rightarrow 1 = 2$  reported that 1 is a resource to 2's work.  $1 \leftarrow 2 = 3$  Both reported that the other organization is a resource to their own organization's work. No arrow = neither reported that the other is a resource to their own work. Red = social or medical service organization; blue = criminal justice system organization.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

*Connectedness.* All three sociograms show a great deal of lines connecting the different shapes, indicating a large amount of relationships in each SART. In other words, organizations within these model SARTs appear to be highly connected to one another by feeling that other organizations in their team are a resource to their work. Density analyses also confirmed a high degree of connection to other organizations via organizations feeling others are a resource to their own work. Each SART received a density score, capturing the extent to which organizations felt other organizations in their team were a resource to their own work. Model SARTs exhibited very high density of the relationship "is a resource to my organization's work" with 79% to 85% of pairs of organizations connected by this relationship (density SART A = .8357, SART B = .8539, SART C = .7931).<sup>49</sup> In other words, organizations in model SARTs reported that most other organizations were a resource to their own work.

*Mutuality*. In directed relationships (that are not inherently reciprocal), like "is a resource to my organization's work" (yes/no), it is possible to examine the extent to which inter-organizational relationships are mutual. If organization 1 reports that organization 2 is a resource to 1's work, does organization 2 report that organization 1 is a resource to 2's work? For the relationship "is a resource to my organization's work" (yes/no) sociograms reveal that in all three SARTs there are reciprocated relationships (indicated by lines with double-headed arrows) as well as relationships that are not reciprocated (indicated by lines with an arrow in only one direction). Dyad-based reciprocity analyses indicate that there is a fairly high degree of reciprocity on this relationship within model SARTs. Reciprocity was calculated as the

<sup>&</sup>lt;sup>49</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

proportion of pairs of organizations with a mutual relationship (both felt the other was a resource to their own work) out of all pairs of organizations in which either organization reported the other was a resource to their work. Each SART received a reciprocity score. Reciprocity can range from 0% (none of the relationships that exist are mutual) to 100% (all of the relationships that exist are mutual). In all three model SARTs, the majority of relationships that existed were mutual (reciprocity of SART A = .7300, SART B = .7674, SART C = .6829). In other words, in model SARTs, when one organization reports that another organization is a resource to their own work, most of the time the other organization also feels that they are a resource to them. This suggests that an extremely high degree of feeling other organizations are a resource to one's own work, and a great deal of reciprocity in this relationship is helpful in SARTs.

Distribution of relationships across different organizations. Next, we sought to understand: how is the relationship "valued my organization's role" distributed across different organizations within model SARTs? An overview of the findings regarding the distribution of this relationship is provided in Table 13 (see next page). This is followed by a thorough explanation of the findings and the evidence supporting those findings. Table 13: Overview of Patterns of the Relationship "Is a Resource to My Organization's Work" (yes/no) within Model SARTs

Pattern regarding the Distribution of Relationships within SARTs	Is a Resource to My Organization's Work
Do Any Organizations Feel an Organization from a Different Sector is a Resource to their Work? (relationships between criminal justice and medical/social service organizations)	Yes (in all three SARTs)
Do Any Organizations Feel an Organization from the Same Sector is a Resource to their Work? (relationships between two criminal justice or two medical/social service organizations)	Yes (in all three SARTs)
Number of Organizations that do not Feel Another Organization in their SART is a Resource to their Work?	None (in all three SARTs)
Number of Organizations that are not Named as a Resource to Other's Work?	None (in all three SARTs)
Evidence of Cliques based on Reporting other Organizations are a Resource to One's Work? (mutually exclusive groups in which organizations report others in their clique are a resource, but do not believe others outside their clique are a resource)	No (in all three SARTs)
Degree to Which Reporting other Organizations are a Resource is Dependent on One Focal Organization? (vs. relationships are diffused across all organizations in the SART; known as "centralization")	Low (in all three SARTs) One key organization is not primarily responsible for reporting others are a
Degree to Which Being Named as a Resource is Dependent on One Focal Organization? (vs. relationships are diffused across all organizations in the SART; known as "centralization")	resource. Low (in all three SARTs) One key organization is not primarily responsible for being named as a resource.
Evidence that a Core and a Peripheral Group of Organizations Exists? (such that relationships are dependent upon a core group of organizations; there is a high degree of relationships among core organizations and a low degree of relationships among peripheral organizations; known as "core-periphery structure")	No for SART A&B Yes for SART C (largest, multi-county SART)

Sociograms reveal that in each model SART, organizations reported that other organizations from the same sector are a resource to their work (relationships existed between criminal justice organizations and relationships existed between social/medical service organizations; indicated by lines connecting blue to blue shapes and red to red shapes); additionally, organizations also reported that organizations from the *other* sector are a resource to their work (across criminal justice vs. social/medical service organizations; indicated by lines connecting blue shapes with red shapes). The sociograms also suggest that within each model SART, organizations vary in the number of relationships they have with other team members. Some organizations reported more organizations were a resource to their own work than others did (akin to their organization being the "nice one" that thinks everyone else is helpful; indicated by some shapes having more arrows extending outward than others) and some organizations were more likely to have made others report that they were a resource (akin to their organization being the "helpful one" that everyone sees as a resource; indicated by some shapes having more arrows pointing toward them). Therefore, centrality, centralization, and core-periphery analyses were conducted to further understand how this relationship was distributed across different organizations in each model SART. Freeman degree centrality analyses confirmed that within each model SART, organizations varied (somewhat) in the number of other organizations they reported were a resource to their own work (called outdegree centrality) and organizations varied somewhat in the number of other organizations that named them as a resource (called "in-degree centrality"). Tables 14 and 15 present information on the variation of out-degree and in-degree centrality within the three model SARTs.

	М	SD	Max.	Min.
	The average	Variation in the	The organization	The organization
	number of other	number of other	that reported the	that reported the
	organizations	organizations	most other	least other
	they reported	they reported	organizations	organizations
	were a resource	were a resource	were a resource	were a resource
			to their own	to their own
			work reported:	work reported:
SART A	<i>M</i> = 11.53	<i>SD</i> = 3.83	14 other	2 other
	organizations		organizations as	organizations as
	(out of 14		a resource to	a resource to
	possible)		their work	their work
			(out of 14	(out of 14
			possible)	possible)
SART B			9 other	4 other
			organizations as	organizations as
			a resource to	a resource to
			their work	their work
			(out of 9	(out of 9
			possible)	possible)
SART C			9 other	4 other
			organizations as	organizations as
			a resource to	a resource to
			their work	their work
			(out of 9	(out of 9
			possible)	possible)

Table 14: Organizational Variation in Out-Degree Centrality (Naming Others as a Resource)<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

Table 15: Organizational Variation in In-Degree Centrality (being Named by Others as a Resource)<sup>51</sup>

	М	SD	Max.	Min.
	The average	Variation in the	The organization	The organization
	number of other	number of other	that reported the	that reported the
	organizations	organizations	most other	least other
	they reported	they reported	organizations	organizations
	were a resource	were a resource	were a resource	were a resource
			to their own	to their own
			work reported:	work reported:
SART A	<i>M</i> = 11.53	SD = 0.72	14 other	2 other
	organizations		organizations as	organizations as
	(out of 14		a resource to	a resource to
	possible)		their work	their work
			(out of 14	(out of 14
			possible)	possible)
SART B			9 other	4 other
			organizations as	organizations as
			a resource to	a resource to
			their work	their work
			(out of 9	(out of 9
			possible)	possible)
SART C			9 other	4 other
			organizations as	organizations as
			a resource to	a resource to
			their work	their work
			(out of 9	(out of 9
			possible)	possible)

These findings reveal that, within each model SART, some organizations report that

more of their team members are a resource to their work, while some organizations are more

likely to be perceived by their team members as a resource to their work<sup>52</sup>.

<sup>&</sup>lt;sup>51</sup> Inter-actor relationships in social networks vary depending on network size (a highly dense network is more difficult to achieve in a network with a large number of actors than a network with a small number of actors). Therefore, comparisons across SARTs with different numbers of organizations should be made with caution.

<sup>&</sup>lt;sup>52</sup> Due to the small number of organizations in each SART, further analyses to determine which organizations were more likely to be viewed as a resource were not possible.

Additional analyses were conducted to further understand patterns regarding the distribution of this type of relationship across different organizations in each model SART. The sociograms and degree centrality analyses showed there were no "isolates" or organizations that either did not feel others were a resource (indicated by no shapes with no arrows extending outward) or organizations that were not named as a resource by others (indicated by no shapes with now arrows extending inward). Furthermore, none of the model SARTS's sociograms suggested the presence of "cliques" or isolated subgroups of organizations that reported other members of their clique were a resource, but did not feel other organizations outside their group were a resource (this would have appeared in the sociogram as multiple isolated blocks of organizations that had arrows connecting shapes within a block, but no arrows between shapes that were in different blocks).

Centralization and core-periphery analyses were conducted to follow-up on these findings and understand whether the "is a resource to my organization's work" (yes/no) relationships were dependent upon one key organization (centralization) or a group of key organizations (core-periphery structure). Centralization analyses examined the extent to which the relationship "is a resource to my organization's SART" (yes/no) in any given SART fit a perfectly centralized network, in which all relationships were dependent upon one key organization. Two different perfectly centralized networks were tested. One was a perfectly centralized *out-degree* network, in which one focal organization is the only organization to ever *report* that another organization was a resource to their work. In a perfectly central out-degree network, the network is completely dependent on one organization to report that others are a resource to their own work; they are the only organization that ever does. As an example, imagine a SART with a medical/forensic examiner that reported that every other organization was a resource to their work, but no other organizations ever felt that the medical/forensic examiner or any of their other organizational team members were a resource to their work. If a SART fit this structure, it would indicate an extreme amount of inequality in the SART, with only one organization that ever reports other team members are a resource to their work. Outdegree centralization scores were calculated for each SART. Scores provide a numeric value for the extent to which each SART is similar to a perfectly out-degree centralized network, with 0% representing no centralization (meaning reports of other organizations as a resource are perfectly spread out across organizations in the SART) and 100% = perfect centralization (meaning that one focal organization is the only one that ever reports other organizations are a resource in that SART). The model SARTs in this study had low out-degree centralization, ranging from 17% to 19% centralization (SART A = 18.88%, SART B = 17.28%, SART C = 25.93%). This indicates that within these SARTs there was not one key organization that was typically the one to report that other members of their team were a resource to their work; rather a variety of organizations reported other team members were a resource to their own work. They did not rely upon one organization to report this type of relationship.

The second type of perfectly centralized network is a perfectly central *in*-degree network in which one focal organization is the only organization that is ever *named* by other organizations as a resource to their work. The network depends completely on that organization to be a resource to others; no other organizations are considered a resource by their team members. As an example, picture a SART with a medical forensic examiner that everyone reports is a resource to their work; however, neither the organizations nor the medical/forensic examiner ever report that any other organization is a resource to their own work. If a SART had perfect in-degree centralization, it would indicate complete reliance on only one organization in the SART: the only organization that is ever perceived as a resource to others. In-degree centralization scores were calculated for each model SART, capturing the extent to which each SART fit the perfectly in-degree centralized network. An in-degree centralization score of 0% represents no in-degree centralization (meaning that a variety of organizations are named as a resource to other's work) and 100% represents perfect in-degree centralization (i.e., the network fits the perfectly central in-degree structure exactly, and there is only one organization that is ever perceived as a resource to others). The model SARTs in this study had low in-degree centralization, ranging from 11% to 26% centralization (SART A = 11.22%, SART B = 17.28%, SART C = 25.93%). This indicates that within these SARTs there was not one key organization that was typically the one to be seen as a resource to others; rather a variety of organizations were viewed as a resource to other's work. They did not depend on one key organization to be a resource to their team members.

While centralization examined whether relationships were dependent on *one* key organization, core-periphery analyses examined whether relationships were driven by a key *group* of organizations. Specifically, core-periphery analyses examined the extent to which the patterns of the relationship "is a resource to my organization's work" (yes/no) in model SARTs fit a perfect core-periphery structure. In a perfect core-periphery structure, there are two distinctive traits: (1) all organizations that belong to a key, "core" group perceive each other to be a resource; and (2) none of the organizations that belong to the more marginal "periphery" perceive one another to be a resource. In a perfect core-periphery network, some of the time

organizations on the periphery may perceive organizations on the core to be a resource, and core organizations may perceive organizations on the periphery to be a resource. If a SART were to fit this pattern, it would indicate that the SART is stratified on this relationship, with some core organizations that are highly likely to view one another as a resource, and other peripheral organizations that may be connected to the core group, but do not feel other peripheral organization are a resource to their own work. Core-periphery analyses were conducted to examine whether the patterns of this relationship in model SARTs were similar to a core-periphery structure. Each SART received a fitness scores that indicates the extent to which the pattern of the relationship "is a resource to my organization's work" (yes/no) in their SART is similar to the perfect core-periphery structure (with 0 = not at all like a core-periphery structure, and 1 = a perfect core periphery structure). Based on the pattern of relationships, the analyses also assigned organizations within each SART to belong to either the core or the periphery.

The model SARTs varied in the extent to which they were similar to a core-periphery structure. Similar to the relationship "values my organization's role," SARTs B and C were not very similar to a core-periphery structure<sup>53</sup>. In other words, relationships between organizations in two of the model SARTs did not indicate the presence of a key (core group of organizations that perceived one another as a resource to each other's work and a peripheral group that did not perceived one another as a resource to their own work. Rather in these two

 $<sup>^{53}</sup>$  SART B fitness score = .570, core size = 7; fitness score of SART C = .495, core size = 6; A fitness score of 0 = not at all like a core-periphery structure and 1 = perfectly fits a core-periphery structure, with fitness scores of .570 and .495 indicating that this pattern does not describe how this relationship is distributed within SARTs.

SARTs, most organizations reported most other organizations were a resource to their own work.

On the other hand, "is a resource to my organization's work" in SART A was very similar to a perfect core-periphery structure. SART A had a fitness correlation of .723, indicating that patterns of reporting other organizations were a resource to one's work were quite similar to a perfect-core periphery structure (a correlation of 1.00 would have indicated a perfect coreperiphery pattern of relationships; .723 indicates overall, there was a high amount of similarity to a perfect core-periphery pattern). Eleven of the network's 15 organizations were a part of the core, and four were located in the periphery.<sup>54</sup> Figure 18 provides a sociogram of "is a resource to my organization's work" (yes/no) in SART A, with core organizations represented by circles and periphery organizations represented by squares. Core organizations were extremely likely to report that other core organizations were a resource to their own work (97% of the time; actual within-core density = .973; in a perfect core periphery structure, this would be = 1, indicating a great deal of similarity to a core periphery structure on this characteristic).<sup>55</sup> The four peripheral organizations were fairly unlikely to name one another as a resource. That is, peripheral organizations only named other peripheral organizations as a resource to their work 25% of the time (actual within-periphery density = .250; within-periphery density = 0 in a perfect core periphery structure, indicating a fairly good match to a core periphery structure on

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

<sup>&</sup>lt;sup>54</sup> Theoretically, the core could have ranged from 2 to 14 organizations; a core of ten organizations is neither "good" nor "bad;" it simply shows how the relationships were stratified in this particular SART.

<sup>&</sup>lt;sup>55</sup> Evidence of high communication between core organizations can be seen visually in the sociogram, based on the high proportion of lines connecting core organizations (circles) to other core organizations.

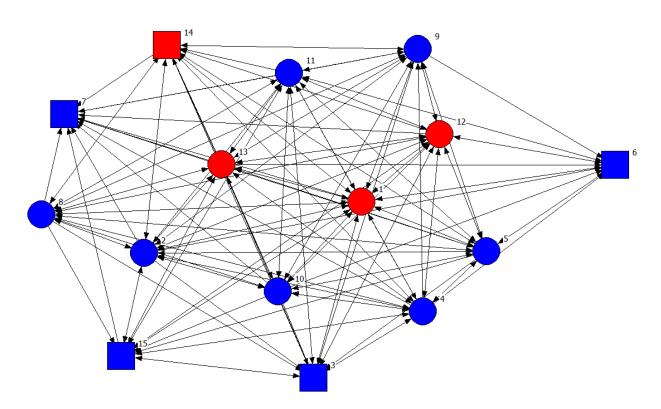
this characteristic).<sup>56</sup> Periphery organizations reported core members were a resource to their work fairly often (density of periphery nominating core members as valuing their role = .450),<sup>57</sup> while core organizations reported that peripheral organizations were a resource to their work the vast majority of the time (density of core nominating peripheral members as a resource to their work = .977).<sup>58</sup> Thus, within SART A (the largest model SART, which consisted of 15 organizations from three counties), the patterns of relationships revealed two distinct groups of organizations (a core and a periphery) that varied in how they named other organizations in their SART as a resource to their work. In SART A, there was a core group of organizations that tended to name one another, as well as the peripheral organizations, as a resource to their own work; however, there were also more marginalized organizations on the periphery that sometimes felt core organizations were a resource to their work, but were unlikely to feel other peripheral members were a resource.

<sup>&</sup>lt;sup>56</sup> Evidence of the low communication between periphery organizations can be seen visually in the sociogram, based on the low proportion of lines connecting periphery organizations (squares) to other periphery organizations.

<sup>&</sup>lt;sup>57</sup> Density of relationships between core and periphery organizations is unspecified in a core-periphery structure and should not be taken as an indication of the degree to which this SART fits the core-periphery structure.

<sup>&</sup>lt;sup>58</sup> Density of relationships between core and periphery organizations is unspecified in a core-periphery structure and should not be taken as an indication of the degree to which this SART fits the core-periphery structure.

Figure 18: Sociogram of Is a Resource to My Organization's Work (Yes/No) Core-Periphery for



SART A

*Circles* = Organizations that belong to the core; *Squares* = Organizations that belong to the periphery. *Arrows* = relationships between two organizations.  $1 \rightarrow 2 = 1$  reported that 2 is a resource to 1's work.  $2 \rightarrow 1 = 2$  reported that 1 is a resource to 2's work.  $1 \leftarrow \rightarrow 2 =$  Both reported that the other organization is a resource to their own organization's work. No arrow = neither reported that the other is a resource to their own work. Red = social/medical service organization; blue = criminal justice system organization.

Overall, the findings on the distribution of the inter-organizational relationship "is a resource to my organization's work" have interesting implications. They suggest that organizations should report that most other organizational members of their team are a resource to their work, and that these relationships should not rely primarily on one key organization. Interestingly, there were somewhat mixed findings in regards to role of subgroups of organizations. We found that in small SARTs, there were not subgroups of peripheral organizations that do find one another to be a resource to their own work, but in the largest

model SART, this did exist. It may be that once SARTs reach a certain size, it is impossible and/or not sustainable for organizations to see every other member of the team as valuable. These more peripheral members may represent less central groups that may naturally have less contact, and therefore not necessarily see one another as a resource. See page 126 for further discussion of these findings. A summary of the findings regarding the nature and distribution of all three relationships (by relationship type) is provided in Table 16.

	Communication in the Past Six Months	Values my Organization's Role	Is a Resource to My Organization's Work
Degree of Connection	High	Very High	Very High
Reciprocity/Mutuality	N/A; communication is inherently mutual	High	High
Presence of Cross-Sector			
Relationships?			
(relationships between criminal justice and medical/social service organizations)	Yes	Yes	Yes
Presence of Within-Sector			
Relationships?			
(relationships between two criminal justice or two medical/social service organizations)	Yes	Yes	Yes
Number of Organizations that are not	Very Low	Very Low	Very Low
connected to others in their SART	(none)	(one in SART A)	(None)
Evidence of Cliques? (mutually exclusive groups; relationships exist within but not across groups)	No	No	No
Degree to Which Relationships Center around One Focal Organization?	Moderate	Low	Low
Evidence that a Core and a Peripheral Group of Organizations Exists? (such that there is a high degree of relationships among core organizations and a low degree of relationships among peripheral organizations)	Yes for all three SARTs	No for SART A&B Yes for SART C (largest, multi- county SART)	No for SART A&B Yes for SART C (largest, multi- county SART)

Table 16: Summary of Findings Regarding the Nature and Distribution of Collaborative Inter-Organizational Relationships across Model SARTs Associations between different types of inter-organizational relationships. While the prior results focused on characteristics of each individual type of relationship, we also sought to understand the associations *between* the different types of collaborative relationships within model SARTs. In addition, while the prior analyses focused on the existence of relationships (yes/no) and therefore were conducted on the dichotomized data, these analyses focused on the strength of the relationships and were conducted on the continuous data (communication frequency from 0 = no communication to 6 = daily communication; extent of values my role from -3 = strongly disagree to +3 = strongly agree; and extent of is a resource to my organization's work from -3 = strongly disagree to +3 = strongly agree).

To assess associations between these network data, Pearson Correlations were examined. Quadratic Assignment Procedure (QAP) correlations compare the interorganizational relationships across two different networks (Hanneman & Riddle, 2005; Krackhardt, 1988). This allowed for appropriate statistical significance testing of the correlations. The correlations are interpreted in the traditional sense, with large positive values approaching 1 indicating a highly positive association, negative values approaching -1 indicating a highly negative association, and values close to zero indicating a minimal association. Correlations are based on inter-organizational relationships within individual SARTs and *do not* involve comparisons across organizations that belong to different SARTs. See Table 17 for within-SART network correlations between the three types of collaborative inter-organizational relationships. Across all three model SARTs, there were strong, positive associations between "extent of values my organization's role" and the relationships "extent of is a resource to my organization's work" (correlations range from .607 to .757) such that higher scores on "values my organization's role" were associated with higher scores on "is a resource to my organization's work" in all three SARTs. There were moderate, positive associations between communication frequency and the relationship "extent of values my organization's role" as well as moderate, positive associations between communication frequency and the relationship "extent of is a resource to my organization's work", such that more frequent communication was associated with higher scores on both "values my organization's role" as well as "is a resource to my organization's work" for all three model SARTs.

	Communication Frequency	Extent of Values my Organization's Role
Extent of Values my Organization's Role	SART A: .302, <i>p</i> < .001 SART B: .225, <i>p</i> < .026 SART C: .358, <i>p</i> < .001	
Extent of Is a Resource to my Organization's Work	SART A: .317, <i>p</i> < .001 SART B: .352, <i>p</i> < .01 SART C: .407, <i>p</i> < .01	SART A: .757, <i>p</i> < .001 SART B: .607, <i>p</i> < .001 SART C: .745, <i>p</i> < .001

*Note.* Comparisons across SARTs with different numbers of organizations should be made with caution.

In summary, these findings suggest that in model SARTs, these three types of

relationships are related to one another. Valuing another organization is related to finding

them to be a resource to your own work, and both valuing the organization and finding them to

be a resource is related to how frequently your organizations communicate. Interestingly, the

two types of "valuing" relationships were consistently strongly correlated with one another,

and more moderately correlated with communication frequency.

## DISCUSSION

Sexual assault response teams (SARTs) are community-level interventions that seek to improve collaboration amount sexual assault service providers, and thereby improve the prosecution of sexual assault cases and victims' experiences of seeking-help. To date, there are hundreds of SARTs in the U.S.; however, their implementation has not been guided by empirical evidence. Thus, there is a pressing need for research that can help guide communities in forming and sustaining effective SARTs (Greeson & Campbell, 2013). In light of this need, the current project sought to document how SARTs currently operate in practice and identify which ways of structuring SARTs are associated with effectiveness at improving legal and victim outcomes.

## Summary of Study 1 Findings and Integration with Prior Literature

SART structural characteristics. In Study 1, we used rigorous random sampling methods to obtain a nationally representative sample of 172 SARTs. SART leaders reported on their SART's structure, as well as their perceptions of their SART's effectiveness at improving victims' help-seeking experiences and improving legal outcomes. With regards to SART structure, Diffusion of Innovation Theory (Rogers, 2003) would suggest that as SARTs are adopted in new communities, they will be adapted and revised, resulting in different models of implementing SARTs. In addition, prior research using convenience sampling has suggested that SARTs vary in how they are structured. The results of Study 1 are congruent with Diffusion of Innovation Theory and prior convenience sampling research: SARTs vary considerably in their membership breadth (the amount of stakeholder groups involved in the team), their formalization (their use of formal structures and resources to organize their work), whether they engage in formal evaluation of their multidisciplinary efforts, and their institutionalization of recommended collaborative activities (specifically policy/protocol development and review, multidisciplinary cross-trainings, and multidisciplinary case review). This suggests that SARTs are indeed adapted, and significantly different forms of the intervention are being implemented in different communities.

Current SART guidelines (e.g., NSVRC, 2011; OAGSATF, 2009) suggest that SARTs should engage in these collaborative processes. Indeed, most SARTs follow these recommendations, such that most engage in case review (74%), cross-trainings, (76%), and policy/protocol development and review (82%)<sup>59</sup>. However, the SARTs who participated in this study did not typically engage in these activities on a regular basis (regular case review: 42%, regular crosstrainings: 38%, regular policy/protocol review: 31%). It is possible that most SARTs engage in these collaborative processes on occasion, but do not have sufficient buy-in from their members, time, or other resources, to engage in them on a more regular basis. SARTs may also see the value of these activities, but fail to see the utility of engaging in them on a regular basis and therefore only engage in them on an as needed basis. However, the findings of this study show that the institutionalization of recommended collaborative activities is associated with SARTs' perceived effectiveness (see "structural factors related to SARTs' effectiveness" for more information on pp. 126).

Using cluster analysis, we identified three types of SARTs that varied with respect to their formalization, institutionalization of recommended collaborative activities, and use of

<sup>&</sup>lt;sup>59</sup> The exception was the majority of SARTs do not follow recommendations to engage in formal program evaluation involving data collection and/or data analysis. Only 15% of teams engaged in this practice at all.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

program evaluation to evaluate their collaborative efforts. When compared to the other types of SARTs, those in the "Low Adopters" cluster (38% of the total sample) utilized fewer formal structures, were less likely to institutionalize multidisciplinary trainings and policy/protocol review into their group's collaboration, and did not engage in program evaluation. The SARTs in the other two clusters tended to utilize more formal structures and collaborative activities to organize their work. The SARTs in the "High Adopters except Evaluation" cluster (47% of the total sample) tended to use more formal structures, and engaged in more institutionalization of multidisciplinary trainings and policy/protocol review into their group's collaboratior; however, none of the SARTs in this cluster engaged in program evaluation. The "High Adopters plus Evaluation" cluster (16% of the total sample) also tended to use more formal structures and engaged in more institutionalization of multidisciplinary trainings and policy/protocol review; in addition, they also engaged in formal program evaluation to assess their collaborative efforts. These findings reinforce the notion that SARTs are heterogeneous in their implementation.

Given current recommendations, why do "Low Adopter" SARTs exist? Before discussing possible explanations for the existence of Low Adopter SARTs, it is important to re-iterate that the "Low Adopters" SARTs were not void of structure or collaborative process. Instead, they were low, in comparison to the two groups of SARTs. On average, the "Low Adopters" implemented four to five formal structures to organize their work and many of them engaged in one or more of the recommended collaborative activities—but they were less likely to do so on a *regular* basis. Thus, it may be that a key difference between Low Adopters and High Adopters is taking the step from using these collaborative processes as needed, to creating a stable collaborative process in which these regular processes are part of the foundation of their collaboration.

So why did some SARTs not implement more structure? It may be that some communities truly prefer this less formalized, less structured intervention model and chose not to implement more structure, in preference of a looser, more informal collaboration. In light of time and resource constraints, communities may see regular institutionalization of the collaborative processes as burdensome, particularly if they do not have a very high caseload. It is also possible that some SARTs (such as young SARTs or SARTs with limited collaborative capacity and technical support) intend to implement more structure as they grow over time, but had not yet reached that point in their development at the time of data collection, and were classified in the "Low Adopters" Cluster (but intended to become "High Adopters" in the future). Or, it may be that collaborative hurdles, such as tension between multidisciplinary partners or turnover in key stakeholders, cause SARTs that were once more structured to become less so (i.e., SARTs that were "High Adopters" become "Low Adopters."<sup>60</sup> Our study did not directly assess how or why these differences in implementation came to be; thus, future research that helps untangle the dynamic relationship between SART structure and functioning over time, and helps SARTs understand how to develop and then sustain a highly structured SART over time will be particularly beneficial to informing practice.

**Structural factors related to SARTs' effectiveness.** The development of these different types of SARTs is particularly relevant because the current study found that on average, "Low

<sup>&</sup>lt;sup>60</sup> This may have been the case with the n=1 SART that was classified in the "High Adopter plus Evaluation" cluster in Study 1 and had disbanded at the time of Study 2 recruitment.

Adopters" were the least effective. According to Diffusion of Innovation Theory (Rogers, 2003), the existence of different ways of structuring SARTs suggest that SARTs are likely to vary in their effectiveness. Given our findings regarding heterogeneity in SART practice, we examined how cluster membership, SART composition (i.e., membership breadth), and several contextual factors predict perceived effectiveness. Consistent with Diffusion of Innovation Theory (Rogers, 2003) and the literature on dissemination of innovations, the High Adopters plus Program Evaluation group was perceived as more effective than the Low Adopters group on each of the four domains of effectiveness that were measured in this study. Prior research and theory on the diffusion of innovations suggests retaining core elements of an intervention is crucial to effectiveness. (Dearing, 2009; Durlak & Dupre, 2003; Emshoff, 2008; Hazel & Onaga, 2003; Lee et al., 2008; Rogers, 2005). The current study did not find specific, individual processes to be critical vs. not critical elements of the SART intervention (e.g., we did not find a policy focused clusters to be more effective than a training focused cluster). Instead, our data reveals that together, formal structure and adopt and institutionalization of collaborative processes generally are important features of SART interventions. To complement these findings, local longitudinal evaluations could help individual SARTs assess the impact of isolated, specific processes on their collaboration to help them assess *which* specific processes are most beneficial to their own work.

In addition to the finding that "High Adopters plus Program Evaluation" SARTs were, on average, more effective than "Low Adopters", Study 1 also revealed that SARTs in the "High Adopters plus Program Evaluation" group tended to perceive themselves as more effective at contributing to improvements in victims' participation in the criminal justice system than SARTs in the "High Adopters except Evaluation" cluster. This finding was somewhat unexpected, as it would be reasonable to presume that the "High Adopters plus Evaluation" cluster would be perceived as more effective across all four domains of effectiveness, due to the addition of program evaluation. As such, it was somewhat surprising that the inclusion of program evaluation was associated with only *one* of the four possible outcomes (and not all four). Program evaluation theory suggests that both the process of engaging in an evaluation, as well as the substantive findings of an evaluation can lead to programmatic changes; in turn, these changes can create improvements in the effectiveness of a program (Cousins & Whitmore, 1998; Patton, 2008). However, the current study's findings did not show a universal contribution of program evaluation; rather, the "High Adopters plus Program Evaluation" cluster was perceived as more effective than the "High Adopters except Program Evaluation cluster" on only one of the four domains of effectiveness.

There are several plausible reasons for this pattern of results. First, the "High Adopters plus Program Evaluation" cluster consisted of 27 SARTs. Thus, there may have been limited statistical power to detect an effect of cluster membership (type II error) due to the size of that cluster. Second, the key difference between the "High Adopters plus Program Evaluation" SARTs and the "High Adopters except Program Evaluation" SARTs was whether they *conducted* formal evaluation. The current study did not capture whether they *used* those evaluation efforts to create changes to how they respond to sexual assault or work together as a team. In other words, some SARTs may have "gone through the motions" of evaluation, but may not have used the evaluation to alter their practices. In fact, the evaluation literature verifies that quite frequently, evaluations are conducted but do not translate into meaningful programmatic changes (Amo & Cousins, 2007; Birkeland, Murphy-Graham, & Weiss, 2005; Cousins & Whitmore, 1998; Patton, 2008). Thus, simply conducting program evaluation may not have been sufficient to translate in widespread improvements in all four domains of effectiveness. A third alternate explanation is that by conducting program evaluation, these SARTs were more aware of their strengths, but also their weaknesses and limitations in making improvements in their community, and in turn, this led their leaders to have similar ratings of their effectiveness as the leaders in the "High Adopters except Evaluation" cluster on three of the four domains of effectiveness.

Another critical aspect of a SART's structure is its membership: the different stakeholder groups that participate in the coordinated team. The current study found that SARTs with broader *active* membership from more stakeholder groups had higher perceived effectiveness on all three forms of *legal* effectiveness; however there was not a statistically significant relationship between membership breadth and perceived effectiveness at improvements in victims' help-seeking experiences. This is consistent with prior studies of domestic violence coordinating councils, which have found that broader active membership tends to be associated with higher perceived effectiveness (Allen, 2005; Allen, 2006; Allen et al., 2010). It may be that involving more diverse groups facilitates SARTs success by getting more groups with different roles in the legal process to participate in the collaboration. In doing so, when the group develops strategies for improving the response to cases, the strategies are informed by more perspectives and more stakeholders are involved in *implementing* changes to improve the response to cases. It should be noted that while we found that wider membership breadth was associated with higher perceived effectiveness in this sample (*M* = 8.50, *SD* = 2.64, scores ranged from 2-15 stakeholder groups actively involved) this finding should not be interpreted to mean that more is *always* better; it seems likely that at some point, too many stakeholders could make a SART so large that it becomes unmanageable, and therefore less effective.

#### Summary of Study 2 Findings and Integration with Prior Literature

The limited research to date on SARTs has emphasized the importance of attuning to both structural characteristics of SARTs (such as those examined in Study 1) and multidisciplinary relationships among team members (see Greeson & Campbell, 2013 for review). In Study 2, we sought to expand the existing knowledge base about SARTs through an in-depth analysis of inter-organizational relationships within SARTs. Specifically, we used social network analysis to study inter-organizational relationships within four SARTs that fell in the "High Adopters plus Evaluation" cluster (the cluster that most closely mirrors recommendation for how SARTs should operate). Within each model SART, all organizations were asked about their relationships with all other organizations that participated in their team; contacts from each organization reported on the frequency of their communication with other organizations (outside of official group discussion and individual cases), the extent to which they felt that other organization's valued their role, and the extent to which they felt that other organizations were a resource to their own organization's work in responding to sexual assault. Study 2 analyses and results focused on three of the four model SARTs: one was excluded due to a high degree of missing data.

Consistent with prior research on domestic violence coordinating councils, we found a high degree of connection between organizations within each model SART. In each of the three model SARTs, most pairs of organizations had communicated in the past six months (outside of official group meetings and individuals cases), felt valued by one another, and perceived one another as a resource. This is consistent with prior social network which found that higher connection (i.e., higher density) between organizations within domestic violence coordinating councils (DVCCs) was associated with higher perceived effectiveness at achieving their collaborative goals (e.g., Nowell, 2006). In addition, model SARTs were also characterized by a high degree of connection both within and across sectors (criminal justice vs. non-criminal justice sectors), suggesting that model SARTs are successful in bridging the differences between these very different sectors, and also create collaborative relationships between organizations that belong to the same sectors. The model SARTs were characterized by a high degree of formalization and a high degree of institutionalization of collaborative activities. It is possible that implementing these processes within their multidisciplinary team helped model SARTs to create and sustain a high proportion of relationships between their members.

SART guidelines often pay particular attention to the importance of different sexual assault responders (e.g., police, advocates, etc.) learning about one another's roles and see one another as resources (e.g., NSVRC, 2011). Given the vast differences between police, prosecutors, advocates, nurses, doctors, social works, and others with respect to their missions, responsibilities, and philosophies (Martin, 2005), it can be difficult to develop relationships in which such different groups truly value one another's roles. The current study found that within model SARTs, these relationships tend to be reciprocal. For example, when organization A felt valued by organization B, organization B was also likely to feel valued by A. In addition, when organization A felt that organization B was a resource to their work, organization B was also likely to think that organization A was a resource to their work. This suggests that one-sided relationships, in which one party values the other, but the other does not, are relatively uncommon within model SARTs. Again, model SARTs were unique in their use of formal structures and collaborative activities to structure their work. It may be that working together through different collaborative processes (such as case review, multidisciplinary trainings, and policy/protocol adoption and review) that involve learning about one another's roles, limitations, and priorities in responding to sexual assault helps SARTs to develop mutual relationships in which both parties come to value, and feel valued by one another.

Study 2 findings also revealed that the three different types of collaborative relationships were related to one another. Specifically, within model SARTs, seeing another organization as a resource is related to feeling valued by them, and both factors contribute to communicating with them more frequently outside of official group meetings. In other words, valuing one another contributed to more coordination. This is consistent with Nowell's (2006, 2009) prior work that indicated a high degree of correlation between different types of collaborative relationships. This also provides support for the notion that SARTs should work to help responders value one another's role and see each other as a resource, because when they did, they also coordinated with one another more frequently.

Clearly, relationships are important, but in a climate of limited time and money, is it feasible to expect all SART members to be equally involved in relationships with other members of their team? In all three SARTs, all members attended group activities and collaborative meetings. However, outside of communication at group meetings and discussion of individual cases, there was stratification of communication; this communication was driven by a critical "core" group of organizations. There was a "core" group of organizations that tended to communication with one another and a "peripheral" group that communicated with the core group of organizations relatively frequently; however the peripheral members tended not to communicate with one another above and beyond group meetings or working together on individual cases. In other words, there were some highly involved SART organizations that communicated a lot, and there were other less involved organizations that communicated with some of the highly involved SART organizations, but not each other (above and beyond the coordination around individual cases and group meetings). These findings are consistent with Allen and colleagues finding (2010) that in successful DVCC's, there was often a core group of "worker bees" who were exceptionally committed and drove the collaboration's efforts. This suggests that within model SARTs, all communication does not have to be equal. Outside of the full group meetings, some organizations can be more highly involved, and others, while still involved in group meetings, can take a more tangential role in communication outside of SART meetings.

This pattern in which communication is driven by a group of key players may exist because it is not necessarily valuable for everyone to be equally involved in coordination outside of group meetings. For example, if an individual works for a homeless shelter that participates in the SART because their organization wants to provide the victims we see with referrals to legal, medical, and mental health services, they probably do not need to coordinate with the crime laboratory (which process medical/forensic evidence for use in the criminal justice system) outside of our group meetings because they do not have a shared focus in their organizations' work. Instead, it may be more feasible and sustainable to establish more coordination outside of group events among the most important and committed players, and then have more tertiary team members who are still involved at group meetings, but only coordinate with the key players outside of the context of full group meetings. In this way they can still be involved, and relate to the most critical players, but do not have to invest time and energy outside of group functions into relationships that are less critical.

The pattern was different for the two types of relationships that had to do with valuing and feeling valued by other team members. Generally, we found that in two of the three model SARTs, while there was some variation in the number of organizations each organization perceived as a resource or felt valued by, there was little dependence upon one key organization or a focal group of organizations to drive the existence of these valuing relationships. Instead, relationships were spread more diffusely throughout members of the SART and there was little difference between organizations in the number of other organizations they were connected to within their team. They had sufficient relationships such that most of the team was valued and valued by most of the rest of the team. However, in the third SART, which served multiple counties and was the largest of the three model SARTs, there was some stratification of these relationships. There was a core group of organizations that tended to value, and feel valued by one another, and a periphery group that was often connected to the core group of organizations, but tended not to value, or feel valued by one other. It may be that in certain contexts (such as particularly large SARTs, or SARTs serving multiple jurisdictions), despite belonging to the same collaboration, certain organizations do not develop relationships in which they come to value or feel valued by one another. This pattern may exist because it may not be feasible for every team member to be equally involved in certain types of SARTs (e.g., large, or multi-county teams). For example, if two organizations

have very little in common in the response to sexual assault (e.g., two police departments that are two counties away from one another), they may never develop, or need to develop, a relationship in which they value one another. This is not to suggest that relationships are unimportant, but rather, that under certain circumstances that make extensive relationshipbuilding less feasible or valuable, a SART may still flourish with a core group that values and feels valued by one another, and a more peripheral group that tends to feel valued and by valued by the main players, but does not have to invest in feeling valued and being valued by one another.

It is also important to note that when stratification occurred in these SARTs, both criminal justice and non-criminal justice organizations belonged to both the key group of organizations and the marginal group. In other words, stratification did not result in separating the criminal justice system organizations or the medical/social service organizations from each other; rather both were represented in the core group of key players. This may be a key piece to success—if some groups are going to be less involved, both criminal justice and non-criminal justice groups still need to be part of the group of key players.

#### Project Strengths, Limitations, and Implications for Future Research

In Study 1, we conducted the first national study of Sexual Assault Response Teams that used random sampling methods. As such, this study gives us the first representative picture of how SARTs are structured and function in the U.S. SART leaders' perceptions of their SARTs' effectiveness at improving legal outcomes and victims' help-seeking experiences were measured. While asking collaboration members' to report on their perceptions of the collaboration's effectiveness is standard in large-scale studies (e.g., Allen, 2005, 2006; Allen et al., 2010; Nowell, 2006), it is possible that SART leaders may have under or overestimated the impact of their team on victims' experiences seeking help post-assault and the processing of sexual assault cases through the criminal justice system. It is possible that social desirability could have caused SART leaders to over-estimate their teams' effectiveness. Another possibility is that due to the nature of being more structured and engaged in collaborative processes, SARTs in the "High Adopters" categories perceive themselves as more effective than "Low Adopter" SARTs due to the higher degree of activity they were putting into their collaboration.

To address this limitation, there are several alternate measurement approaches that could be used in future studies of SARTs' effectiveness. For example, data should be collected from survivors (for example, on the services they received, their perceptions of the accessibility and responsiveness of the systems they sought help from, their participation in the criminal justice system, and their well-being and recovery) to assess their help-seeking experiences and any impact that SART efforts have on improving those experiences. Archival records could be coded to identify changes in practices in the response to sexual assault and changes in legal outcomes such as availability of forensic evidence, arrest rates, conviction rates, and sentence lengths. Observations could be conducted to document how services are provided and how criminal processes unfold. However, interviewing survivors, obtaining archival records, and conducting observations are extremely resource-intensive modes of data collection, and therefore would be most suitable for smaller-scale studies of a few teams (Campbell et al., 2009, 2011; Spohn & Tellis , 2012).

This study was also the first to examine the association between SARTs' structure and their perceived effectiveness. To be maximally beneficial to practitioners, research needs to not only examine whether interventions are effective, but also which factors contributed to or curbed their effectiveness. In this study, we identified a variety of structural features of SARTs that are associated with higher perceived (including diverse membership, implementation of formal structures and collaborative activities, and a high degree of mutual, inter-organizational cross-sector and within sector relationships). This identification of factors that promote SARTs effectiveness is a key strength that makes the study well-suited to informing SART practice (see pp. 138 for a discussion of specific implications of the findings for practice). While this is a key contribution of the study, the exclusive focus on SARTs' structure meant that other features of these collaborative groups were not examined. For example, prior research has shown that leadership guality, efforts to promote members' participation, and the collaborative climate are associated with collaborations' effectiveness (Allen, 2005, 2006; Allen et al., 2010; Foster-Fishman et al., 2001). A limitation of the current study is the lack of examination of other nonstructural factors and their relationship to SARTs' effectiveness. To address this limitation, future studies could use qualitative and/or mixed method approaches to allow SARTs themselves to identify additional factors that promote and/or curb their effectiveness. More indepth study of SARTs' collaborative process, for example through observations of SARTs' collaborative activities and in-depth data collection from all SART members could also be a useful methods for identifying additional process-related factors that are associated with successful SARTs.

Another strength of the current project is the focus on the structure of inter-

organizational relationships in model SARTs. While there has been a great deal of focus on building positive relationships within SARTs, this is the first study to provide empirical evidence about specific qualities of relationships that are associated with successful SARTs. Although this is an important advancement of the literature, more research is needed to fully understand the relationship between the structure of inter-organizational relationships and SARTs' effectiveness. Specifically, this study did not compare the model SARTs to lower-functioning SARTs, and therefore did not allow us to isolate specific characteristics that are unique to successful SARTs and promote success. As such, it is theoretically possible that some of the relationship characteristics that were identified within model SARTs (e.g., the existence of stratification between organizations in their involvement in relationships with their SART) may also exist within low-functioning SARTs. Future research can advance the current study's findings by comparing the structure of inter-organizational relationships between more and less effective SARTs, in order to identify factors that promote or detract from SARTs' effectiveness at improving legal and victim outcomes.

#### **Implications for Policy and Practice**

The current study has a variety of implications for policy and practice (see Table 18 on page 143 for summary). Diffusion of Innovation Theory (Rogers, 2005) and research on the dissemination of interventions, suggests that ideally, when adopting an intervention in a new setting, the "critical components" of the intervention should be retained, and other, less critical, features of the intervention should be adapted to improve the intervention's effectiveness in the local context (Dearing, 2009; Durlak & Dupre, 2003; Emshoff, 2008; Hazel & Onaga, 2003; Lee, Atschul, & Mowbray, 2008; Rodríguez, Baumann, & Schwartz, 2010). In this vein, the current study found that SARTs that tended to be higher in formalization and their institutionalization of collaborative activities (the "High Adopters plus Program Evaluation" cluster) were perceived as more effective than SARTs that were lower in their formalization and use of collaborative activities ("Low Adopters" cluster). *This suggests that a "critical component" of SARTs is having enough structure to organize the SARTs' teamwork.* 

Collaboration is a shifting dynamic process: members join and leave the team, goals shift, ideas for what constitutes best practice evolve, resources change, and so on. In this changing environment, through formalization and institutionalization of collaborative activities, the SART should have a "backbone" that supports them. The team members know what their process is for working together and they have structures in place to keep themselves focused on making progress on their collaborative goals. In turn, SARTs that are less formalized and only engage in collaborative activities occasionally may find themselves unsure of how it is they work together, and may have to spend substantial time each time they meet as a group figuring out what they are trying to achieve and how they will navigate working together.

A second implication is that SARTs need to develop a high degree of collaborative relationships across a diverse group of sexual assault stakeholder groups, from both the criminal and non-criminal justice sectors. The foundation of the SART intervention is collaboration. Positive relationships between SART organizations can both promote multidisciplinary learning and coordinated efforts, as well as create accountability toward one another. *However, the corollary to this implication is that, under some circumstances, all organizations may not need to be as connected with all other team members.* In some instances, trying to build relationships between all organizations that are involved in the SART may not be feasible, or even valuable. Instead, SARTs should focus on building the inter-organizational relationships that are going to be the most beneficial to achieving their collective goals.

Funders and organizations that support SARTs should help them to implement these recommendations. SART members, as sexual assault responders, are unlikely to have had substantial training and/or experience in building multidisciplinary relationships and creating a collaborative infrastructure. Manuals, trainings, and technical assistance for SARTs should give SARTs very specific strategies regarding *how* to implement collaborative infrastructure, build collaborative multidisciplinary relationships, and overcome any barriers to successful implementation that may exist in their community. In addition, methods could be developed to help SARTs support and learn from each other. If one SART is struggling to successfully institutionalize case review, it is likely that many other SARTs have had similar struggles, and have ideas for how to overcome those problems. Thus, a venue that allows for communication and mentoring between different SARTs could be a valuable contribution to the field and help teams to support one another. In particular, a venue that is easy to access, and can be anonymous, may make SARTs more likely to reach out to one another for support (e.g., a SART webpage, a SART discussion board).

The third implication of these findings is that forcing communities to collaborate may not, in and of itself, be useful. Study 1 found that SARTs in the "Low Adopters" cluster (38% of the total sample) were more informal, tended to engage in recommended activities less frequently if at all, and were perceived as the least effective across all four domains of effectiveness. These SARTs do try to work together, but appear to be struggling to achieve true collaboration in which their members buy-in to their collaborative efforts and engage in joint discussion and action to create improvements in the response to sexual assault. A recent review of the literature found that despite agreeing to form a SART, there are a variety of challenges that SARTs face in attempting to achieve true collaboration (see Greeson & Campbell, 2013). Thus, policies that require the formation of a SART, while well-intentioned, should be combined with resources that help SARTs move beyond being a "SART in name only" to achieve true collaboration. Otherwise, a SART may technically exist, but may not be very productive.

A fourth implication of the current study is that SARTs are under-evaluated. Only 27 out of 172 SARTs engaged in formal program evaluation, and it is unclear to what extent the evaluations they conducted met their information needs and were used to guide practice. SARTs could benefit from systematically evaluating their efforts, and then *using* their evaluation efforts to guide how they work together to improve the response to sexual assault. While the findings regarding the role of program evaluation were somewhat mixed (differences were only found between "High Adopters plus Evaluation" and "High Adopters except Evaluation" on only one of four domains of perceived effectiveness), it seems likely that if SARTs were able to conduct evaluations that met their information needs and then use those evaluations to guide their efforts, they would benefit (Patton, 2008). However, they need support to do so. SART members are sexual assault responders, and are unlikely to have significant expertise in designing, conducting, and using evaluation to guide practice. *Thus, efforts to assist SARTs in engaging in useful evaluations may be particularly beneficial.* For example, sample evaluation instruments could be provided for SARTs to use along with corresponding plans for how to conduct data collection, analyze the data, and use the findings to guide practice. SARTs could also receive an initial training and the ongoing technical assistance from an organization that supports sexual assault responders (such as a state coalition) to help them design, implement, and use their own evaluation. Such an approach has been used successfully with SANE programs to develop their evaluation capacity (Campbell, Townsend, Bybee, Shaw, & Markowitz, 2013) and could be easily adapted to the context of SARTs. Additionally, financial resources could be allocated by funders specifically to SARTs' evaluation efforts. This would provide SARTs with incentives to engage in evaluation and offset the time and other resources that would go into engaging in self-evaluation or hiring an outside evaluator.

The final implication we wish to highlight is that being victim-centered is not in conflict with improving legal outcomes for SARTs. The current project found that SARTs that perceived themselves to be more effective at improving victims' experiences also tended to perceive themselves as more effective at all three types of legal effectiveness. The two types of effectiveness were not odds, but rather they were compatible. This suggests that SARTs do not need to choose between focusing on victims or improving legal outcomes; rather, focusing on the needs of victims is both important in its own right, as well as associated with improving legal outcomes. A "critical component" of SARTs is having enough structure to organize the SARTs' teamwork.

SARTs need to develop a high degree of collaborative relationships across a diverse group of sexual assault stakeholder groups, from both the criminal and non-criminal justice sectors. However, under some circumstances, all organizations may not need to have certain types of relationships with all other team members.

Organizations and funders that support SARTs' efforts should help them to utilize formal structures, institutionalize collaborative process, and develop multidisciplinary relationships. Manuals, trainings, and technical assistance for SARTs should give specific strategies that will show SARTs *how* to implement recommended practices, and address barriers to implementation.

Methods could be developed to help SARTs support each other in establishing structure and developing strong inter-organizational relationships

Policies that require the formation of SARTs should be supplemented by resources that help the community to achieve true collaboration.

SARTs are under-evaluated. Thus, efforts to assist SARTs in engaging in useful evaluations (such as workbooks and tools to engage in self-evaluation and resources devoted to evaluation efforts) may be particularly beneficial.

Being victim-centered is not in conflict with improving legal outcomes for SARTs. Rather, focusing on the needs of victims is both important in its own right, as well as associated with improving legal outcomes.

## APPENDICES

#### **APPENDIX A: REFERENCES**

- Allen, N. E. (2005). A multi-level analysis of community coordinating councils. *American Journal of Community Psychology*, *35*, 49-63.
- Allen, N. E., Javdani, S., Anderson, C. J., Rana, S., Newman, D., Todd, N., ... Davis, S. (2010).
   *Coordinating the criminal justice response to intimate partner violence: The effectiveness of councils in producing systems change.* Washington, DC: National Institute of Justice.
- Allen, N. E., Watt, K. E., & Hess, J. Z. (2008). A qualitative study of the activities and outcomes of domestic violence coordinating councils. *American Journal of Community Psychology*, 41, 63-73.
- Amo, C. & Cousins, J.B. (2007). Going through the process: An examination of the operationalization of process use in empirical research on evaluation. *New Directions in Evaluation*, 116, 5-26.
- Basile. K. C., Chen, J., Black, M. C., & Saltzman, L. E. (2007). Prevalence and characteristics of sexual violence victimization among U.S. Adults, 2001-2003. *Violence & Victims, 22, 437-438.*
- Birkeland, S., Murphy-Graham, E., & Weiss, C. (2005). Good reasons for ignoring good evaluation: The case of the drug abuse resistance education (D.A.R.E.) program. *Evaluation and Program Planning, 28,* 247-256.
- Black, M. C., Basile, K. C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Borgatti, S. P., & Everett, M. G. (2000). Models of core/periphery structures. *Social Networks*, *21*(4), 375-395.
- Borgatti, S., Everett, M., & Freeman, L. (2002). UCINET for Windows: Software for social network analysis. Analytic Technologies, Harvard, MA.
- Butterfoss, F. D., Goodman, R. M., & Wandersman, A. (1993). Community coalitions for prevention and health promotion. *Health Education Research, 8,* 315-330.
- Bureau of Justice Statistics [BJS] (2007). *National Crime Victimization Survey (NCVS)*. Washington DC: Author.
- Campbell, R. (1998). The community response to rape: Experiences with the legal, medical, and mental health systems. *American Journal of Community Psychology, 26,* 355-379.

- Campbell, R. (2006). Rape survivors' experiences with the legal and medical systems: Do rape victim advocates make a difference? *Violence Against Women, 12,* 30-45.
- Campbell, R. (2008). The psychological impact of rape victims' experiences with the legal, medical, and mental health systems. *American Psychologist*, *68*, 702-717.
- Campbell, R., Adams, A. E., Wasco, S.M., Ahrens, C. E., & Sefl, T. (2009). Training interviewers for research on sexual violence: A qualitative study of rape survivors' recommendations for interview practice. *Violence Against Women*, *15*, 595–617.
- Campbell, R., & Ahrens, C. (1998). Innovative community services for rape victims: An application of multiple case study methodology. *American Journal of Community Psychology, 26,* 537-571.
- Campbell, R., Bybee, D., Ford, J. K., Patterson, D., & Ferrell, J. (2009). A systems change analysis of SANE programs: Identifying the mediating mechanisms of criminal justice system impact. NIJ Award Number 2007-WX-BG-0012. Washington, DC: National Institute of Justice.
- Campbell, R., Greeson, M. R., Bybee, D., & Kennedy, A. (2011). *Adolescent Sexual Assault Victims' Experiences with SANE-SARTs and the Criminal Justice System*. National Institute of Justice Award 2007-WG-BX-0012.
- Campbell, R., Townsend, S. M., Bybee, D., Shaw, J. L., & Markowitz, J. (2013). *Implementation of a Sexual Assault Nurse Examiner (SANE) practitioner toolkit.* Washington, DC: U.S. Department of Justice.
- Campbell, R., Townsend, S. M., Long, S. M., Kinnison, K. E., Pulley, E. M., Adames, S. B., & Wasco, S. M. (2006). Responding to sexual assault victims' medical and emotional needs: A national study of the services provided by SANE programs. *Research in Nursing & Health, 29,* 384-398.
- Chen, Y., & Ullman, S. E. (2010). Women's reporting of sexual and physical assaults to police in the national violence against women survey. *Violence Against Women, 16,* 262-280.
- Clark, S. J., Burt, M. R., Schulte, M. M., & Maguire, K. (1996). *Coordinated community response* to domestic violence in six communities: Beyond the justice system. Retrieved from: <u>http://aspe.hhs.gov/hsp/cvp/domvilnz.htm</u>.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 115-159.
- Cousins, J.B., & Whitmore, E. (1998). Framing participatory evaluation. *New Directions for Evaluation*, *80*, 5-23.

- Dearing, J. W., Maibach, E. W., & Buller, D. B. (2006). A convergent diffusion and social marketing approach for disseminating proven approaches to physical activity promotion. *American Journal of Preventive Medicine*, *31*, S11-S23.
- Department of Justice (2004). A national protocol for sexual assault medical forensic examinations: Adults/adolescents. Washington, DC: Author.
- Department of Justice (2013). A national protocol for sexual assault medical forensic examinations: Adults/adolescents (2<sup>nd</sup> ed.). Washington, DC: Author.
- Durlak, J. A., & Dupre, E. P. (2008). Implementation matters: A review of research on the influence of implementation of program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41,* 327-350.
- Emshoff, J. G. (2008). Researchers, practitioners, and funders: Using the framework to get us on the same page. *American Journal of Community Psychology*, *41*, 393-403.
- Foster-Fishman, P.G., Salem, D.A., Allen, N.A., & Fahrbach, K. (2001). Facilitating interorganizational collaboration: The contributions of interorganizational alliances. *American Journal of Community Psychology, 29,* 875-905.
- Galaskiewicz, J. (1979). The structure of community organizational networks. *Social Forces, 57,* 1346-1364.
- Greeson, M. R., & Campbell, R. (2013). Sexual Assault Response Teams (SARTs): An empirical review of their effectiveness and challenges to successful implementation. *Trauma, Violence, & Abuse, 14*, 83-95.
- Hanneman, R.A., & Riddle, M. (2005). *Introduction to social network methods*. Riverside, CA: University of California, Riverside.
- Hazel, K. L., & Onaga, E. (2003). Experimental social innovation and dissemination: The promise and its delivery. *American Journal of Community Psychology, 32,* 285-294.
- Hosmer, D. W., Jr., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). New York: Wiley.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6,* 1-55.
- Johnston, B. J. (2005). Outcome indicators for sexual assault victims. *Journal of Forensic Nursing*, *1*, 118-132.

- Kilpatrick, D. G., Resnick, H. S., Ruggiero, K. J., Conoscenti, L. M., & McCauley, J. (2007). *Drug-facilitated, incapacitated, and forcible rape: A national study.* Washington, DC: National Institute of Justice.
- Koss, M., & Achilles, M. (2008). Restorative justice responses to sexual assault. Harrisburg, PA: National Online Resource Center on Violence Against Women <u>http://www.vawnet.org/SexualViolence/Research/VAWnetDocuments</u>.
- Krackhardt, D. (1988). Predicting with networks: nonparametric multiple regression analysis of dyadic data. *Social Networks, 10,* 359-381.
- Ledray, L.E. (2001). Evidence collection and care of the sexual assault survivor: The SANE-SART response. Violence Against Women Online Resources, Harrisburg, PA: VAWnet National Online Resource Center on Violence Against Women <a href="http://www.vawnet.org/SexualViolence/Research/VAWnetDocuments">http://www.vawnet.org/SexualViolence/Research/VAWnetDocuments</a>).
- Lee, S. J., Altschul, I., & Mowbray, C. T. (2008). Using planned adaptation to implement evidenced-based programs with new populations. *American Journal of Community Psychology*, *41*, 290-303.
- Logan, T. K., Cole, J., & Capillo, A. (2007). Sexual assault nurse examiner program characteristics, barriers, and lessons learned. *Journal of Forensic Nursing*, *3*, 24-34.
- Logan, T. K., Evans, L., Stevenson, E., & Jordan, C. E. (2005). Barriers to service for rural and urban survivors of rape. *Journal of Interpersonal Violence, 20,* 591-616.
- Luke, D. A. (2005). Getting the big picture in community science: Methods that capture context. *American Journal of Community Psychology, 35,* 185-200.
- Maier, S. L. (2008). "I have heard horrible stories..": Rape victim advocates' perception of the revictimization of rape victims by the legal and medical systems. *Violence Against Women, 14,* 786-808.
- Malefyt, M. B., Littel, K. M., & Walker, A. H. (1998). *Promising practices: Improving the criminal justice system's response to violence against women.* Washington DC: STOP Violence Against Women Grants Technical Assistance Project.
- Martin, P.Y. (2005). *Rape work: Victims, gender, and emotions in organization and community context*. New York: Routledge.
- Mayer, J.P., & Davidson, W.S. (2000). Dissemination of innovation as social change. In J. Rappaport & E. Seidman (Eds.), *Handbook of community psychology* (pp. 421-438). New York: Plenum.
- Miller, R.L. (2001). Innovation in HIV prevention: Organizational and intervention characteristics affect program adoption. *American Journal of Community Psychology, 29*, 621-647.

- Miller, R.L., & Shinn, M. (2005). Learning from communities: Overcoming difficulties in dissemination of prevention and promotion efforts. *American Journal of Community Psychology*, 35, 169-183.
- National Sexual Violence Resource Center (2011). SART Toolkit. Retrieved from: <u>http://ovc.ncjrs.gov/sartkit/about.html on 6/18/2013</u>. Washington, D.C.: U.S. Department of Justice, Office for Victims of Crime.
- Nowell, B. (2006). *The role of social capital in interorganizational alliances.* East Lansing, MI: Michigan State University.
- Nowell, B. (2009). Profiling capacity for coordination and systems change: The relative contribution of stakeholder relationships in interorganizational collaboratives. *American Journal of Community Psychology, 44,* 196-212.
- Nugent-Borakove, M.E., Fanfilk, P., Troutman, D., Johnson, N., Burgess, A., & O'Connor, A. L. (2006). Testing the efficacy of SANE/SART programs: So they make a difference in sexual assault arrest and prosecution outcomes? NIJ Award Number 2003-WG-BX-1003. Washington, DC: National Institute of Justice.
- Oregon Attorney General's Sexual Assault Task Force (2009). SART handbook version III. Salem, OR: Author.
- Patterson, D. & Campbell, R. (2010). Why rape survivors participate in the criminal justice system. *Journal of Community Psychology, 38*, 191-205.
- Patterson, D., Greeson, M. R., & Campbell, R. (2009). Protect thyself: Understanding rape survivors' decisions not to seek help from social systems. *Journal of Health & Social Work, 34,* 127-136.
- Patton, M.Q. (2008). Utilization-focused evaluation (4th edition). Thousand Oaks, CA: Sage.
- Pennsylvania Coalition Against Rape. (2002). Sexual assault response team (SART) guidelines. Harrisburg, PA: Author.
- Peterson, M. S., Green, W., & Allison, B. (2009). *California SART report: Taking sexual assault response teams to the next level.* Davis, CA: University of California-Davis.
- Provan, K.G., Huang, K., & Milward, H.B. (2009). The evolution of structural embeddedness and organizational social outcomes in a centrally governed health and human services network. *Journal of Public Administration Research and Theory, 19,* 873-893.
- Provan, K.G., Veazie, M.A., Staten, L.K., & Teufel-Shone, N.I. (2005). The use of network analysis to strengthen community partnerships. *Public Administration Review*, *65*, 603-613.

- Rapkin, B. D., & Luke, D. A. (1993). Cluster analysis in community research: Epistemology and practice. *American Journal of Community Psychology, 21(2),* 247-277.
- Rodríguez, M. M. D., Baumann, A. A., & Schwartz, A. L. (2010). Cultural adaptation of an evidence based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology, 47,* 170-186.

Rogers, E. M. (2003). *Diffusion of innovations* (5<sup>th</sup> ed.). New York, NY: Free Press.

Scott, J. (2000). *Social network analysis: A handbook (2<sup>nd</sup> edition)*. London: Sage Publications.

- Snavely, K., & Tracy, M. B. (2000). Collaboration among rural nonprofit collaborations. Nonprofit Management & Leadership, 11, 145-165.
- Snavely, K., & Tracy, M. B. (2002). Development of trust in rural nonprofit collaborations. Nonprofit and Voluntary Sector Quarterly, 32, 62-83. DOI: 10.1177/0899764002311003.
- Spohn, C., & Tellis, K. (2012b). Policing and prosecuting sexual assault in Los Angeles city and county: A collaborative study in partnership with the Los Angeles Police Department, the Los Angeles Sheriff's Department, and the Los Angeles County District Attorney's Office (NCJRS Document 237582). Washington, DC: National Institute of Justice.
- Stork, D., & Richards, W.D. (1992). Nonrespondents in communication network studies: Problems and possibilities. *Group & Organization Management*, *17*, 193-209.
- Tabachnick, B., G., & Fidell, L. S. (2007). *Using multivariate statistics* (2<sup>nd</sup> ed). Boston, MA: Pearson.
- Tjaden, P., & Thoennes, N. (2006). *Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey.* Washington, DC: National Institute of Justice.
- Ullman, S.E. (2010). *Talking about sexual assault: Society's response to survivors.* Washington, DC: American Psychological Association.
- Wasserman, S., & Faust, K. (1994). Social network analysis: Methods and applications. Cambridge: Cambridge University Press
- Wilson, D., & Klein, A. (2005). An evaluation of the Rhode Island Sexual Assault Response Team (SART). NIJ Award Number 2002-WG-BX-0007. Washington DC: National Institute of Justice.
- Yin, R. K. (2003). *Case study research: design and methods* (3<sup>rd</sup> ed.), Thousand Oaks, CA: Sage.

- Zajac, J.J. (2006). *Report on the national needs assessment of Sexual Assault Response Teams*. Document 2004-vf-gx-k007 Enola, PA: National Sexual Violence Resource Center.
- Zajac, J. J. (2009). *National sexual assault response team survey report.* Enola, PA: National Sexual Violence Resource Center.

## **APPENDIX B: DATA COLLECTION INSTRUMENTS**

### **APPENDIX B1: STUDY 1 INTERVIEW**

# **Study 1: Key Informant Interview**

Participant ID	Interviewer ID
Date	Start Time(s)

Interview Administration: 1 = Continuous; 2 = Stopped; Continued Later

Thank you for agreeing to participate in our study. I recognize that people from different communities and different disciplines use different terms. Throughout the interview I will use "SART" to refer to a multidisciplinary team, and victim to refer to people who have been sexually assaulted. For some questions, I will ask you to choose an answer that best represents your team, like on a survey, while for other questions, I will ask you to describe your SART to me. There are no right or wrong answers- we are just looking for your honest opinions. Remember- everything we speak about today will be kept strictly confidential.

Date Entered	By
Date Double Entered	By
Date Transcribed	Ву
Document Quality Checkin	ng Here:

# SECTION ONE: BACKGROUND INFORMATION ON THE SART

I would like to start by getting some background information on the SART.

1. How long has the SART been in operation?

\_\_\_\_\_ [years]

2. Has the SART been in operation continuously or have there been times when it has stopped and re-started?

1 = CONTINUOUS

2 = STOPPED AND STARTED

888 = Not Applicable [due to SART being continuous]

a. If stopped and started, how long has the SART been in operation this time?

\_\_\_\_\_[years]

3. How long have **you** been a member of the SART?

\_\_\_\_\_[years]

4. What is your current title or position within the SART?

SPSS

SPSS

# BACKGROUND

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

SPSS

5. How long have you held this position?

\_\_\_\_\_[years]

SPSS

# 6. What stakeholder group do you belong to?

- 1 = Medical/forensic examiner
- 2 = Rape crisis center advocate or counselor
- 3= Prosecutor
- 4 = Police
- 5 = Crime lab personnel
- 6 = Advocate within victim's witness unit in prosecutor's office
- 7 = Judge
- 8 = Other [Specify\_\_\_\_]SPSS

Now, I have some quick yes or no questions about your SART.

7. Is there a specific group of sexual assault victims that your SART exclusively

serves (for example, a university population or a military base)?

1 = YES [Specify\_\_\_\_] SPSS

0 = NO

#### BACKGROUND

8. What age groups of sexual assault victims does your SART serve?

\_\_\_\_\_ [get cut-off years]

- 9. Is your SART a for-profit organization?1=YES0=NO
  - [If no, go to Q10.]

[If yes, go to Q11.]

**10.** Is your SART a 501c3 non-profit organization? 1 = YES 0 = NO

11. Does your SART currently have any formal sources of funding other than fundraising (such as federal, state, or local grants)? 1 = YES 0 = NO

12. Does your SART have a leader, coordinator, or administrator?

1 = YES 0 = NO

- **13. Does your SART have a paid staff person?** 1 = YES 0 = NO
  - a. If yes, is this a full-time position?

1 = YES

0 = NO

888 = Not Applicable [due to no paid staff]

#### BACKGROUND

- 14. Does your community have a Child Advocacy Center? By community I mean the community that your SART primarily serves.1 = YES 0 = NO
- 15. Does your community have Sexual Assault Nurse Examiner [SANE] or Sexual Assault Forensic Examiner [SAFE] trained <u>nurses</u>?
   1 = YES 0 = NO

   If no, go to Q18.
- 16. Does your community have a SANE or SAFE <u>program</u>? [defined as having more than two nurses and a coordinator, and being recognized as a program by their institution and the broader community]
  - 1 = YES
  - 0 = NO *If no, go to* Q18
  - 888 = N/A due to no SANE nurses
- 17. Which came first, the SANE program or the SART?
  - 1 = SANE FIRST
  - 2 = SART FIRST
  - 3 = SAME TIME

888 = N/A due to no SANE nurses or no SANE program

## BACKGROUND

## SECTION TWO: MEMBERSHIP

18. Now I would like to ask you questions about the members of your SART team. By member I mean someone who attends SART meetings or other functions reasonably frequently. I will read off a list of different stakeholder groups- just let me know with a simple yes or no whether someone from that group is a member of your SART.

#### a. Sexual Assault Nurse Examiner [SANE] or Sexual Assault Forensic Examiner

	[SAFE]	1 = YES	0 = NO
b.	Other medical personnel	1 = YES	0 = NO
C.	Rape crisis center staff	1 = YES	0 = NO
d.	Prosecutor	1 = YES	0 = NO
e.	Police	1 = YES	0 = NO
f.	Crime lab personnel	1 = YES	0 = NO

#### g. Advocate within the victim's witness unit in the prosecutor's office

		1 = YES	0 = NO
h.	Judicial	1 = YES	0 = NO
i.	Sex offender treatment	1 = YES	0 = NO
j.	Corrections (includes probation and parole)	1 = YES	0 = NO
k.	Clergy or the faith community	1 = YES	0 = NO
I.	School (grades k-12)	1 = YES	0 = NO

#### MEMBERSHIP

m. Higher education (meaning, a college or university)

	1 = YES	0 = NO
n. Child Advocacy Center	1 = YES	0 = NO
o. Domestic violence agency	1 = YES	0 = NO
p. Other social services (for example, drug abus	e, welfare)	
	1 = YES	0 = NO
q. Sexual assault victims/survivors who represer	nt the perspective	e of victims and
not an organization on the SART	1 = YES	0 = NO
r. Are there other groups that are represented in	n your SART that	l didn't
mention?	1 = YES	0 = NO
i. If yes, Specify[	]	SPSS

19. How many different organizations or agencies belong to your SART?

SPSS

CONTINUE ON NEXT PAGE

## MEMBERSHIP

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

ID\_\_\_\_\_

- 20. Next I am going to ask you about the extent to which your SART is composed of members who are front line staff, middle management, and executives within their organization. Of the individuals involved in the SART approximately what proportion are:
  - a. General staff or front-line workers that do not hold primary leadership or decision-making roles in their organization? Would you say...
    - 1 = None
    - 2 = Some, but less than half
    - 3 = Most members
    - 4 = The vast majority or all members
  - b. Middle Management (such as captains or sergeants, department heads, or

program coordinators?)

- 1 = None
- 2 = Some, but less than half
- 3 = Most members
- 4 = The vast majority or all members

161

#### MEMBERSHIP

- c. The leader or executive of their organizations/agencies (for example, the chief of police, elected prosecutor, rape crisis center director)?
  - 1 = None
  - 2 = Some, but less than half
  - 3 = Most members
  - 4 = The vast majority or all members

## CONTINUE ON NEXT PAGE

## MEMBERSHIP

#### SECTION THREE: GOALS

21.Next, I would like to ask you some questions about your SART's goals. What was the main reason for forming the SART?

22. Next, I will read aloud a list of possible goals. I am going to ask you to rate how important each of these goals is to your team currently. Please choose from: "not a primary goal," "somewhat important," "very important," or "a primary goal," for your team.

TRANSCRIBED

	Goal	Would you say this is
	To increase prosecution rates?	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> </ul>
D.	To increase reporting of sexual assaults to the police?	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal
	Goal	Would you say this is
C.	To reduce barriers to seeking <u>medical/forensic</u> <u>services</u> post-assault?	1 = Not a primary goal 2 = Somewhat important 3 = Very important

## GOALS

		4 = A primary goal
d.	To reduce barriers to seeking mental health services post-assault?	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal
e.	To reduce barriers to seeking <b>advocacy services</b> post-assault?	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal
f.	To improve the quality and comprehensiveness of	1 = Not a primary goal
	medical/forensic services that are offered to survivors	2 = Somewhat important
	who seek help from the medical system?	3 = Very important 4 = A primary goal
g.	To improve the quality and comprehensiveness of	1 = Not a primary goal
	mental health services that are offered to survivors	2 = Somewhat important
	who seek help from the mental health system?	3 = Very important 4 = A primary goal
h.	To improve the quality and comprehensiveness of	1 = Not a primary goal
	advocacy services that are offered to survivors who	2 = Somewhat important
	seek help from advocates?	3 = Very important 4 = A primary goal
Go	pal	Would you say this is
i.	To reduce negative treatment of victims by primary	1 = Not a primary goal
	responders? By primary responders, I mean victim	2 = Somewhat important
	advocates, medical/forensic examiners, police, and	3 = Very important 4 = A primary goal
	prosecutors.	
j.	To educate primary responders about responding to	1 = Not a primary goal
	sexual assault?	2 = Somewhat important
		3 = Very important
k.	To improve primary responders' attitudes toward	4 = A primary goal 1 = Not a primary goal
	sexual assault victims?	2 = Somewhat important
		3 = Very important
		4 = A primary goal

# GOALS

ID\_\_\_\_\_

I.	To improve primary responders' skills in responding to sexual assault? To hold responders accountable to responding to	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> <li>1 = Not a primary goal</li> </ul>
	sexual assault appropriately?	2 = Somewhat important 3 = Very important 4 = A primary goal
n.	To educate the general public about sexual assault/rape and the services that are available to victims in your community?	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> </ul>
	Goal	Would you say this is
0.	To increase coordination among stakeholders? By stakeholders, I mean community partners who work on sexual assault issues.	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal
p.	To increase communication among stakeholders?	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> </ul>
q.	To increase stakeholders' understanding of one another's roles and limitations?	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal
r.	To improve the quality of relationships among stakeholders?	1 = Not a primary goal 2 = Somewhat important 3 = Very important 4 = A primary goal

# GOALS

S.	To improve local organizations' (such as the rape crisis center, hospital, police department, prosecutor's office) policies and procedures regarding sexual assault?	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> </ul>
t.	To provide a victim-centered response to sexual assault?	<ul> <li>1 = Not a primary goal</li> <li>2 = Somewhat important</li> <li>3 = Very important</li> <li>4 = A primary goal</li> </ul>

23. What are other goals of your SART that I didn't ask you about?

\_\_\_\_\_ SPSS

24. If you were to rank the primary goals of your SART, is your SART's time and

energy most focused on improving legal outcomes (like increasing prosecution

rates), improving victims' experiences, or prevention education?

#1	SPSS
#2	SPSS
#3	SPSS

They can rank some or all of them equally. If equally, put them on the same line.

Go to 25.

## DURING DATA ENTRY CODE BASED ON ANSWER TO 24

Legal outcomes vs. victim experiences

1 = Legal is more important; 2 = Victim is more important; 3 = Equally important

## GOALS

Legal outcomes vs. prevention/education

1 = Legal is more important; 2 = Prevention is more important; 3 = Equally important

Victim outcomes vs. prevention/education

1 = Victim is more important; 2 = Prevention is more important; 3 = Equally important

#### GOALS

#### SECTION FOUR: STRUCTURE

Now, I am going to ask you some questions about how you work together as a team.

25. I will read a list of formal structures that some collaborations use. Please answer yes or no which of these are in place in your SART.

a. Written mission statement	1 = YES	0 = NO
b. Meeting attendance and/or sign-in sheets	1 = YES	0 = NO
c. Written meeting agendas	1 = YES	0 = NO
d. Recorded and distributed meeting minutes	1 = YES	0 = NO
e. Newsletters for SART members	1 = YES	0 = NO
f. Subcommittees	1 = YES	0 = NO
g. SART organizational chart	1 = YES	0 = NO

 Formal bylaws or operating rules/procedures specific to the operation of the SART. This does NOT include policies/procedures for responding to sexual assault victims.

		1 = YES	0 = NO
i.	Formal procedures for decision-making	1 = YES	0 = NO
j.	Formal procedures for conflict resolution	1 = YES	0 = NO

k. An established mechanism for ensuring members are accountable to the rest of the SART in completing tasks 1 = YES 0 = NO

#### STRUCTURE

#### SECTION FIVE: ACTIVITIES

- 26. Now, I will read a list of activities that some SARTs engage in. Please give me a simple yes or no to indicate whether or not your SART uses this activity.
  - a. Case review (specifically reviewing individual cases)

 $1 = YES \quad 0 = NO$ 

i. If yes, do these occur regularly, or as needed?

1 = As needed

2 = Regularly [Specify how often]\_\_\_\_\_SPSS

888 = Not applicable [does not utilize this activity]

#### b. Meetings which include business other than or in addition to case review

 $1 = YES \quad 0 = NO$ 

i. If yes, do these occur regularly, or as needed?

1 = As needed

- 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
- 888 = Not applicable [does not utilize this activity]

#### ACTIVITIES

 $1 = YES \quad 0 = NO$ 

i. If yes, do these occur regularly, or as needed?

1 = As needed

2 = Regularly [Specify how often]\_\_\_\_\_SPSS

- 3 = Some regularly, some as needed
  - [For each, specify how often]\_\_\_\_\_SPSS

888 = Not applicable [does not utilize this activity]

d. Trainings conducted by non-SART members or presentations from guest speakers that all SART members are invited to attend

 $1 = YES \quad 0 = NO$ 

i. If yes, do these occur regularly, or as needed?

1 = As needed

- 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
- 3 = Some regularly, some as needed

[For each, specify how often]\_\_\_\_\_SPSS

SPSS

SPSS

888 = Not applicable [does not utilize this activity]

#### ACTIVITIES

 $1 = YES \quad 0 = NO$ 

ID\_\_\_\_\_

i. If yes, does this occur regularly, or as needed?

1 = As needed

2 = Regularly [Specify how often]\_\_\_\_\_SPSS

- 3 = Some regularly, some as needed
  - [For each, specify how often]\_\_\_\_\_SPSS

888 = Not applicable [does not utilize this activity]

f. Discussion of the response to sexual assault in your community (including problems, potential improvements, or other issues)

 $1 = YES \quad 0 = NO$ 

- i. If yes, does this occur regularly, or as needed?
- 1 = As needed
- 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
- 3 = Some regularly, some as needed

[For each, specify how often]\_\_\_\_\_SPSS

SPSS

888 = Not applicable [does not utilize this activity]

SPSS

171

g. Policy or protocol adoption, development, or revision

 $1 = YES \quad 0 = NO$ 

- i. If yes, does this occur regularly, or as needed?
  - 1 = As needed
  - 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
  - 3 = Some regularly, some as needed
    - [For each, specify how often]\_\_\_\_\_SPSS

\_ SPSS

888 Not applicable [does not utilize this activity]

h. Development, adoption, or revision of memoranda of understanding between different stakeholder groups

 $1 = YES \quad 0 = NO$ 

- i. If yes, does this occur regularly, or as needed?
  - 1 = As needed
  - 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
  - 3 = Some regularly, some as needed
    - [For each, specify how often]\_\_\_\_\_SPSS

SPSS

888 Not applicable [does not utilize this activity]

#### ACTIVITIES

i. Program evaluation (such as research or quality assurance) of the SART team as a whole

 $1 = YES \quad 0 = NO$ 

- i. If yes, does this occur regularly, or as needed?
  - 1 = As needed
  - 2 = Regularly [Specify how often]\_\_\_\_\_SPSS
  - 3 = Some regularly, some as needed
    - [For each, specify how often]\_\_\_\_\_SPSS

888 Not applicable [does not utilize this activity]

ii. [If yes]: Please describe your evaluation activities

[Probe for type of evaluation and topic of evaluation (for example, prosecution rates vs. victim outcomes)]

SPSS/TRANSCRIBED

CONTINUE ON NEXT PAGE

#### ACTIVITIES

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

SPSS

ID

## SECTION SIX: PERCEIVED EFFECTIVENESS

We are a little over half of the way through the interview now. Thanks very much for answering these questions. Next, I am going to ask you some more specific questions about how you believe your SART has impacted your community. By community I mean the community that your SART primarily serves.

a. An increase in the number of assaults that are reported to police? <u>Please</u> <u>choose from the</u> <u>following</u> <u>options</u>	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
b. Victims giving more complete accounts of the incident to law enforcement?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT P	AGE	

27. To what extent has the SART's efforts led to:

#### EFFECTIVENESS

To what extent has the SART	s' efforts led to:	
c. Victims being more engaged during the investigation of their case?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
d. Victims being more likely to continue participating throughout the entirety of their case?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
e. Victims being more forthcoming with other evidence that may support their accounts?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

f. Victims being more willing to prosecute?	1= Not at all <u>If not at all,</u> is that because	1 = there was little to no room for improvement?
	> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit	3= or your team was unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
g. Victims being more engaged with prosecutors	1= Not at all <u>If not at all</u> , is that because	1 = there was little to no room for improvement?
during court preparations?	> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit	3= or your team was unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
<ul> <li>h. Victims being more at ease with legal personnel throughout the process?</li> </ul>	1= Not at all <u>If not at all,</u> is that because	1 = there was little to no room for improvement?
	2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit	3= or your team was unable to achieve this goal?
	5 = To a great extent	4=other[Specify

To what extent has the SARTs	' efforts led to:	
i. Improvements in support for victims as they participate in the criminal justice process?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
j. Improvements in the quality of forensic evidence?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
k. Improvements in police knowledge of medical/forensic evidence?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

To what extent has the SARTs	efforts led to:	
<ol> <li>Improvements in prosecutors' knowledge of medical/forensic</li> </ol>	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
evidence?	because> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
m. Improvements in police	1= Not at all	1 = there was little to no
utilization of medical/forensic	<u>If not at all,</u> is that because>	room for improvement? 2= this was not a goal of
evidence?	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was unable to achieve this
	4 = Quite a bit 5 = To a great extent	goal?
		4=other[Specify]
n. Improvements in prosecutors' utilization of	1= Not at all	1 = there was little to no room for improvement?
medical/forensic evidence?	<i>If not at all,</i> is that because>	2= this was not a goal of
	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was unable to achieve this
	4 = Quite a bit 5 = To a great extent	goal?
		4=other[Specify]
CONTINUES ON NEXT PAGE		

<ul> <li>Rape kits being more likely to be submitted to</li> </ul>	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
the crime lab?	because>	2= this was not a goal of
	2 = A little bit	your SART? 3= or your team was
	3 = Somewhat 4 = Quite a bit	unable to achieve this
	5 = To a great extent	goal? 4=other[Specify
		]
<ul> <li>p. Improvements in law enforcements'</li> </ul>	1= Not at all	1 = there was little to no room for improvement?
investigations of sexual assault cases?	<u><i>If not at all,</i></u> is that because> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit	3= or your team was unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
q. Improvements in police	1= Not at all	1 = there was little to no
building rapport with victims?	<i><u>If not at all,</u></i> is that because>	room for improvement? 2= this was not a goal of
	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	4=other[Specify]

Improvements in medical/forensic personnel expert witness	1= Not at all	1 = there was little to no
		room for improvement?
	<u>If not at all,</u> is that because>	2= this was not a goal of
testimony?	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
		unable to achieve this
	4 = Quite a bit	goal?
	5 = To a great extent	4=other[Specify
		]
s. Improvements in	1= Not at all	1 = there was little to no
prosecutors arguing cases?	<u>If not at all,</u> is that	room for improvement?
64565!	because>	2= this was not a goal of
	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	-
		4=other[Specify]
		L
t. Improvements in	1= Not at all	1 = there was little to no
prosecutors' education of juries about sexual	<u>If not at all,</u> is that	room for improvement?
assault?	because>	2= this was not a goal of
	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	
		4=other[Specify]
		]

To what extent has the SARTs	s' efforts led to:	
u. Improvements in prosecutors building rapport with victims?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
v. Improvements in prosecutors preparing victims for testimony?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
w. Police being more likely to refer cases to the prosecutor's office?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

. Cases that are referred to the prosecutor's office	1= Not at all	1 = there was little to no room for improvement?
being more likely to be charged <i>[same as</i>	<u>If not at all,</u> is that because>	2= this was not a goal of
warranted or authorized]	2 = A little bit	your SART?
by the prosecutor?	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	4=other[Specify
		]
. Cases that were charged	1= Not at all	1 = there was little to no
being less likely to be dismissed by a grand jury	<u>If not at all,</u> is that	room for improvement?
judge, or prosecutor?	because>	2= this was not a goal of your SART?
	2 = A little bit	3= or your team was
	3 = Somewhat	unable to achieve this
	4 = Quite a bit	goal?
	5 = To a great extent	4=other[Specify
		]
z. An increase in the number	· 1= Not at all	1 = there was little to no
of prosecuted cases that result in conviction or a	<u>If not at all,</u> is that	room for improvement?
guilty plea?	because>	2= this was not a goal of
	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was unable to achieve this
	4 = Quite a bit	goal?
	5 = To a great extent	4=other[Specify
		]]

To what extent has the SARTs	s' efforts led to:	
aa. A decrease in the prevalence of sexual assault in your community?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
bb. The creation, expansion, or re-structuring of programs or services for sexual assault victims in your community?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
cc. Victims being more likely to receive referrals to <u>medical/forensic</u> <u>services</u> ?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

dd. Victims being more likely to receive referrals to	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
mental health services?	because> $2 = A$ little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit 5 = To a great extent	3= or your team was unable to achieve this goal? 4=other[Specify]
ee. Victims being more likely to receive referrals to <u>advocacy</u> services?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
ff. Victims being more likely to seek out needed services post-assault?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	1 = there was little to no room for improvement?2= this was not a goal of your SART?3= or your team was unable to achieve this goal?4=other[Specify]

To what extent has the SARTs	s' efforts led to:	
gg. Responders being more knowledgeable about sexual assault and responding to sexual assault effectively? By responders, I mean victim advocates, medical/forensic examiners, police, and prosecutors.	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
hh. Improvements in responders' skills in responding to sexual assault?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
ii. Improvements in responders' attitudes toward sexual assault victims?	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

To what extent has the SARTs	s' efforts led to:	
jj. Responders providing more comprehensive, higher quality services to victims?	1= Not at all <u>If not at all</u> , is that because> 2 = A little bit 3 = Somewhat	<ul> <li>1 = there was little to no room for improvement?</li> <li>2= this was not a goal of your SART?</li> <li>3= or your team was unable to achieve this</li> </ul>
	4 = Quite a bit 5 = To a great extent	unable to achieve this goal? 4=other[Specify]
kk. Responders being more sensitive toward victims?	<pre>1= Not at all <u>If not at all</u>, is that because</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
II. Victims having more positive experiences with the <b>legal system?</b>	<pre>1= Not at all <u>If not at all</u>, is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>

#### EFFECTIVENESS

To what extent has the SARTs	' efforts led to:	
mm. Victims having more positive experiences with the <b>medical system?</b>	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
nn.Victims having more positive experiences with the <u>mental health</u> <u>system?</u>	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
oo. Victims having more positive experiences with <u>advocacy?</u>	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify]</pre>
CONTINUES ON NEXT PAGE		

pp. Improvements in the general public's	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
knowledge of sexual assault and services for	because>	2= this was not a goal of your SART?
sexual assault victims in your community?	2 = A little bit 3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
qq. Improvements in local organizations' policies and	1= Not at all	1 = there was little to no room for improvement?
procedures for responding to sexual assault?	<u>If not at all</u> , is that because> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit	3= or your team was unable to achieve this goal?
	5 = To a great extent	4=other[Specify]
rr. An increase in communication among	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
SART stakeholders?	because> $2 = A$ little bit	2= this was not a goal of your SART?
	3 = Somewhat	3= or your team was unable to achieve this
	4 = Quite a bit 5 = To a great extent	goal?
		4=other[Specify]

ss. SART stakeholders having	1= Not at all	1 = there was little to no
a better understanding of		room for improvement?
one another's roles and	<u>If not at all,</u> is that because>	2= this was not a goal of
limitations?	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
		unable to achieve this
	4 = Quite a bit	goal?
	5 = To a great extent	4=other[Specify
		]
tt. SART responders being	1= Not at all	1 = there was little to no
more accountable to	<u>If not at all,</u> is that	room for improvement?
providing an appropriate response to sexual	because>	2= this was not a goal of
assault?	2 = A little bit	your SART?
	3 = Somewhat	3= or your team was
	4 = Quite a bit	unable to achieve this goal?
	5 = To a great extent	-
		4=other[Specify]
uu. Improvements in SART stakeholders' knowledge	1= Not at all	1 = there was little to no room for improvement?
of services available to	<u>If not at all,</u> is that because>	-
victims in your community?	2 = A little bit	2= this was not a goal of your SART?
		3= or your team was
	3 = Somewhat	unable to achieve this
	4 = Quite a bit	goal?
	5 = To a great extent	4=other[Specify
		]

To what extent has the SARTs' efforts led to:		
vv. SART stakeholders working together more	1= Not at all <u>If not at all,</u> is that	1 = there was little to no room for improvement?
efficiently?	because> 2 = A little bit	2= this was not a goal of your SART?
	3 = Somewhat 4 = Quite a bit 5 = To a great extent	3= or your team was unable to achieve this goal? 4=other[Specify]
ww. Improvements in the quality of relationships among SART stakeholders?	<pre>1= Not at all <u>If not at all,</u> is that because&gt; 2 = A little bit 3 = Somewhat 4 = Quite a bit 5 = To a great extent</pre>	<pre>1 = there was little to no room for improvement? 2= this was not a goal of your SART? 3= or your team was unable to achieve this goal? 4=other[Specify</pre>

## CONTINUES ON NEXT PAGE

#### EFFECTIVENESS

28. What factors have helped your SART achieve your goals?

Probe for factors related to:

- Individuals
- Organizations
- Relationships (among individuals and among organizations)
- Broader community
- SARTs operations and activities

\_\_\_\_\_ TRANSCRIBED

29. What factors have made it harder to achieve your goals?

Probe for factors related to:

- Individuals
- Organizations
- Relationships (among individuals and among organizations)
- Broader community
- SARTs operations and activities

#### EFFECTIVENESS

ID		192
		TRANSCRIBED
30. What a	dvice or lessons learned do you have to share based	on your experiences
with yo	ur SART? [OK if they don't want to add anything. This	s is just a chance for

them to share more.]

TRANSCRIBED

## **EFFECTIVENESS**

ID\_\_\_\_\_

## SECTION SEVEN: OTHER CHARACTERISTICS OF COMMUNITY RESPONSE

Next I want to ask you real quick, just yes or no, whether a few things exist in

your community.

31. Does your community have any multidisciplinary joint service agencies that are specific to sexual assault? (for example, an organization that houses both police and medical/forensic examiners)

1 = YES

0 = NO

a. If yes, Can you describe this for me?

[Probe for which stakeholder groups work together and how they work together.]

TRANSCRIBED

32. In your community, do medical/forensic examiners and police typically conduct interviews jointly with victims?

1 = YES

- 0 = NO
- 33. Does the local prosecutor's office have a specialized unit that handles sexual assault crimes?

1 = YES

- 0 = NO
- a. If yes, what type of unit is it? [for example, a sex crimes unit]

SPSS

#### COMMUNITY RESPONSE

0 = NO

a. *If yes,* approximately how many of your SARTs' members are also involved in one of these teams? Would you say...

1 = None

2 = Some, but less than half

3 = Most members

4 = The vast majority or all members

888 = Not Applicable; no to 34.

35. How often are victims who report the assault to police given information about services from the local rape crisis center? Would you say that...

1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable

- 2= The option is offered to the survivor <u>most</u> of the time
- 3= The option is offered to the survivor <u>occasionally</u>
- 4= The option is offered to the survivor <u>rarely</u> or never

888 = Not applicable, due to no rape crisis center

## COMMUNITY RESPONSE

36. How often are victims who report the assault to police given information about receiving a medical forensic exam?

1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable

- 2= The option is offered to the survivor <u>most</u> of the time
- 3= The option is offered to the survivor <u>occasionally</u>
- 4= The option is offered to the survivor <u>rarely</u> or never
- 37. How often are victims given the opportunity to have a victim advocate accompany them during the medical/forensic exam?

1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable

- 2= The option is offered to the survivor <u>most</u> of the time
- 3= The option is offered to the survivor <u>occasionally</u>
- 4= The option is offered to the survivor <u>rarely</u> or never
- 38. How often are victims given the opportunity to have a victim advocate accompany them during the initial report to the responding police officer?

1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable

- 2= The option is offered to the survivor <u>most</u> of the time
- 3= The option is offered to the survivor <u>occasionally</u>
- 4= The option is offered to the survivor <u>rarely</u> or never

#### COMMUNITY RESPONSE

- 39. How often are victims given the opportunity to have a victim advocate accompany them during victim interviews with the detective?
  - 1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable
  - 2= The option is offered to the survivor <u>most</u> of the time
  - 3= The option is offered to the survivor <u>occasionally</u>
  - 4= The option is offered to the survivor <u>rarely</u> or never
- 40. How often are victims given the opportunity to have a victim advocate accompany them during court hearings?

1 = The option is offered to the survivor <u>every</u> time, for every survivor when appropriate/applicable

- 2= The option is offered to the survivor <u>most</u> of the time
- 3= The option is offered to the survivor <u>occasionally</u>
- 4= The option is offered to the survivor <u>rarely</u> or never
- 41. How often does law enforcement consult with medical/forensic examiners regarding forensic exam findings? Would you say that...

1= Law enforcement consults with medical forensic examiners regarding every case, when applicable

2= Law enforcement consults with medical forensic examiners regarding <u>most cases</u>

3= Law enforcement consults with medical forensic examiners regarding <u>occasional cases</u>

4= Law enforcement consults with medical forensic examiners regarding cases <u>rarely or never</u>

#### COMMUNITY RESPONSE

42. How often do prosecutors consult with medical/forensic examiners regarding forensic evidence findings?

1= Prosecutors consult with medical/forensic examiners regarding every case, when applicable

2= Prosecutors consult with medical/forensic examiners regarding most cases

3= Prosecutors consult with medical/forensic examiners regarding occasional cases

4= Prosecutors consult with medical/forensic examiners rarely or never

43. How often do medical forensic examiners conduct an examination of suspects in sexual assault cases when a suspect has been apprehended?

1= A medical forensic examiner conducts a suspect exam for every suspect that have been apprehended, when applicable

2= A medical forensic examiner conducts a suspect exam for most suspects that have been apprehended

3= A medical forensic examiner conducts a suspect exam occasionally of suspects that have been apprehended

4=A medical forensic examiner conducts a suspect exam rarely or never for suspects that have been apprehended

# CONTINUES ON NEXT PAGE

## COMMUNITY RESPONSE

44. When sexual assault cases go to trial, how often do medical/forensic examiners testify? Would you say that...

1 = A medical/forensic examiner testifies <u>every</u> time a sexual assault case goes to trial, when applicable

2= A medical/forensic examiner nurse testifies in <u>most</u> sexual assault cases that go to trial

3= A medical/forensic examiner testifies in <u>occasional</u> sexual assault cases that go to trial

4= A medical/forensic examiner testifies <u>rarely or never</u> in sexual assault cases that go to trial

## CONTINUES ON NEXT PAGE

## COMMUNITY RESPONSE

## SECTION EIGHT: DEMOGRAPHICS

Now, I will end the interview with some demographic questions about you and your community.

45. What communities does your SART **primarily** serve? *Probe for specific counties, cities, and/or jurisdictions.* 

[Do not include people who happen to come in from other communities]

 community, state	SPSS
 community, state	SPSS
 community, state	SPSS
 community, state	SPSS

46. How many counties does your SART serve?

SPSS

47. Would you characterize the community/communities that your SART serves as...

- a. Urban? 1 = YES 0 = NO
- b. Suburban? 1 = YES 0 = NO
- c. Rural? 1 = YES 0 = NO

#### 48. What is your gender?

- 1 = Male
- 2 = Female
- 3 = Transgender

## DEMOGRAPHICS

(in years)	SPSS
(III J Cui S)	01 00

#### 50. Race?

- 1 = Native American or Alaskan Native
- 2 = Asian American
- 3 = Black or African American
- 4 = Native Hawaiian or Pacific Islander
- 5 = White
- 6 = Hispanic, Latino(a), or of Spanish origin
- 7 = Biracial or Multiracial

[Specify	]SPSS
----------	-------

8 = Other [Specify\_\_\_\_]SPSS

#### 51. Education Level?

- 1 = Did not complete high school
- 2 = High school graduate/GED
- 3 = Some college or trade school, no degree
- 4 = Associates degree
- 5 = Trade school degree
- 6 = Bachelor's degree
- 7 = Advanced degree

#### Turn off tape recorder.

#### DEMOGRAPHICS

## SECTION NINE: CONCLUSION

#### Turn off tape recorder.

Thank you very much for participating in our study. Before we get off the phone, I do want to let you know that some of the SARTs that we are interviewing will be selected for more in-depth study in the future. If your team is selected again, we will be in touch.

Would you like to be included in a list of people who will receive a brief report of findings from this study?

Do you have any questions for me?

End Time(s): \_\_\_\_\_

Calculate length of interview: \_\_\_\_\_(minutes) SPSS

SPSS

#### **APPENDIX B2: STUDY 2 INTERVIEW**

202

## Study 2 Interview

Participant ID	Date
Interviewer	Start Time

## SECTION ONE: BACKGROUND INFORMATION ON THE SART

Thank you for agreeing to speak with me today about your organization's involvement in the SART. I would like to begin by getting some background information about your role as a SART member.

52. How long have you been a member of the SART?

= \_\_\_\_\_ (total months)

53. What is your job title?

Code as:

1 = SANE/medical-forensic examiner

2 = Rape crisis center advocate, counselor, or other staff

- 3= Prosecutor
- 4 = Police
- 5 = Crime lab
- 6 = Advocate within victim witness unit in prosecutor's office
- 7 = Judge
- 8 = Other (Specify\_\_\_\_\_)

## SECTION TWO: SOCIAL NETWORK DATA

In this next section, I am going to ask you about your organization's relationships with each of the other organizations that are a part of your SART.

First, I would like to ask you about how often your organization communicates with other SART member organizations about coordinating the response to sexual assault. I'd like to focus on communication that happens <u>outside of group discussion at official SART</u> <u>meetings, and does NOT include discussing specific cases.</u> **Examples** that would count include discussing broader issues about your community's response to sexual assault, or sharing information about new information or best practices in responding to sexual assault.

54. How often in the past 6 months has your organization communicated (whether by email, phone, written, or face-to-face) with [Organization A] about coordinating the response to sexual assault? <u>Remember not to include</u> communication about specific cases.

Code as:

- 0= No communication (in the past 6 months)
- 1= 1-2 times (in the past 6 months)
- 2= At least every other month (e.g., 3-5 times in the past 6 months)
- 3= At least monthly (e.g., 6 times in the past 6 months)
- 4= At least twice a month (e.g., 12 times in the past 6 months)
- 5= At least weekly (e.g., 26 times in the past six months)
- 6= At least most days or daily (4 times a week or more).

55. How often in the past 6 months has your organization communicated (whether by email, phone, written, or face-to-face) with [Organization B] about coordinating the response to sexual assault? Remember not to include <u>communication about specific cases.</u>

Code as:

- 0= No communication (in the past 6 months)
- 1= 1-2 times (in the past 6 months)
- 2= At least every other month (e.g., 3-5 times in the past 6 months)
- 3= At least monthly (e.g., 6 times in the past 6 months)
- 4= At least twice a month (e.g., 12 times in the past 6 months)
- 5= At least weekly (e.g., 26 times in the past six months)
- 6= At least most days or daily (4 times a week or more).

[question will be repeated for all other SART member organizations]

206

Next, I would like to ask you about the degree to which your organization's role in the response to sexual assault is valued by the other SART organizations.

56. [Organization A] values my organization's role in responding to sexual assault in our community. *Do you [read response options]:* 

- -3 = Strongly Disagree
- -2 = Disagree
- -1 = Somewhat Disagree
- 0 = Neutral
- +1 = Somewhat Agree
- +2 = Agree
- +3 = Strongly Agree
- With that statement?

[question will be repeated for all other SART member organizations]

Next, I will ask about the degree to which the work of other SART member

organizations is valuable to your organization's work in the response to sexual assault.

57. [Organization A] is a valuable resource to my organization's work in

responding to sexual assault. Do you [read response options]:

- -3 = Strongly Disagree
- -2 = Disagree
- -1 = Somewhat Disagree
- 0 = Neutral
- +1 = Somewhat Agree
- +2 = Agree
- +3 = Strongly Agree
- With that statement?

[question will be repeated for all other SART member organizations]

## **SECTION FOUR: DEMOGRAPHICS**

Now I will end the interview with some brief demographic questions.

8. What is your gender?

- 1 = Male
- 2 = Female
- 3 = Transgender

9. Age?

\_\_\_\_\_ (in years)

58.Race?

Code as:

- 1 = Native American or Alaskan Native
- 2 = Asian American
- 3 = Black or African American
- 4 = Native Hawaiian or Pacific Islander
- 5 = White
- 6 = Hispanic, Latino(a), or of Spanish origin
- 7 = Biracial or Multiracial

[Specify\_\_\_\_\_]

9 = Other [Specify\_\_\_\_]

## 11. Education Level?

- 1 = Did not complete high school
- 2 = High school graduate/GED
- 3 = Some college or trade school, no degree
- 4 = Associate's degree
- 5 = Trade school degree
- 6 = Bachelor's degree
- 7 = Advanced degree

End Time: \_\_\_\_\_

Thank you for very much for participating in this study. Do you have any

questions for me before we get off the phone?

#### **APPENDIX C: PROJECT STAFF**

(in alphabetical order)

Deborah Bybee, Ph.D., Co-Investigator Rebecca Campbell, Ph.D., Principal Investigator Georgia Carpenter, M.A., Sampling Frame Development Megan Greeson, Ph.D., Project Director Claire McDowell, R.N., Interviewer Katherine McKinley, J.D., Sampling Frame Development Katherine Parker, B.A., Interviewer

Jennifer Watling Neal, Ph.D., Co-Investigator

#### Undergraduate and Post-Baccalaureate Research Assistants:

Alyse Bedell	Kristin Kraushaar
Alex Bladek	Carly Rowe
Hailey Bransdofer	Syndey Saidoo
Amanda Delannoy	Shelby Smith
Kari Edington	Amanda Taylor
Kelly Elzinga	Patricia Thurner
Defne Kabas	Shelby Wise

#### **APPENDIX D: DISSEMINATION**

Dissemination as of July 8, 2013

#### **Dissertations/Theses:**

Greeson, M. R. (2013). The heterogeneity of sexual assault response teams (SARTs): A national study of SART implementation and its implications for effectiveness. Doctoral Dissertation, Department of Psychology, Michigan State University, East Lansing, MI.

#### Presentations:

- Greeson, M. R., & Campbell, R. (2013, June). Invited talk: Findings from the national sexual assault response team project. Webinar presented to the National Sexual Violence Resource Center.
- Greeson, M. R., & Campbell, R. (2012, October). The heterogeneity of Sexual Assault Response Teams (SARTs): A national study of variation in the implementation of SARTs and its implications for SARTs' effectiveness. Symposium presented at the International Forensic Nursing Scientific Assembly, Fajardo, Puerto Rico.