An Impact Evaluation of a Sexual Assault Nurse Examiner (SANE) Program

Albuquerque SANE Collaborative
Albuquerque, NM

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The views are those of the authors and do not reflect the opinions of the National Institute of Justice or the U.S. Dept. of Justice

Table of Contents

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Abstract

Research Goals and Objectives

Statement of purpose

The purpose of this evaluation was to determine the impact of SANE services on four areas: 1) healthcare, 2) victim services, 3) law enforcement and 4) prosecution.

Research subjects

The experiences of women who sought services at the University of New Mexico Health Sciences Center in the two years prior to the inception of SANE (n=242) (1994–1996) were compared to the experiences of women who sought services at the Albuquerque SANE Collaborative after inception (October 1996) through the end of 1999 (n=715). Key informants (n=28) from the four areas of impact participated in the research.

Research Design and Methodology

Methods

A quasi-experimental design comparing data pre- and post-SANE was used. Ten qualitative and quantitative data collection methods were used. Qualitative methods included: an advocate focus group, victim services interviews, healthcare interviews, law enforcement interviews, and prosecution interviews. Quantitative methods included reviews of pre-SANE medical charts, SANE medical charts, law enforcement and court records, and a victim telephone survey.

Data Analysis

Qualitative data were tape recorded, transcribed, coded, and summarized; content analysis was undertaken. Exploratory and descriptive analyses were used to summarize quantitative data. Chi-square tests were used to compare categorical data and t-tests were used to compare continuous data pre- to post-SANE.

Research Results and Conclusions

Results

Demographic characteristics were similar in the pre- and post-SANE medical, police, district attorney and court records. Post-SANE victims received more medical services for sexual assault, including STD treatment, pregnancy testing and prophylaxis. Post-SANE victims received a greater number and more comprehensive type of referrals to victim services compared to pre-SANE victims (4.0 vs. 1.7 referrals/patient, $p<0.0001$). More SANE victims reported to police (72% vs. 50%, $p<0.0001$) and had sexual assault evidence kit collected than did pre-SANE victims (88% vs. 30%, $p<0.0001$). Police filed more charges post-SANE compared to pre-SANE (7.0 vs. 5.4 charges/perpetrator, $p<0.0001$). Post-SANE charges had a higher conviction rate (69% vs. 57%, $p=0.001$) and a longer average sentence (5.1 vs. 1.2 years, $p<0.0001$) compared to pre-SANE cases.

Conclusions

The data strongly suggest that a SANE unit greatly enhances the healthcare quality of women who have been sexually assaulted, improves the quality of forensic evidence, improves law enforcement's ability to collect information and to file charges, and increases the likelihood of successful prosecution. While SANE units significantly impact the collection of forensic data and improve prosecution, additional resources are needed for victims services (*e.g.*, follow up and counseling), training of law enforcement, and improved communication across all service providers.

Summary

Overview

This report details the findings of the University of New Mexico Hospital Emergency Medicine Department's comprehensive outcome evaluation of the Albuquerque Sexual Assault Nurse Examiner (SANE) Collaborative. Although the proliferation of SANE units in the U.S. suggests an apparent success of this type of program, this is the first coordinated, comprehensive evaluation of SANE.

Our outcome evaluation addresses four areas: 1) healthcare, 2) victim services, 3) law enforcement, and 4) prosecution. We measured SANE's impact using a variety of techniques including face-to-face interviews, telephone interviews, and analysis of medical, police and court records. While we addressed each of the four areas separately, each is so intertwined with one another that we have attempted to link the components so as to comprehensively evaluate SANE. Our evaluation uses a pre-, post- comparison design, comparing responses that reflect on conditions before and after the implementation of the Albuquerque SANE Collaborative.

Our findings strongly suggest that the establishment of the Albuquerque SANE Collaborative in October 1996 significantly and positively impacted healthcare, victim services, law enforcement, and prosecution.

SANE victims received more consistent and broad healthcare services, including STD treatment, pregnancy testing and prophylaxis and a greater number and more comprehensive type of referral to medical and victim services providers compared to pre-SANE victims. More post-SANE victims reported to police (72% vs. 50%) and had sexual assault evidence kit collected than did pre-SANE victims (88% vs. 30%). Police were able to file more charges post-SANE compared to pre-

SANE and these charges ultimately had a higher conviction rate (69% vs. 57%) and a longer average sentence (5.1 vs. 1.2 years) compared to pre-SANE cases.

Community leaders and service providers were overall very pleased with SANE. In all areas of the evaluation, SANE contributed positively to service delivery and the quality of professional's work.

The Albuquerque SANE Collaborative

Until 1996, sexual assault victims in Albuquerque were seen at the emergency departments (ED) of several hospitals. This was perceived to be less than ideal by many, including emergency physicians and nurses, the Albuquerque Rape Crisis Center, the Albuquerque Police Department and the local District Attorney. After two years of planning and fund raising, the Albuquerque SANE Collaborative opened its doors on October 16, 1996. Our evaluation concentrates on the Albuquerque SANE Collaborative and the impact that this unit has had. To better understand our findings, we provide an overview of the typical flow of services prior and subsequent to the startup of SANE.

Typical Pre-SANE Emergency Department Patient Flow

Prior to SANE, sexual assault victims typically sought care at an ED of a local hospital. Upon arrival at the medical facility, the victim would state the reason for their visit to the clerical staff. Often, a patient would not initially state the primary reason for their visit. The patient was triaged by an ED nurse. A history of sexual assault was often elicited at this point and a rape crisis advocate was contacted and requested to come to the ED. Depending upon the patient's severity of illness and injury, the patient would be placed in the ED waiting room for an available exam room. When an exam room became available, the patient would wait for physician evaluation. The physician would assess the patient and would manage any immediate illness or injury. If the patient desired to have a forensic evidence exam, the exam was conducted when resources were available. A physician,

nurse, and rape crisis advocate all needed to be simultaneously available to conduct the exam. Following completion of the exam, the patient would be offered treatment for sexually transmitted diseases, emergency contraception, and definitive treatment for any injuries. If the patient desired to speak with police, a law enforcement officer would be dispatched to interview the patient.

Typical SANE Patient Flow

Since SANE, patients are seen for sexual assault either at a specialized unit at a centrally located hospital in Albuquerque or at another hospital facility if the severity of their injuries do not permit them to go to the SANE unit directly. SANE can be activated through several mechanisms, including the healthcare facility, emergency medical services, police, rape crisis, or by contacting the SANE unit directly. If the victim has injuries that require medical attention, the victim is referred to a local ED for treatment. If the patient needs hospital admission or requires a prolonged ED stay, SANE is contacted for onsite evaluation/forensic evidence exam. If the patient is medically cleared, the SANE nurse and rape crisis advocate are dispatched to meet the patient at the SANE unit. The SANE nurse provides treatment for sexually transmitted diseases and emergency contraception.

Methods

An advisory board of local sexual assault community stakeholders helped us develop the evaluation questions. We convened two working groups of community practitioners: one for healthcare and victim services and one for law enforcement and prosecution. Each of the researcher-practitioner teams met several times during the first six months of the project to develop the evaluation questions and the objective criteria that would be used to assess impact.

We then gathered data from several existing databases, including SANE medical records, University of New Mexico Health Sciences Center (UNMHSC) medical records, Albuquerque

Police Department and Bernalillo County Sheriff's Department data, Second Judicial District (Bernalillo County) prosecution data, and New Mexico Second Judicial District Court data. Pre and post-SANE designations were assigned by the date of service in the medical records, or, in the law enforcement, prosecution and court datasets, by incident date. Those cases initiated or whose date of service preceded October 16, 1996 were designated as pre-SANE individuals, cases initiated after this date were designated post-SANE individuals.

We also collected data from key informant interviews and an advocate focus group. We conducted 28 interviews with representatives from the four target areas: 1) healthcare, 2) victim services, 3) law enforcement, and 4) prosecution. Participants were selected by the advisory board and through referrals from interviewees. The criteria for inclusion were both pre- and post-SANE participation in sexual assault services. We sought to achieve a variety of perspectives—both positive and negative—from the key informants in each of the four areas of impact.

To ensure consistency, a single researcher conducted all the face-to-face interviews. Each interview took 1 to 2 hours. Interviews were tape recorded and later transcribed for analysis.

The interview questions on:

- Nature of the participants' duties as they related to sexual assault services;
- Pre-SANE experience;
- Post-SANE experience;
- Comparison of pre- and post-SANE impacts on the community; and
- Respondents' perception of the SANE unit and suggestions for improvement of sexual assault services.

We interviewed ten law enforcement representatives from the Albuquerque Police Department, the Bernalillo County Sheriff's Department, the New Mexico State Police, University of New Mexico Campus Police and the Bureau of Indian Affairs.

We interviewed six healthcare providers, including ED nurses and physicians, SANE nurses, a physician expert in child sexual assault, and a family practice physician who had experience in seeing sexual assault cases.

We interviewed six victim service stakeholders including therapists, staff and advocates from the Albuquerque Rape Crisis Center (ARCC), the Director of the victim impact program at the DA's office, and the Executive Director of the New Mexico Coalition of Sexual Assault Programs for New Mexico. We also conducted a focus group with five victim advocates from ARCC who had both pre- and post-SANE experience.

Finally Judges and attorneys served as key informants for the prosecution section. Attorneys at the Bernalillo County District Attorney's Office (Violent Crimes Division), Juvenile Court, and the New Mexico State Attorney General's Office were interviewed. Three judges from the District Court were also interviewed. Public defenders and defense attorneys were informally interviewed but no attorney could be identified who had experience with both pre- and post-SANE clients.

Results

The characteristics of sexual assault victims seen in the emergency department (ED) before SANE and those seen at SANE were similar. In both groups, most were Anglo (43% before, 44% after), Hispanic (38% before, 41% after), or American Indian (10% before, 10% after). Among both study groups, victims were of similar age (mean age 27.2 years before, mean age 29.1 years after, $p=0.195$). Most sexual assault victims knew their offender. There were significantly more intimate partner assaults (6% before vs. 11% after, $p=0.0433$), more date and acquaintance assaults (33% before vs. 41% after, $p=0.037$), but fewer family member assaults (11% before vs. 2% after, $p<0.0001$).

Healthcare and Victim Services

Sexual assault victims seen at SANE received a greater variety and depth of medical services for sexual assault compared to victims seen in the ED. Pregnancy testing, pregnancy prophylaxis, and STD treatment were more often reported as provided at SANE than before SANE. Pregnancy testing increased from 79% before SANE to 88% at SANE ($p=0.005$). Likewise, pregnancy prophylaxis was accepted more often (66% before vs. 87% after, $p<0.0001$). Treatment for sexually transmitted diseases (STD) also was accepted more often (89% before vs. 97% after, $p=0.015$). The quality and quantity of referrals also increased. The average number of documented referrals increased significantly from 1.7 referrals per victim before SANE to 4.0 referrals per victim after SANE ($p=0.0237$). Victims seen at SANE received a greater variety of referrals compared to victims in the ED; these referrals included rape crisis (41% before vs. 76% after; $p<0.0001$), social services (13% before vs. 48% after; $p<.0001$), and an STD clinic (9% before vs. 15% after; $p<0.0001$).

Not only did SANE victims receive more services, the time that victims spent at SANE was less than the time that victims spent at the ED. Before SANE, the average time from check-in to discharge was 4 hours and 16 minutes After SANE, the average time from dispatch to discharge time was 3 hours and 26 minutes. Thus, on average, the time spent at SANE was 49 minutes less compared to the ED ($p<0.001$).

Law Enforcement and Prosecution

A greater proportion of victims seen at SANE had forensic evidence collected as well as reported to police. More victims consented to evidence collection (47% before vs. 98% after, $p<0.0001$). Also, vaginal photography was not routinely performed before SANE but after SANE, it was a routine component of the forensic evidence exam (8% before vs. 88% after, $p<0.0001$).

According to medical record data, more victims reported to police (46% before vs. 67% after, $p<0.0001$). The increased reporting coincided with a greater percentage of unfounded cases (4%

before vs. 12% after, p=0.0004) , however, more cases were cleared by arrest (4% before vs. 8% after, p=0.0189).

The number of charges per case (5.4 before vs. 7.0 after, p<0.0001), the proportion of cases presented to the grand jury (38% before vs. 50% after, p=0.0164) and the proportion of charges resulting in an indictment (65% before vs. 70% after, p<0.0001) all increased significantly. Conviction rates also increased. Criminal sexual penetration charge conviction rates increased from 59% before SANE to 69% after SANE (p=0.001). Significantly fewer charges ended with a *nolle prosequi* (28% before vs. 17% after, p<0.0001). There was no difference in the number of dismissals or acquittals. Similar results were observed among charges for criminal sexual contact. A significantly greater percentage of cases received jail time (46% before vs. 55% after, p=0.049). On average, sexual assault cases before SANE were sentenced to 1.2 years versus 5.1 years of incarceration after SANE (p<0.0001).

Discussion

Our findings strongly suggest that the establishment of the Albuquerque SANE Collaborative in October 1996 significantly and positively impacted healthcare, victim services, law enforcement, and prosecution. The statistical data and stakeholder interviews show that SANE has overall increased efficiency by bringing services for sexual assault victims into a unified and central location within a medical setting.

SANE's impact on healthcare was striking. By concentrating previously scattered sexual assault services into one program and one location, a victim receives specialized and sensitive care by professionals who are aware of the physical and psychological affects of sexual assault. Patient care has improved and is more consistent; sexual assault victims are uniformly offered sexually transmitted disease treatment, pregnancy prevention, referrals, and follow-up care.

SANE increased the comfort level of sexual assault victims and provided an environment that offers privacy, safety, and security during their treatment for sexual assault. An increased level of comfort appears to correlate with a greater likelihood to report to police, to undergo forensic evidence collection, and to be willing to cooperate with prosecution.

The improved forensic evidence is perhaps SANE's most important contribution with respect to law enforcement and prosecution. SANE units are able to collect a greater quantity and quality of evidence while saving about an hour of time, on average, compared with the ED. The shorter waiting times may yield better recovery of time-dependent material such as DNA or urine for suspected drug-facilitated sexual assault.

Law enforcement's knowledge of sexual assault issues has increased and their perceptions about and treatment of victims have greatly improved. Better forensic evidence and an improved chain of custody have led to more successful prosecution of sexual assault. DNA, colposcopic photography of vaginal injuries/tears and other injuries, and injury body maps were acknowledged as important contributions to the treatment of sexual assault victims and the prosecution of their offenders. Recent studies have shown that the ability to document injury correlates with successful prosecution (McGregor *et al.*, 2002).

Because the SANE units provide a calmer, less hectic atmosphere to administer services for sexual assault victims, law enforcement officers stated they were able to interview victims who were less stressed and who were more willing to cooperate with law enforcement. Many believed that this has assisted in building more trusting relationships between the victim and law enforcement. This has resulted in an increase in successful prosecution due to more coherent and consistent interviews.

Finally, law enforcement officers stated that another benefit of SANE was an atmosphere where they could 'bond' and develop sympathetic relationships with sexual assault victims. This has

helped law enforcement gain an increased awareness and knowledge of sexual assault issues, which may prevent re-victimization. Prosecutors have increased confidence in forensic evidence and in the interview process. The chain of custody is now rarely challenged by the defense. Prior to SANE, the defense was far more likely to use documentation procured from medical records to infer that the victim 'changed her story.'

Most care providers thought that SANE improved their jobs. Rape crisis advocates and SANE nurse examiners were, however, sometimes at odds. Role clarification of the rape crisis advocate and the nurse examiner appear important steps towards the elimination of stress between these two important components of the acute sexual assault response. All stakeholders reported that SANE has improved the working relationships of SANE medical personnel with law enforcement and prosecution. SANE nurses are available for pre-trial interviews, court appearances, and to give explanations of medical findings. Consistent, familiar faces among the service providers have promoted the exchange of ideas and the opportunity to solve commonly recognized problems.

Prior to SANE, medical providers and prosecutors did not collaborate well. Improved collaboration has eliminated much of the frustration of trying to get medical professionals to participate in the legal process and by providing reliable and factual evidence. While some informants felt that physician testimony might carry more weight, they preferred the consistency and ease with which they were able to use SANE nurse testimony.

Prosecutors were able to bring a greater number of charges forward and they uniformly received indictments for the charges sought. SANE has increased the number of guilty pleas obtained from defendants, thereby avoiding the need for the victim to testify directly. Courts have issued significantly greater sentences for sexual assault crimes.

Our ability to describe the impact on victims was limited. Despite repeated efforts with different modalities, we were unable to solicit the input from the victims of sexual assault to determine their perspective on the services they received. Because of this, we have no direct corroboration from the victim's perspective that SANE has positively impacted them. Uniformly, stakeholders believe that the victim experience is better.

A potential alternative explanation to our findings is that other system changes occurred coincidentally with SANE's startup. Stakeholders do not believe that there were any other significant events or system changes during the study period that impacted sexual assault service delivery.

While not all communities will have the capacity or readiness to implement a SANE-style program, we believe that many of the components of a SANE program might be successfully incorporated into smaller or less ready communities. Intermediate steps to improve services include implementing on-call forensic examiners who can respond to a variety of healthcare locations, and multi-disciplinary or cross-trainings to achieve some of the success of a SANE unit. Having one point person at an emergency department or hospital who can communicate regularly with law enforcement and prosecution might significantly improve problem solving. Healthcare facilities should review their chain of custody procedures and consult with law enforcement on ways to improve and standardize evidence collection.

Finally, the success of SANE begs the question of whether this service delivery model might successfully be applied to similar medical/criminal justice interfaces such as domestic violence or non-intimate battery. SANE in many ways is a highly specialized emergency department—one that combines the expertise of many disciplines to efficiently deliver a high quality product to a somewhat reluctant clientele.

In summary, we find strong and compelling evidence that SANE has positively impacted healthcare, victim services, law enforcement and prosecution. Communities without SANE programs should investigate the possibility of starting a comprehensive program. There is clear evidence that the quality and quantity of services will improve while increasing the likelihood of successful prosecution.

Detailed Final Report

Project Goals and Objectives

This report details the findings of the University of New Mexico Health Sciences Center (UNMHSC) Emergency Medicine Department's comprehensive outcome evaluation of the Albuquerque Sexual Assault Nurse Examiner (SANE) unit in the areas of healthcare, victim services, law enforcement, and prosecution. Although the proliferation of SANE units in the U.S. suggests an apparent success of this type of program, this is the first coordinated, comprehensive evaluation of SANE.

Our outcome evaluation plan addresses four areas: 1) healthcare, 2) victim services, 3) law enforcement, and 4) prosecution. We measured the impact of SANE using a variety of techniques, including face-to-face interviews, telephone interviews, and analysis of police and court records. While we address each of the four areas of interest separately, each area interacts with one another and we have therefore linked the components so as to comprehensively evaluate SANE. Our evaluation uses a pre-, post- comparison design, comparing responses that reflect on conditions before and after the implementation of the Albuquerque SANE Collaborative. Our evaluation meets the research recommendations outlined in the National Research Council publication *Violence in Families* including willingness of service providers to collaborate with researchers, availability and appropriateness of data, and use of satisfactory measures to assess program process and impact (Chalk and King, pg. 8-9).

Statement of Problem

National Data

The problem of violence against women in the United States has gained increasing attention in the past 25 years and has recently become a focus of research and intervention. The National

Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC) have joined together in a collaborative effort to sponsor a research program on violence against women. This evaluation is a response to their joint solicitation for Research and Evaluation on Violence against Women. In particular, this evaluation addresses the identified goal to understand better how to increase the effectiveness of legal and healthcare interventions.

In the past 25 years, perceptions of violence against women have changed tremendously. In particular, domestic violence and sexual assault are now viewed as crimes. Due largely to the efforts of victims' and women's advocates in the 1970s, the myths about crimes against women (*e.g.*, 'battered women would leave if they wanted to,' 'rape victims are asking to be raped') have begun to be dispelled, and funds have been allocated for crisis shelters and services for victims (Zorza, 1994; Hofford and Harrell, 1993; Frisch, 1992; and Bowman, 1992).

The changes in the public's perceptions of sexual violence mirror changes in the legal definition of sexual assault. The definition of what constitutes rape varies from state to state, but generally refers to forced sexual penetration of a victim by an offender. Because the legal definition of rape can be restrictive, the term *sexual assault* has been used to cover a wide range of crimes including attempted rape, indecent assault, and battery (Rosenberg, 1991). Inconsistencies in the definitions of rape and sexual assault make it difficult to estimate the incidence of these crimes. Further still, victims' failure to report due to the perceived social stigma of sexual assault, fear of the criminal justice system, or belief that reporting will do no good also affect the accuracy of prevalence estimates (Bachman and Saltzman, 1995). Despite these limitations, studies have demonstrated that rape and other forms of sexual assault are not rare events.

Sexual assault has been shown to have a severe psychological impact on victims resulting in post-traumatic stress disorder, depression, and suicide (Rosenberg 1991). Other effects include problems with family and friends, including divorce and fear of future assault that limits the victims' re-integration and mobility in the community.

Studies have variously estimated that as few as 2% and as many as 50% of women in the U.S. have experienced rape. Most estimates fall between 13% and 25% (National Research Council, 1996, p. 23). Furthermore, more than half of all rapes occurred during childhood or adolescence: 29% when the victim was less than 11 years old, and 32% between the ages of 11 and 17 (Kilpatrick, Edmunds, and Seymour, 1992). Koss reports that 40% of college women and 44% of women surveyed in community studies report being victims of either attempted or complete rape (Koss, 1990).

Although prevalence estimates vary, studies consistently document that younger women are much more likely to be victimized than older women. In addition, most sexual assault victims know their assailants (p. 39). The National Crime Victims Survey found that only 18% of rapes and sexual assaults against women are committed by strangers; 26% are by a current or former husband or boyfriend, and 56% are by an acquaintance.

The rate of forcible rape reported to the police increased 54.9% between 1974 and 1993. It must be expected that social and cultural changes in the last 25 years would have had an encouraging effect on victims' willingness to report. Still, despite rape laws, reforms, and changes in perception, prosecution rates are very low. According to the Senate Judiciary Committee (1993), only 38% of the approximately 100,000 rapes reported annually to the police result in arrest; as few as 2% of rape victims see their assailant jailed.

These studies and others demonstrate that sexual assault/rape is one of the most under-reported of violent crimes. One reason often cited for lack of reporting is the poor treatment victims receive from the criminal justice system. Improved treatment of victims could increase victim cooperation in both reporting crimes and in providing testimony, which in turn could help prevent criminals from re-offending.

In the last few years, promising policy and procedural changes to improve the law enforcement, prosecutorial, and healthcare responses to victims of sexual assault have been implemented in many states. It should be noted that these improvements in the treatment of sexual assault victims may function as a method of crime prevention. Without victim cooperation in both reporting of crimes and prosecution of offenders, the criminal justice system functions less effectively and in turn, leaves offenders free to re-offend. Examples of system improvements include the use of victim and witness advocates, DNA typing, measures to protect victim privacy to encourage reporting and prosecution (Epstein and Langenbahn, 1994) and sexual assault nurse examiner (SANE) programs or units. The establishment of SANE units provides sexual assault victims a safe and confidential setting for the exam procedures necessary to gather evidence against the offender. It also connects victims to support services and a network of advocates to guide them through the justice system if they choose to prosecute.

SANE programs have demonstrated effectiveness as a community method to case-manage victims of sexual assault (Ledray, 1997). The first SANE units were developed in the late 1970s and were designed to address deficiencies in the delivery of services to victims of sexual assault while providing a caring, supportive environment. Management of sexual assault victims is complex because many agencies are involved in the process of treatment, referral, and prosecution. These agencies include healthcare, law enforcement, judicial, volunteer support

agencies, and others. Prior to the development and implementation of SANE units, most victims of sexual assault were treated in local emergency departments (EDs), subjected to long waiting times in public areas, treated by healthcare providers who were not specifically trained in evidence collection procedures, and received inadequate follow-up care.

The mission of the SANE unit is to prevent further trauma to sexual assault victims in the healthcare environment by providing comprehensive, timely and coordinated treatment. In a SANE unit, healthcare facilities, community agencies, law enforcement and other legal agencies ideally work together to provide the best service to victims of sexual assault. SANE units provide a safe, non-threatening environment where specialized medical/forensic evidence examinations are conducted with privacy. Safety and confidentiality are stressed throughout the interview and examination process. This should allow for better and more timely evidence collection for the criminal justice system—evidence that is tailored toward investigation and prosecution of the perpetrator. The medical records are reinforced in court by professional testimony from the nurse who performed the forensic evidence examination. Thus, SANE units pledge to enhance not only the sexual assault victim's treatment and experience but also the legal community's ability to address this crime. The question of whether or not this goal is met is the subject of this evaluation.

New Mexico and Albuquerque Area Data

Estimating the incidence of rape and other sexual assault in New Mexico is difficult for many of the same reasons cited nationally: inconsistent definitions, under-reporting, and fear of the criminal justice system. Despite these barriers, there are several agencies in the state that track the incidence of sexual assault. Data from recent Uniform Crime Reports consistently show that the New Mexico forcible rape rate is among the highest in the U.S. In 1996, there were 1,088

forcible rapes reported to the criminal justice system in New Mexico but only 85 arrests were made (FBI, 1996). The New Mexico Coalition of Sexual Assault Programs tracks sexual assaults from a sample of rape crisis and mental health centers. From July 1995 to June 1996, 1,625 individuals reported a sexual assault in New Mexico, of which the majority (62%, n=1,014) involved sexual penetration. Most sexual assaults were perpetrated using physical force or manipulation but others involved verbal threats, use of knives, firearms or other weapons.

The Albuquerque SANE Collaborative

Until 1996, sexual assault victims in Albuquerque were seen at the ED of several hospitals. This was perceived to be less than ideal by many, including emergency physicians and nurses, the Albuquerque Rape Crisis Center, the Albuquerque Police Department and the local District Attorney. After two years of planning and fund raising, the Albuquerque SANE Collaborative opened its doors on October 16, 1996. Our evaluation concentrates on the Albuquerque SANE Collaborative and the impact that this unit has had.

To better understand our findings, we provide an overview of the typical flow of services prior and subsequent to the inception of SANE. The paragraphs below summarize a prototypical experience. The flow diagram (Exhibit 1) presents the text in diagrammatic form.

Typical Pre-SANE Emergency Department Patient Flow

Prior to SANE, sexual assault victims typically sought care at an ED of a local hospital. Upon arrival at the medical facility, the victim would state the reason for their visit to the clerical staff. Often, a patient would not initially state the primary reason for their visit. The patient was triaged by an ED nurse. A history of sexual assault was often elicited at this point and a rape crisis advocate was contacted and requested to come to the ED. Depending upon the patient's severity of illness and injury, the patient would be placed in the ED waiting room for an available

exam room. When an exam room became available, the patient would wait for physician evaluation. The physician would assess the patient and would manage any immediate illness or injury. If the patient desired to have a forensic evidence exam, the exam was conducted when resources were available. A physician, nurse, and rape crisis advocate all needed to be simultaneously available to conduct the exam. Following completion of the exam, the patient would be offered treatment for sexually transmitted diseases, emergency contraception, and definitive treatment for any injuries. If the patient desired to speak with police, a law enforcement officer would be dispatched to interview the patient.

Typical SANE Patient Flow

Since SANE, patients are seen for sexual assault either at a specialized unit at a centrally located hospital in Albuquerque or at another hospital facility if the severity of their injuries do not permit them to go to the SANE unit directly. SANE can be activated through several mechanisms, including the healthcare facility, emergency medical services, police, rape crisis, or by contacting the SANE unit directly. If the victim has injuries that require medical attention, the victim is referred to a local ED for treatment. If the patient needs hospital admission or requires a prolonged ED stay, SANE is contacted for onsite evaluation/forensic evidence exam. If the patient is medically cleared, the SANE nurse and rape crisis advocate are dispatched to meet the patient at the SANE unit. The SANE nurse provides treatment for sexually transmitted diseases and emergency contraception.

Scope and Methodology

Development of Evaluation Questions

Researcher-Community Collaboration

Our evaluation strategy for each area of interest was designed to be able to: 1) match each method to the appropriate research question and data type, 2) operationalize outcome measures to achieve an in-depth understanding of the results, 3) collect data from a variety of sources, and 4) triangulate data. We convened two advisory groups of community practitioners to develop evaluation questions: one for healthcare and victim services and one for law enforcement and prosecution. For the topics of healthcare and victim service, we brought together key staff from the Albuquerque SANE Collaborative, the New Mexico Coalition of Sexual Assault Programs, the Albuquerque Rape Crisis Center, the New Mexico Crime Victims Reparation Commission, a sexual assault survivor, and several emergency physicians. For the law enforcement and prosecution work group, we met with members of the Office of the District Attorney, victim advocates, Albuquerque Police Department, Bernalillo County Sheriff's Department, and the Bureau of Indian Affairs. Each of the researcher-practitioner teams met several times during the first six months of the project. An outside facilitator solicited input from the teams in two areas: 1) outcome questions of interest to their stakeholder group and their profession and 2) benchmarks to develop criteria for the proposed outcome questions. For example, the law enforcement and prosecution group wondered whether or not SANE improved the quality of their work. Objective criteria for an improved quality of work would include whether their work was time efficient, whether paperwork was streamlined, whether they had a cooperative witness, whether they had confidence in the evidence and whether the prosecution was successful. If the researchers determined that an evaluation question proposed by the stakeholders could not be

adequately answered from existing or new data sources, then the evaluation question was eliminated.

Following these meetings, the researchers identified appropriate data collection strategies, developed specific measures of effectiveness, and operationalized the indicators for measuring effectiveness. Data collection tools were reviewed by the advisory group.

A complete listing of the evaluation questions, criteria, and data sources used to answer the evaluation questions is found in Exhibit 2

The Research Team

The research team was composed of both faculty and staff. Cameron Crandall, MD, Research Director in the Department of Emergency Medicine coordinated the overall project and directed the quantitative analysis. Deborah Helitzer, ScD, Director of the Office of Evaluation at the UNMHSC directed the qualitative analysis. Drs. Crandall and Helitzer were responsible for the final report.

Shelly Wright abstracted and entered the medical record data.

Anne Worthington, MPH was the project coordinator. She was responsible for the day to day aspects of the project. In addition, she conducted all the stakeholder interviews. Marcia Mikulak, PhD, along with Ms. Worthington, coded and analyzed the stakeholder interviews.

Jonathon LaValley, BS, coordinated the quantitative aspects of the project, managed the databases, and conducted and programmed the statistical analysis in SAS.

Data Collection

Quantitative Methods

From the researcher and community collaboration discussed above, evaluation questions were generated and pertinent quantitative data sources were identified from the sexual assault

service providers. The databases collected for analysis included: medical service provider, police, district attorney, and court data. Two series of quantitative analyses were performed on these data to evaluate the impact of the SANE unit. The first set of analyses compared all datasets by pre- or post-SANE designations. Pre- and post-SANE designations were assigned by date of service or, in the law enforcement and prosecution data sets, by incident date. Those cases initiated or whose date of service preceded October 16, 1996, were designated as pre-SANE individuals; cases initiated after this date were designated post-SANE individuals. The second set of analyses involved the probabilistic linkage of UNMHSC and SANE medical records to police records, district attorney records, and finally court records to make comparison between pre- and post-SANE service outcomes possible. Details of the data linkage procedures are found under the section titled Data Linkage on page 23. Due to difficulties in linking across datasets, only the results from the first analysis are included in this report.

Prior to linkage or analysis, data were collected, checked and cleaned for errors, and aggregated. Victims of sexual assault who were female and 18 years of age or older on January 1, 2000 were included. The wide variety of data sources and formats resulted in a variety of data quality and completeness. In the sections below, we describe each of the datasets that were used for the quantitative analyses. Exhibit 3 below summarizes the source and sample size of the datasets that were used in the analysis.

Medical Service Provider Data

Medical service provider data were collected from the UNMHSC medical records through abstraction of charts for those patients who had a diagnosis of sexual assault in the hospital discharge and billing database. SANE medical record data on all sexual assault victims presenting to SANE during the study period were provided in Microsoft Access format by the

Albuquerque SANE Collaborative. Data elements that were analyzed in the SANE (n=715) and UNMHSC (n=242) medical record data included: demographics of each victim population, medical services provided, referrals made to other victim services, assault characteristics, forensic evidence examination and evidence collection, law enforcement involvement and victim-offender relationship information.

Police Data

Data were collected from the Albuquerque Police Department and the Bernalillo County Sheriff's Department for police cases that involved criminal sexual activity during the study period. Police data were obtained for 1995-1999, which included 6,112 observations representing 1,430 unique suspects and 2,891 charges. The case number identified unique incidents of sexual assault reported to the police. The overall quality of the police data file was limited; eight of the 21 variables provided by the Albuquerque Police Department had greater than 75% of the data missing. Data elements that were analyzed included victim and offender demographic information, case disposition and status, crime/statute violated, drug and alcohol involvement, evidence of previous domestic violence and involvement of domestic violence, weapons use and victim/offender relationships.

District Attorney Data

Data were collected from the Office of the District Attorney in the Second Judicial District regarding cases of felony criminal sexual assault. The district attorney database is comprised of three smaller data sets: a victim data set (n=498) which contained one entry for each victim name, a case data set (n=705) which contained case characteristics and charges, and a charges data set (n=6,285) which identified the description of each charge. Only cases that had at least one felony criminal sexual charges were included in the prosecution data set. Each component of

the district attorney database was indexed by a unique district attorney case number. More than 35 fields contained in this database had 90% or more missing data. Data elements that were analyzed included victim and defendant demographic information, charge definition, sequence (initial charges and final charges) and number, law enforcement case information, charge and case status, and a limited amount of information regarding case outcome and sentencing.

Court Data

The New Mexico Second Judicial District Court provided a database consisting of court record of felony sexual offenses. The database for this project was comprised of five data sets linked by a unique court case number, these datasets include the case data set (n=448) which described the party or individuals involved in the case including defendants, witnesses, prosecutors, etc.; a charge data set (n=3,480) which described the charges associated with each case; and three sentence data sets (community service (n=104), incarceration (n=133), and probation (n=175)) which described court case outcomes and the community service, jail time, or probation that resulted from each case. Thirty-three (33) fields found in the Court database had 90% or more missing data. Data elements analyzed include case disposition and status, defendant characteristics, initial and final charges, trial outcomes and sentencing.

Data Linkage

Two different protocols were used to attempt to merge UNMHSC medical records and SANE records with the police, district attorney, and court datasets. The initial attempt involved the linkage of victims to the police data via personal identifying information such as name, incident date, social security number, and date of birth. These linked records were then matched to district attorney and court data using suspect personal identifying information such as name, incident date, social security number, and date of birth. The first data linkage protocol

successfully linked only 66 records from pre- and post-SANE eras, as many of the databases lacked important personal identifying information or the information that was available was inconsistent. For example, there are multiple ways of spelling many last names, often addresses are no longer accurate, medical records and police records may have conflicting dates of incident, etc. A second protocol based upon probabilistic matching across databases was developed with assistance from Larry Cook, statistician from the Intermountain Injury Control Research Center in Utah. This second attempt at merging victim records across datasets utilized the LinkSolv (Strategic Matching, Inc., Version 2.3.436) probabilistic merge matching software. The first merge linked UNMHSC and SANE medical records to police data by using personal identifiers such as first and last name, date of birth, date of incident, date of medical/SANE service, race, city, zip code, quadrant, and street. Only records that merged with a match probability of greater than 95% were included in the linked data. These merged files were then linked to district attorney records using both the defendant and victim information. Other merge criteria used to link medical and police records to District Attorney records included: defendant/suspect first and last name, victim first and last name, defendant birth date, defendant race, and incident date. Only those records with a match probability of 95% were included. Finally, the merged records were linked to the court database using defendant first and last name, social security number, and case number. The resultant dataset consisted of 31 pre-SANE victims and related suspects and 227 post-SANE victims and related suspects. These data were then analyzed and compared. Because only 31 pre-SANE cases linked across the dataset, we have decided not to include these findings in the report. In nearly every case, the probabilistic linkage analyses provided the same inference as the binary pre-/post-SANE comparison.

Victim Telephone Survey

To solicit opinions from sexual assault victims about their experiences with medical care, victim services, law enforcement, and prosecution, we attempted to survey all pre-SANE UNMHSC patients and SANE clients. We used procedures that stressed patient confidentiality. The contact lists were provided from the billing data for sexual assault services at the UNMHSC or from the SANE client database. From this information, Albuquerque SANE Collaborative staff attempted to contact the sexual assault victim via telephone to determine if they would be interested in participating in a telephone survey. The SANE staff explained to the victim that if they agreed to participate that a researcher from the university would contact them to conduct the survey. The Albuquerque SANE Collaborative staff was instructed to attempt to call at least three times, on different days and at different times during the day. Victims were told that the survey would take approximately 30 minutes and that it was preferred if they could provide a date and time when they would be uninterrupted. Victims were informed that they would be compensated for their participation with a $15 certificate good at a local store.

The response rate for both the pre-SANE and post-SANE groups was very poor. The response rate for the UNMHSC group was lower than that of the SANE group (0.4% versus 1.8%). Most of the extremely low response rate was due to refusal to participate (16% pre-SANE, 9% post-SANE), incorrect and disconnected phone numbers (41% pre-SANE, 38% post-SANE) and no answers (43% pre-SANE, 51% post-SANE). In many instances, the victim told the SANE personnel that they would participate, but despite repeated attempts, the UNM personnel could not reach the victim. However, 13 telephone interviews were conducted. The telephone survey contact protocols and the survey instrument are provided in .

Statistical Analysis

The quantitative data were analyzed using standard techniques of exploratory and confirmatory data analysis. After the data were cleaned (for out-of-range values, etc.), frequencies of variables were examined. Wherever appropriate, categories were collapsed. After cleaning and removing non-qualified records, the resultant data sets were analyzed and compared. Basic frequencies and population characteristics were computed for both pre- and post-SANE groups.

The data were analyzed using a quasi-experimental approach. The primary comparison for all analyses was between pre- and post-SANE periods. The incident date contained within each of the datasets relative to the inception date of SANE (October 16, 1996) defined the pre- and post-SANE periods. All comparisons are based upon this binary division.

For the medical data, we used a standard of "not documented—not done" in our analysis. For example, if there was no documentation that the victim had a pregnancy test or was provided sexually transmitted disease treatment, we assumed that it did not occur.

At the time that the data were collected, some post-SANE cases had not had sufficient time to be adjudicated. Hence, to correct for this, we examined only post-SANE cases with greater than six months of time following the grand jury indictment, allowing for the time allotted under New Mexico's 'speedy trial' provisions. This correction eliminated 51 defendants with 143 charges who were removed from the post-SANE group in all analyses involving charge outcome.

Prosecution outcome was analyzed in two ways: 1) at the charge level and 2) at the defendant level. At the charge level, the units of analysis were the individual charges themselves. At the defendant level, the unit of analysis was the defendant. For the defendant level, we concentrated on the highest level charge that applied to their case.

Sentencing time was calculated as the sum of the time sentenced less time credited. Credited time includes both suspended and deferred sentence time.

We compared the distribution of categorical variables against the chi-square distribution and normally distributed continuous variables against the t-distribution for statistical inference. When continuous variables were not normally distributed (*e.g.*, many time interval data points were highly skewed), we used nonparametric methods. Whenever an expected cell frequency was less than 5, we used Fisher's Exact Test. In all cases, we used a two-tailed Type I error rate of 5% to determine statistical significance. SAS statistical software (version 8.2, Cary, NC) was used to conduct all of the quantitative analyses.

Qualitative Methods

We collected original data from key informant interviews and an advocate focus group. We conducted 28 interviews with representatives from the four target areas: 1) healthcare, 2) victim services, 3) law enforcement, and 4) prosecution. Participants were selected by the advisory board and through referrals from interviewees. The criteria for inclusion were both pre- and post-SANE participation in sexual assault services. We sought to achieve a variety of perspectives—both positive and negative—from the key informants.

To ensure consistent data collection, a single researcher conducted all the face-to-face interviews. The researcher explained the interview process, answered questions, and obtained informed consent from the key informant. Each interview took from 1 to 2 hours. The interview was tape recorded and later transcribed for review and coding.

The interview questions were developed by the evaluation team and revised by the advisory board. All interview tools included five general sections:

- Nature of the participants' duties as they related to sexual assault services;

- Pre-SANE experience;
- Post-SANE experience;
- Comparison of pre- and post-SANE impacts on the community; and
- Respondents' perception of the SANE Collaborative and suggestions for improvement of sexual assault services.

In addition to the general questions, each target area interview contained questions devised to capture information relevant to the participant's area of expertise (Appendix B.). The questionnaire was constructed in a "gap" format. The "gap" methodology asks interviewees to describe the ideal service delivery then to rate their experience. Researchers then measure the "gap" between experience and expectation. The researcher, rather than the respondent, makes the analytic comparisons. A codebook was developed from the interviews, and all interviews were coded and entered into the Atlas Ti program (version 4.2, Scientific Software Development, Berlin, 1997), a software program used to facilitate qualitative data analysis. A matrix of responses was compiled and data were analyzed by the researchers. The analysis of these data is summarized below in the Detailed Findings cross-reference section.

Interview process

Law Enforcement

Researchers conducted ten law enforcement interviews with representatives from the Albuquerque Police Department, the Bernalillo County Sheriff's Department, the New Mexico State Police, UNM Campus Police and the Bureau of Indian Affairs. Four of the law enforcement interviews were with Albuquerque Police Department sex crimes detectives who had investigated the majority of recent sexual assault cases in Albuquerque. Because field officers are often the first to respond to a crime scene, we attempted to interview two such officers. Only one officer was interviewed, despite efforts over six months to make contact with a second officer.

Division heads of the Bernalillo County Sheriff's Department and the New Mexico State Police Department were interviewed both for their personal experience and also to summarize the experience of those they supervise. A detective from the Bureau of Indian Affairs who had the most experience investigating sex crimes on Indian land was interviewed, as was an officer from the campus police at the University of New Mexico. A former Albuquerque Police Department sex crime detective who now serves as a liaison to the local District Attorney's office was also interviewed.

Healthcare

We interviewed six healthcare providers, including ED nurses from UNMHSC, ED physicians from UNMHSC and other local hospitals, SANE nurses, a physician expert in child sexual assault, and a family practice physician who had experience in treating sexual assault cases. All of the healthcare providers had several years experience in each of their respective fields and represented UNMHSC as well as other Albuquerque area hospitals. One of the ED nurses was also a SANE nurse.

Victim Services

Victim services programs were represented through six stakeholder interviews with therapists, staff and advocates from the Albuquerque Rape Crisis Center (ARCC), the Director of the victim impact program at the local District attorney's office, and the Executive Director of the New Mexico Coalition of Sexual Assault Programs for New Mexico.

A researcher-facilitated focus group was conducted with five victim advocates from the ARCC who had both pre- and post-SANE experience. Information from the ARCC advocate focus group has been incorporated into the analysis. As with the stakeholder interviews, the focus group was tape recorded and transcribed for later review and analysis.

Because of our inability to conduct the telephone survey, we elected to conduct a victim focus group so that we might at least obtain qualitative data on the victim's experiences and satisfaction with services. For the victim focus group, we placed advertisements in local newspapers and at the ARCC asking for women who experienced sexual assault and who received services at either UNMHSC or SANE. We also contacted the few women who had agreed to participate in the telephone survey to see if they would be willing to participate in a focus group. While several individuals did contact us, none of the women who responded to the advertisements had received services at UNMHSC or at SANE. None of the women who had agreed to the telephone survey would agree to participate in the focus group. Thus, we were unable to hold the focus group. As a consequence, we caution that any statements about the victim's experience with the system do not come from the perspective of the victim stakeholders themselves. While we were able to conduct 13 telephone surveys, we are concerned about the generalizability of their responses. We have decided to not include their responses in the report.

Prosecution

Judges and attorneys served as key informants for the prosecution section. Attorneys at the Bernalillo County District Attorney's Office (Violent Crimes Division), Juvenile Court, and the New Mexico State Attorney General's Office were interviewed. Three judges from the District Court were also interviewed. Public defenders and defense attorneys were informally interviewed but no attorney could be identified who had experience with both pre- and post-SANE clients. The comments of the public defenders/defense attorneys have been incorporated into the analysis of the prosecution data. Attorneys and staff at the United States Attorney's Office were interviewed regarding prosecution of cases on Indian land. Their experience was limited to one

case within the scope of our study. An attorney from the US Attorney's Office was interviewed by telephone and these comments were included in the data analysis.

Stakeholder quotations are provided as examples of statements about a particular topic. These examples were chosen because they were typical of the larger dataset. Stakeholder interviews are cited by number (Example: [HC#4]) in this report. We do not identify any of the stakeholder interviewees in this report.

All aspects of the study design and data collection were approved by the University of New Mexico Health Sciences Center Human Subjects Institutional Review Board.

Detailed findings

The findings below are organized to mirror the chronological experience of a sexual assault victim as she moves through the continuum of sexual assault services. We first begin by describing the study population, and then we describe the healthcare and victim services from the perspective of the healthcare and victim service providers. Next, we describe the outcomes reported by law enforcement and prosecution. Finally, we describe areas of impact that cross through all four areas of evaluation.

Demographics and Characteristics of the Study Population

Demographic characteristics of sexual assault victims are presented in Exhibit 4. Pre- and post-SANE sexual assault populations were similar with respect to age, ethnicity, geographic area of referral, and victim/offender relationship. Because of human subject considerations, we only examined cases where the victim was 18 years or older. Among the pre-SANE sexual assault victims who sought services, the mean age was 27.2 years of age. Post-SANE victims who sought services were on average slightly but not significantly older (mean age 29.1 years, p=0.195).

Most sexual assault victims knew their offender both pre- and post-SANE. The proportion of unspecified/missing relationship information between victim and offender was lower in the post-SANE group (pre-SANE: 36.2%, post-SANE: 13.0%, p<0.0001). While several miles (~5 miles) separate the UNMHSC and the Albuquerque SANE Collaborative, pre- and post-SANE sexual assault victims still came from similar areas of the city. Both pre- and post-SANE groups included individuals referred from correctional facilities, New Mexico tribal reservations, and from out-of-state areas in the Navajo reservation. For the purposes of comparison and because of the limited number of these out-of-state individuals (n=2), these records were omitted. The majority of the victims in the pre-SANE and post-SANE groups were from the Albuquerque metropolitan area. The distribution of zip codes within Albuquerque was compared pre- and post-SANE and was not found to be significantly different.

Pre-and post-SANE victims arrived at the site of medical care or examination using similar transportation methods; most frequently victims arrived alone. The majority of pre- and post-SANE victims arrived at the medical care facility by ambulatory means (Exhibit 4). More sexual assault victims arrived by ambulance in the pre-SANE sample. A slightly greater but not significantly different number of post-SANE victims were documented as accompanied by law enforcement (29.8%) than pre-SANE (24.1%) (p=0.25). A significantly greater percentage of post-SANE victims (27.3%) were accompanied by a spouse or a significant other compare to pre-SANE (7.4%) (p=<0.0001).

Characteristics of the sexual assault are in Exhibit 5. Post-SANE records contained information about alcohol, drug use, and domestic violence; however, no comparison data were available pre-SANE. The location of the assault was more commonly known in the post-SANE data than pre-SANE. Both pre-and post-SANE victims were assaulted on similar days of the

week and similar times of day. Saturday and Sunday represent the largest percentages of assaults by day of week. Assaults for pre- and post-victims generally occurred at night between midnight and 4 AM. Most pre and post-SANE victims were assaulted by one assailant (pre-SANE 89.1%, post-SANE 86.2%). Weapon data were not typically recorded in the pre-SANE medical record which precluded a pre- and post-SANE comparison. From the police data, weapon use was similar pre-and post-SANE.

Healthcare and Victim Services

Continuity of Care, Unified Services, and Uniform Communications

Stakeholders reported that prior to SANE, sexual assault victims were seen in a variety of care and service facilities. Treatment was fractured and inconsistent. Post-SANE, the data suggest that all cases of sexual assault that did not involve major injuries went directly to SANE. Informants perceive that now there is one facility instead of many agencies, which provides a greater continuity of care within both the medical system and entire sexual assault system. Informants concur that SANE provides comprehensive services including medical exam interview, treatment, forensic evidence exam, medical documentation for prosecution, police interview, STD treatment, pregnancy prevention, emotional support, referrals, follow-up, sexual assault information, and legal services. They believe that all services are provided with confidentiality, safety, and privacy.

> "Their [SANE] services are more personable, more private, [and] more comfortable. I think that the police like it better also...you know, ideally, the SANE situation is set up... so that everything goes smoothly, medical to law enforcement to legal...I think it's a lot better that a survivor can have a police interview at the SANE location. It's a much better atmosphere, I think both for survivors and a better atmosphere to advocate." [VS#4]

Improved Training in Sexual Assault Treatment and Evidence Collection for Healthcare Providers

With fewer medical providers involved and standardized healthcare provider training, informants perceive that SANE brings consistency into the treatment and care of sexual assault victims and establishes a standard of care. The data show that all SANE nurses receive the same sexual assault treatment training and use the same terminology and reporting structures. SANE providers reported that they are trained to use a protocol, unlike ED healthcare providers, where training is inconsistent and a standard protocol is often not followed.

> "...some of the frustration that the ED staff would feel, too, is that we would spend a lot of time with sexual assault victims and never really saw any benefit." [HC#5]

Prior to SANE, ED nurses reported that they were often fearful of doing forensic evidence exams—afraid that they were not collecting all the evidence. Pre-SANE, ED doctors were also unfamiliar with rape kits and how to use them. SANE nurses are forensic nurses who receive mandatory training in how to conduct rape exams, collect evidence, take photos of injuries, and detect and photograph microscopic tears using a colposcope. SANE nurses report that they are comfortable and confident conducting forensic evidence exams because of their training and because they are now specialists in evidence collection.

> [Pre-SANE] "We pretty much dreaded doing sexual assault exams [and were] a little uncomfortable that we were doing something wrong, that we were collecting the evidence wrong and it wouldn't be worthwhile to the victim...we always had this feeling that since we did the exams rarely, we weren't doing them correctly, or the fear that we wouldn't do them correctly, wouldn't gather the evidence correctly, so we would do it pretty much cookbook. You know, we'd get the list out, make sure we did it. We wouldn't quit until we were completely done. So each exam, just the collection part would take maybe a half-hour or so. So I would always feel like I would have to have everything else in the ED cleared up before I even went into the room to talk to the victim" [HC#5]
>
> [Pre-SANE] "The physician would be really frustrated because they didn't even know what a rape kit was, this would be maybe [a community

> hospital] type, where very few rape cases were brought, and here's a physician who's had to call somebody to get a rape kit cause they didn't have any more in their hospital...and then, he's frustrated, because he doesn't know exactly how to do it." [VS#3]

Informants reported that the training SANE nurses receive has led to increased medical provider understanding of physiological and psychological affects of sexual assault. SANE nurses are trained to know what questions to ask patients, and are able to make decisions regarding what forensic evidence to collect. SANE nurses, having a greater understanding of sexual assault combined with more time to spend with victims, are better able to include the patient in choosing options during medical forensic evidence exams, and are more able to give complete explanations of exam procedures.

> "...we as [victim service agency] are in training with the SANE nurses more so that we can talk a little more about the emotional dynamics of sexual assault...PTSD, sexual rape trauma syndrome..." [VS#1]
>
> "The training made forensic exams successful and gave confidence to nurses." [HC#4]

Increased Efficiency, Decreased Workload and Improved Job Satisfaction for ED Staff

Informants reported that pre-SANE, healthcare professionals in ED settings dreaded attending to sexual assault victims because of the length of time required for exams, the emotional trauma of the victim, lack of training in collection of sexual assault evidence, and the stress of the ED. Now, SANE nurses do not feel over-extended and stressed by external service delivery demands while they serve sexual assault victims. Healthcare informants reported that SANE was "more of a non-medical unit that provides more security, comfort, and homey environment—not a clinical environment" [HC#4] making it possible to work in a calmer atmosphere.

Informants reported that SANE provides a better sense of job satisfaction for nurses by providing a specialized service in an atmosphere that is created to support victims of sexual

assault. Healthcare providers no longer feel isolated and alone. In the post-SANE era, when patients are badly hurt and require treatment at an ED, those medical providers reported that they really appreciated having SANE nurses help them collect the evidence from victims in the ED. Better yet, most of the victims go immediately to SANE, bypassing the ED altogether.

> "In terms of the medical community, they know about SANE, they are glad to have SANE. This has been a good addition for them." [HC#3]
>
> "It helped us because it got them [assault victims] out of the ED. That stress wasn't there anymore. I think any ED nurse will agree with me. It was the best thing that happened to the ED." [HC#4]

Healthcare informants reported that SANE has freed-up ED medical personnel. There is a more efficient use of healthcare provider time, because at SANE, scheduling of forensic evidence exams can occur. However, a downside is that residents in emergency medicine, family medicine, and obstetrics and gynecology do not get the required training in forensic evidence examinations and medical management of sexual assault, as these exams are now held offsite at SANE.

> "[Pre-SANE,] no one really enjoyed doing it. I mean that was the thing we didn't like; we really just didn't enjoy doing it. It was lengthy, the kit had to be precise, [there were] probably ten to twenty envelopes of different things you had to collect, so it was a very lengthy procedure. So if you were busy, if you had other patients that were bad, you know it took a lot of time, to be away from your other four or five patients. You know you need to do this, you need to go, you need to get the medicine, you need to do this you need to that, and you can't really do all that and stay there with the girl. I mean you would go in and out, you know you had to draw the blood, give the medicine, you had to do the procedure, and you had to hold the evidence until either the police showed up, or security took you down to the locked area in the basement." [HC#6]
>
> "I'm the expert [a SANE nurse]. [The ED providers] call me for every rape that comes in now." [HC#4]

Improved Healthcare Provider Attitudes Toward Victims and Decreased Use of Stereotypes About Sexual Assault Victims

Informants report that pre-SANE, stereotypes about sexual assault victims were common among healthcare providers. Attitudes about sexual assault victims were relatively negative because of the time and attention they required compared to other patients. The SANE Collaborative has helped debunk negative cultural stereotypes regarding rape: who's responsible, who's to blame, and how a victim is to be treated after the trauma of rape.

Informants report that forensic evidence exams are perceived as uncomfortable for the victim. The collection of forensic evidence takes a long time and required a different type of care than the ED providers' normal routine. There is very little, if any, privacy in the ED, and if they weren't physically hurt, sexual assault victims would have to wait a long time to be seen. ED providers avoided the victims—they avoided the work.

> "Before SANE it was very frustrating and time consuming for an emergency room nurse. I think it almost left us with a feeling of guilt because of the way they [victims] were treated in the ED." [HC#4]
>
> "It [healthcare provider attitudes] varied all the way from empathy to anger...depending on how busy we were...we kind of took it out on the patient, you might say...In the ED there was more of an attitude of blaming the victim" [HC#1]
>
> "There is always that preconceived notion, that stereotypic view that was held by providers. If it was a date rape or something, and they [doctors] didn't take time to really explore the story it was like they [victims] weren't really raped" [HC#2]
>
> "They [ED staff] avoided those patients and they avoided the work. Really what they were doing was avoiding the work. The time, the staffing, and the documentation. I bet in there too, it's just that they are uncomfortable. There are lots of people out there that have been hurt in a sexual way either as a child or as an adult and cases like this are very difficult for them." [HC#3]
>
> "I think dealing with medical personnel that really understood the whole dynamics of sexual assault [was important]. You know, you had to do a lot of brushing over or mediating to make sure that the survivor didn't take things wrong or feel like she was being blamed. I had one doctor come in

> and say, 'Well, you might have been sexually assaulted but I only found one sperm underneath the microscope' implying that, well I only found one so it couldn't be so bad but if I had found fifty then it would have been bad." [VS#1]

Improved Relations with Law Enforcement and Prosecution Communities

Informants perceived that the prosecution and legal community are more accessible to the medical community since SANE. SANE nurses understand law enforcement procedures better. Law enforcement stated that there is increased rapport with victim services and with nurses since SANE.

Prosecution staff found that the quality of evidence gathering has improved. Prosecution staff found medical reports more reliable, easier to read, more efficiently transferred into their domain, and more effective in court.

Informants report that pre-SANE, there was little consistent contact between healthcare providers and the District Attorney's Office. The ED and healthcare providers often didn't know what the outcome was for sexual assault victims. Since SANE, follow-up is more thorough.

> "[Pre-SANE,] it depended on whether we spoke to the staff during previous cases and had built a relationship with those individuals and they could help us out in whatever way they could. Otherwise, there was no relationship; it was difficult to communicate with them [healthcare providers]." [LE#10]

> "I don't know if you really had a chance to establish rapport with the medical personnel at all the different hospitals [pre-SANE]...there wasn't a chance to establish long term friendships or work habits." [LE#5]

> "We [healthcare, victim services, law enforcement and prosecution] worked together but it wasn't a close working relationship...actually you got four different points of view. Now there's a lot less stress...you get to know them on a first name basis. You even have a better atmosphere where you can have more casual conversations getting to know the person and being more relaxed. Therefore there's a lot more interaction between everybody." [LE#3]

Improved Relations with Victim Services/Advocacy Community

Informants report that SANE nurses participate in community events, go to conferences, and participate in trainings with other organizations. Pre-SANE difficulties for advocacy services included waiting for doctors, concerns about security and safety, and making sure an advocate would be available. Advocates often stated they were in a position of having to challenge stereotypes within the legal and medical venue and hence they were in an adversarial position. Advocates stated that they had to "brush over" events in order to make sure victims didn't take inconsiderate healthcare provider statements about their rape in the wrong way. Also pre-SANE, advocates stated that there was less support and contact with legal services and law enforcement. Post-SANE, some victim service interviewees stated with mixed emotions that perhaps SANE nurses felt they could now do the advocates' job. Advocates felt that while their role was valued in the ED by the staff, sometimes the SANE nurses acted as if the were in the way. This was especially true for the younger, less experienced advocates.

Interestingly, healthcare informants provide an alternative perspective. Prior to SANE, healthcare professionals at times stated that rape crisis advocates were in the way and annoying.

> "[Pre-SANE,] with the advocates, that there were a lot of them that had agendas or issues...they were an annoyance." [HC#2]

Post-SANE, healthcare providers often stated that rape crisis was a source of help and support for rape victims. However, one advocate reported significant strife between SANE nurses and the rape crisis advocates. This informant felt that the SANE nurses were not properly trained to function as a victim advocate.

> "...This is a very typical complaint to both early SANE directors: is that they did not respect the Rape Crisis Centers for knowing something. The felt that they were the medical profession, they had this going on, they had the best training in the country to become a SANE nurse, and therefore nobody could tell them anything. And here are Rape Crisis advocates, and Rape Crisis staff coming in saying, 'No actually we do know a little—and

> we know that this will need prosecution, and this one needs the law enforcement, [etc.].' And, while they have good training as a SANE nurse, they were trained as a nurse, they're trained as evidence collectors, and as medical providers—not as a Rape Crisis advocate and they thought that they could take on way more than they should. They wanted to be both the advocate, and the SANE nurse, and I can't tell you how typical this is. They give 'zero' respect to their crisis." [VS#3]

Improved Quality and Standard of Healthcare

Both quantitative and qualitative data strongly suggested that the quality and standard of healthcare received by the sexual assault victim improved with the advent of the Albuquerque SANE Collaborative. Healthcare services were more consistently documented as provided post-SANE than pre-SANE. Pregnancy testing, pregnancy prophylaxis, and STD treatment were more often reported as provided in the post-SANE than the pre-SANE group. In addition, the quality and quantity of referrals also increased.

Post-SANE, pregnancy testing was completed significantly more often compared to pre-SANE (87.6% vs. 79.2%, $p=0.005$). Likewise, pregnancy prophylaxis was accepted more often post-SANE compared to pre-SANE (87.1% vs. 66.1%, $p<0.0001$). Treatment for sexually transmitted diseases was accepted significantly more often post-SANE than pre-SANE (97.0% vs. 89.0%, $p=0.015$).

A colposcope was unavailable in the ED, but was documented as used in the exam in 8.3% of the pre-SANE cases (cases seen in a UNMHSC clinic—not in ED). Post-SANE, a colposcope was used 87.6% of the time to obtain microscopic photographic evidence of injury ($p<0.0001$).

Informants' statements perceived that pre-SANE follow-up care was inconsistent and required heavily upon the victim's initiative. Post-SANE, follow-up is coordinated within SANE with the help of reminder phone calls and motivation.

> "[Pre-SANE, follow-up] was inconsistent. It was inconsistent kinds of care; people who didn't know much about the issues would end up seeing

them. There wasn't good follow-up. There wasn't a coordinated kind of response." [HC#3]

"[Pre-SANE] the quality of medical services was good to excellent, the quality of the forensic exam and follow-up were fair to poor depending" [HC#3]

The overall time that elapsed from initial contact until discharge from the facility differed significantly pre- versus post-SANE. Pre-SANE, the average time from check-in to discharge was 4 hours and 16 minutes. Post-SANE, the average time from dispatch to discharge time was 3 hours and 26 minutes. Thus, on average, the SANE experience saved sexual assault victims 49 minutes compared to the ED experience ($p<0.001$).

ED and SANE models of service delivery are fundamentally different; therefore, the time periods pre- and post-SANE are inherently different. Exhibit 7 on page 93 compares roughly similar time intervals experienced by women in the pre-SANE era compared to the post-SANE era graphically on the flow diagram. Exhibit 8 on page 94 displays these times in tabular form. During each phase of care, sexual assault victims experienced significantly shorter times compared to the pre-SANE era.

Pre-SANE, informants believed that victims were re-victimized by the ED process. That perception appears to have diminished significantly as informants consistently reported a perception that post-SANE victims had universally positive experiences at SANE.

[Pre-SANE] "Most of them were just walking out, weren't waiting, the majority of people that we would call. [We would ask,] 'Why didn't you [stay]? Oh I wasn't going to wait, I wasn't going to go through that, and I didn't want to go through that.' Many of them walked out of the hospital during the wait. If the officer didn't remain with them they would just walk out and they would never go back, they just didn't want to deal with that, the whole atmosphere of the emergency room, the whole re-victimizing of them sitting there being looked at, if it was a Hispanic male that raped them and there were four or five that looked just like her attacker in the emergency room bleeding, everybody reminded her of her attacker in the emergency room so they were just walking out." [LE#9]

> "Instead of complaints about anything with the medical exam I'm having victims who bring it up saying that it was really amazing. That is was a horrible thing to go through but everybody was so nice and it was quiet and she felt safe and just grateful" [PS#2]

SANE decreased the trauma of going to the healthcare facility for victims.

> "The fact that there is a SANE unit is a statement itself; that you are welcome here and you are important, and what has happened to you is a significant thing and this is where you're going to get care." [VS#4]

An analysis of a different dataset, the UNMHSC ED patient tracking system (an ED computer system that tracks patient's arrival, chief complaint, diagnosis and disposition), documented 37 patients with a complaint of sexual assault who left without being seen by a physician between February 1994 and December 1999, representing 4.3% of all patients with a chief complaint related to sexual assault from the same time period. While the number of patients who presented to the ED with a complaint of sexual assault has declined since the inception of SANE, the proportion that leaves without being seen has not changed. The number of sexual assault victims that were "lost to excessive wait time" or "left without being seen" was not available from the SANE records but it is believed to be a lower number since nurses are dispatched to meet the patient at an appointed time. The "no show" rate was also not available. Anecdotally, the SANE Collaborative estimates that about 7 to 10 patients per year leave without completing their care (Constance Monahan, Director, Albuquerque SANE Collaborative, personal communication, January 31, 2003). Consequently, the data suggest that fewer adult women sexual assault victims leave without being seen in the post-SANE era.

Referrals

Exhibit 6 provides the number of sexual assault victims who had documented post-care follow-up. Documented referrals increased in both number and comprehensiveness post-SANE compared to pre-SANE, including a greater proportion of referrals to rape crisis, social services,

and to STD clinics. The average number of documented referrals pre-SANE of 1.7 referrals per victim increased significantly post-SANE to 4.0 referrals per victim (p=0.0237).

Pre-SANE, healthcare providers stated that follow-up procedures were inconsistent or inadequate.

> "Well, that's the problem with the nature of the Emergency Room is those results come back a couple days later, when many times I am not there. So they would get, you know, put in with the regular cultures from the other patients, and the nurse or the doctor on duty at that time would follow through on contacting patients about the results of positive cultures. And so the staff on duty at the time had no connection with the patient, may not even know what was going on, and they would find themselves calling patients to give them the results of tests. Where confidentiality was a problem, they would call them and say, 'We have your test results. Come back to the Emergency Room and get them.' So none of those were good answers—you know, I'm sure a patient who has just spent two or three hours in the ED doesn't want to come back to see their results, and they also don't want the results given over the phone. So follow-up, I think, was a big problem." [HC#5]

The SANE Collaborative has a formal procedure for follow-up services. This appears to be insufficient, however, because a commonly re-occurring subject among stakeholders was the need for even more comprehensive and thorough follow-up services for victims. These follow-up services should include medical, mental health, prosecution advisement, access to and communication with law enforcement and extended contact with advocates throughout the legal and prosecution system. Stakeholders also stated that follow-up and intervention services should be linked.

> "I think there needs to be more follow-up [post-SANE]. Being raped is a big deal, but the way we treat it is just by doing a rape kit, giving them their medicine and then good-bye. They have a follow-up clinic but it's hard to get people to come back in. So I think that needs to be worked on." [HC#3]
>
> "I guess maybe there should be some sort of some way to try to impact the victim to assure a greater response by the victim on secondary follow-ups such as counseling, medical exams things like that." [LE#1]

> "[Talking about areas for improvement post-SANE] the thing that we are working on, you can do some intervention afterwards that is medical and if you can hook the medical and mental health piece together instead of having it be separate, people can see that." [HC#3]

Improved Patient Confidentiality

Informants believe that patient confidentiality has been greatly improved through SANE.

> "The victim's dignity would be taken away even more because you walk in and you have to tell the doctor that this person is in because she was raped. Everyone hears about that and the victim knows that they are going to be victimized again in the hospital, so then there is no confidentiality there at all." [LE#2]

> "[Now] the victims know about the SANE unit and they know it's going to be kept confidential and they can go there and they don't have to be embarrassed like in the ED" [LE#3]

Improved Atmosphere for Sexual Assault Victims Improves Psychological Well-Being

Informants perceive that SANE provides more privacy and more personalized care for patients than is possible in the ED. They state that SANE has increased the comfort level of sexual assault victims because treatment and interviews are now conducted in a private, quiet, "non-clinical," and secure environment. Informants report that SANE gives nurses a sense of authority and place so that they are able to better control the environment for victims. It allows them to focus their attention on the victims of sexual assault, thus enabling them to attend to the victim's emotional as well as physical needs.

> "I think, overall, it affects their whole healing process, if that is positive, it facilitates their healing, if that is negative I think it decreases their ability to heal quickly and effectively. Because you know if they had a bad experience, are they going to associate that with our advocacy and then not come to us, I think as a whole experiences are pretty good at the SANE unit." [VS#1]

Victim Satisfaction

A substantial amount of effort by the researchers was devoted to obtaining the input of sexual assault victims who had received services at either UNMHSC or SANE. Despite numerous efforts, we were only able to reach an extremely small number of victim informants.

We were only able to interview one of the several hundred victims in the pre-SANE era and 12 from the 715 in the post-SANE era. As a consequence, we do not feel that we can reliably gauge the comments from these few respondents. The opinions from the very few victims who agreed to participate in the telephone interviews were varied and at times conflicted with the perceptions of the stakeholders. The varied victim responses may reflect on where they are in the continuum of healing from the assault. Victims also have little comparison—their experience was traumatic, period.

Since researchers were able to speak to only a few victims directly, the information on victims' satisfaction comes largely from informant's perception of victim attitudes.

Stakeholder informants reported that SANE has had an overall positive effect on the satisfaction of victims and had improved the coordination of services that they now receive. Informants perceive that victims heal better; they are not shamed as they once were, and law enforcement is more effectively involved.

Informants perceived that SANE affected a change in atmosphere, degree of privacy, and level of confidentiality for victims. Informants perceived the ED as a hurried environment that lacked privacy and confidentiality for victims. In contrast, informants felt that SANE provides a better, more confidential, environment for victims.

> "We could direct them to the EDs but they weren't as inclined to go there. You can't say 'go to the ED, it's quiet, it's private, you won't have all these people walking by looking at you and you can talk about your sexual assault'" [VS#1]
>
> "[SANE] is more of a non-medical unit. That provides more security, comfort, and homey environment. Not a clinical environment. Couches and stuff like that." [HC#4]
>
> "Because [SANE] is a self contained unit, the rooms have doors on them and people are aware of confidentiality. People become very aware of confidentiality, as opposed to seeing kids running around with their gowns

> on and half undressed and all that. It gets a lot easier to maintain confidentiality; you only see one kind of patient with one type of problem." [HC#3]

Prior to SANE, informants perceive that victims were not getting complete explanations of each procedure nor the risks associated with them.

> "[The victims] would sit around in rooms that were bare-bones at best, typical emergency room cubicles and wait for somebody to come in to tell them what was going on and what they were waiting for. None of them know what was going to occur for an exam. They were not apprised of risks." [HC#2]

Informants reported that victims are re-victimized in the ED, especially in the waiting room, but at times also by the ED provider. By contrast, the informants perceive that SANE increased the likelihood that victims felt less re-victimization both because of the "homey" environment of SANE as well as by the medical and law enforcement personnel.

> "The victims would loose more dignity in the Emergency Room because they were victimized again by the physicians and the nurses. They would feel like their crime was not as serious as someone who was stabbed or shot." [LE#2]

> "I think there are so many different things that are all so important [about SANE]. The decrease in shaming the individual, how they are treated, the fact that law enforcement gets involved, we have trained medical personnel, there's a place for them to go. I think, overall, it affects their whole healing process, if that is positive, it facilitates their healing, if that is negative I think it decreases their ability to heal quickly and effectively." [VS#1]

Law Enforcement and Prosecution

Law enforcement and evidence collection

Comments on Overall Improvement

Informants reported that SANE vastly improved evidence collection, storage, and chain of custody. Informants believed that the environment of SANE was more conducive to cooperation with law enforcement.

> "It's 99.9% positive [SANE]. It's documented and preserved evidence that we use to support the victim's story and because we have SANE we have victims not pissed off with that part of the process right away. They are more willing to talk with us, talk with law enforcement. And then when we are able to proceed on a case we are not in that weakened position [as we were pre-SANE] that well 'the medical evidence is lost' and we somehow look bad because we can't get the cooperation, we can't get the evidence, we can't use it, it wasn't sealed properly, it wasn't collected properly. All of that has put our cases in a stronger position because evidence is collected. Things are documented and we have the witness available for the whole process and that has put us in a stronger position to get better pleas, to go to trial." [PS#2]

Informants also perceived that SANE has increased the ability of the victim to give reliable statements to law enforcement, increasing the efficacy of the legal process.

> "It was hard to conduct an interview [in the ED]. You would...conduct your interview behind a curtain and it was a lot more difficult for the victim to talk to you about what happened to her. Then you have to have photographs taken because then you have the right instruments to take photographs there like you [now] do at SANE. So a Field Investigator would come out to take overall photographs and usually they are male. And the female victims would feel uncomfortable...[At SANE,] we [are] able to talk to the victim in an atmosphere that is not so threatening like the ED." [LE#2]

Reporting to police

According to medical record data, a greater proportion of victims reported to police post-SANE compared to pre-SANE (66.6% vs. 45.7%, $p<0.0001$).

Perpetrator Type

Post-SANE, the victim-perpetrator relationship differed somewhat from the pre-SANE period. There were significantly more intimate partner assaults (5.9% vs. 11.0%, $p=0.0433$), more date and acquaintance assaults (33.0% vs. 41.4%, $p=0.037$), but fewer family member assaults (11.3% vs. 2.4%, $p<0.0001$) pre-SANE compared to post-SANE. Some of this difference may be explained by a significantly fewer number of unknown victim-offender relationships post-SANE compared to pre-SANE (12.0% vs. 21.7%, $p<0.001$) (Exhibit 4).

Increased Efficiency of Evidence Collection

Informants reported that the efficiency of evidence collection has vastly improved since the advent of SANE.

> "You could accomplish in an hour there [SANE] what would take you three hours to accomplish in an emergency room." [LE#3]
>
> "SANE is fantastic. They collect the evidence, they seal the evidence, they store the evidence, and they transport it down here and tag it into evidence that has freed up so much available time." [LE#5]
>
> "The collection of evidence, our ability to get medical records from SANE and understand them is night and day difference. So there are a lot of things in the process of prosecution that are so much easier now." [PS#2]

Increased Quality of Forensic and Examination Evidence Collection, Storage, and Results

A greater percentage of sexual assault victims consented to sexual assault evidence collection post-SANE compared to pre-SANE (Exhibit 6, 98.0% s. 47.0%, $p<0.0001$). Also, use of a colposcope was not routinely performed pre-SANE; post-SANE it is a routine component of the forensic evidence exam and includes photography (Exhibit 6, 8.3% vs. 87.6%, $p<0.0001$).

Informants perceive that pre-SANE, the quality of the forensic evidence exam and follow-up were fair to poor. They report that post-SANE, the quality of the forensic evidence exam improved markedly.

> [Post-SANE,] "the forensic evidence was excellent. It was useful because it was clear that the evidence had been collected very carefully and very meticulously. Just the thoroughness of the documentation of even the most minor injury or scratch on the body was thorough." [PS#1]
>
> "They [SANE] do good forensic medical collection consistently on the patients that go there, whereas before it was real spotty." [HC#3]
>
> "Things like the photography, interior photos of the vagina, things like that have taught me a lot more about evidence, about the body itself and the injuries and how things work." [PS#2]

Decrease in lost or damaged forensic evidence

Informants report that pre-SANE, evidence was lost because the health providers were not consistently giving out the correct information to the victims about what they could and couldn't do with regards to maintaining forensic evidence.

> [Pre-SANE] "From the forensic standpoint, nobody told them not to go to the bathroom, not to eat, and not to change their clothes, so a lot of evidence was lost." [HC#2]

Informants said that SANE has standardized the collection of evidence in sexual assault exam kits, assisting law enforcement officers in evidence reading.

> "[Pre-SANE, the quality of written medical documentation] was fair, but not as good as it is now. You didn't have a complete coherent statement of what had happened medically. We had to try to decipher doctor's notes that were often not legible." [PS#3]
>
> [Pre-SANE] "There were so many different doctors and different hospitals that a lot of them would only take what they thought was going to be relevant to the case. They would make their own determination of what was relevant and that wasn't always helpful to us, and that's an understatement." [PS#2]
>
> [Post-SANE,] "when the evidence is brought from them to our criminalistics people they already know what its going to look like. It isn't foreign to them. They don't have to guess like: 'what did this doctor do?' It's standard for each one, so they know what they are dealing with." [LE#2]
>
> [Post-SANE,] "the quality of the documentation or history is much improved because again it is more standardized and they are trained specifically for this. They are not putting things in the report that are inflammatory and their own synopsis of what the victim said because they are trained how to take these particular reports. The records that we are getting are more detailed than they used to be from an ED." [PS#2]

Informants consistently stated that the quality of the evidence collected, including photos, has improved greatly since the advent of SANE. The improved communication among law enforcement, prosecution and SANE has enhanced the understanding of the photographic evidence.

> "[Pre-SANE,] the quality of evidence was difficult because, it was difficult for the DA to have adequate evidence in front of them to proceed with prosecution because they had to rely on testimonial evidence, and that's sometimes pretty difficult." [LE#9]
>
> "With SANE we now have the photographs to document the close up genital photos which clearly document injuries that otherwise would not have been documented." [PS#1]
>
> "[Post-SANE,] now it's more than just looking for bruises or cuts. We can prove it happened on the basis of body fluids and hairs." [PS#4]

Law enforcement and prosecution informants reported that SANE created a system that helped ensure a high quality of evidence preservation.

> "The great thing about SANE is that they can preserve the evidence for us." [LE#2]
>
> "[SANE] has put our cases in a stronger position because evidence is [better] collected. Things are documented and we have the witness available for the whole process and that has put us in a stronger position to get better pleas, to go to trial." [PS#2]

With SANE, informants believe that the chain of custody of evidence has been maintained much better than before SANE.

> "[Pre-SANE]...for us to try to find somebody and bring them back just to get the chain of custody so we could use whatever forensic evidence we had, it was a huge struggle in almost every case it was a nightmare." [PS#2]
>
> "Like I said, [post-SANE] it was a lot more efficient, a lot more thorough. And when it got to trial, you had a lot easier time explaining your chain of evidence. It was a lot easier to say that it went straight from SANE to evidence, versus you sitting on the stand and them going, 'What happened there?' 'I don't know.' You know, it [SANE] made a big difference with that...I think a lot easier for our forensic, to have that consistency. The chain of [custody] going straight from SANE to evidence alleviates a lot of the doubt." [LE#3]
>
> "In the early years of my practice, defense attorneys challenged the chain of evidence frequently but now chain of evidence isn't challenged." [PS#1]

In addition, informants reported that the method by which evidence is collected is of highest standard.

> "[Pre-SANE, doctors] weren't looking for particular things, they weren't as careful with the internal exams in noting things like redness, stiff neck, if someone had been choked. So these things frequently [didn't] get documented because they weren't observed." [PS#2]

Informants also believe that the privacy and safety of the SANE atmosphere makes it easer for the witness to relax and tell the whole story. This makes the witness statements more likely to be reliable.

> "In the ED, you were, 'let's go, let's get this done while we can.' There [SANE] you can say, 'Do you want to take a break? Do you need to get a drink of water? If you don't feel real good just take a break.' And then they can gather their thoughts and they can come back more of a whole person. The statements were usually a lot more accurate...In a relaxed atmosphere [like SANE] you have a much more reliable witness statement. No matter what, the situation is going to be uncomfortable, but if you make it more relaxed, they are more relaxed and tell you more." [LE#3]

Prosecution informants stated that prior to SANE the written evidence was not good, nor consistent. It was attacked in court by the defending counsel, making it seem that the victim changed her story.

> [Pre-SANE] "The doctors weren't noticing that if they put something different down, or if they re-interpreted it as they were writing that could be a really bad thing for the prosecution. It made the victim seem like she changed her story, when in fact she didn't. They just heard it wrong, wrote it down differently, [and] paraphrased it. The defense tried to use that as evidence that the victim changed her story." [PS#2]

Quality of law enforcement work

Informants stated that the quality of the law enforcement officer's job related to sexual assault had changed for the better since the advent of SANE.

> "The atmosphere at SANE, I found to be very supportive; it plays a positive role in my job." [LE#4]

Informants reported that job satisfaction among law enforcement officers improved as a result of improved communications with healthcare providers. Pre-SANE, it was difficult to communicate with healthcare providers because working relationships lacked consistency. Under

SANE, new protocols in evidence collection increased communication and collaboration between law enforcement and medical personnel. SANE also facilitates the ability to have regular meetings with consistent attendees to provide ongoing quality improvement.

> "Much nicer, a lot more quiet, a lot more relaxed, a lot more bonding. *Interviewer:* With the victim? *Respondent:* Yes. Actually, just about anybody there. You know - I shouldn't say it like this, but my phrase that comes to mind all the time is those little things, like when it's two o'clock in the morning and you've been up all night and you're tired and you have brain farts and you forget things, SANE nurses are going, 'Do you remember that?' You know, you've just got this set pattern that it's just so much easier to be organized, and it was a lot less often that you'd forget to do something like that and a lot easier to get reports later. But there was a lot more bonding. Rape Crisis advocates I got to know more on a first-name basis who they were, and the nurses that were performing the medical tests. It made a difference." [LE#3]

Informants report that one important benefit of the direct communication between SANE nurses and law enforcement is that officers are now able to more quickly and accurately identify trends in similar assaults and perpetrator types. Informants reported that SANE helped them to identify pattern rapists.

> "We had a medium where if the officers were frustrated with a certain part of a case, especially medical, we went to SANE or Rape Crisis. They were kind of our neutral zone and they could answer the questions for us. It's what we call identity patterns in a suspect." [LE#3]
>
> "I think a factor that helped that SANE has noted or we have noted is that if they see a common type of situation occurring in rapes they will report this trend to us." [LE#1]
>
> "Have SANE in place for example, the SANE personnel is really alert to what is going on. We had a pattern rapist that hit the southeast and I was just talking to the secretary about that. And she said we had another case that came in yesterday morning similar to your case. Well I put the two together." [LE#2]

Informants perceive that SANE increased the efficiency of every task performed by law enforcement officers. Waiting time for victims' medical exams is greatly reduced, and police are able to attain medical records in a timely manner. Overall law enforcement time at the medical

facility is greatly reduced. Time spent on evidence collection and processing is also greatly reduced, freeing up officers for investigations of sexual assault.

> "The case load didn't change really, but your efficiency was a lot better. You could do more cases and get them completed a lot quicker, a lot more thorough." [LE#3]

Law enforcement officers now state that they have the ability to contact and/or interview witness and family members in a centralized location where the atmosphere is calm and comforting, confidentiality is now strictly maintained, and victims feel safer. Prior to SANE, the ED atmosphere was chaotic, impersonal, unsafe, de-humanizing, and lacked privacy for victims. With SANE, police were better able to establish a positive rapport with victims, which increased the quality of witness statements. Law enforcement officers feel that they are better able to determine validity of witness statements post-SANE, and because they are getting more accurate interviews, they are able to identify perpetrators more easily. Informants reported that SANE has provided a positive and supportive atmosphere for law enforcement: private space for interviews, cooperation with nurses, less time spent waiting, and support for personal needs (coffee, snacks, and telephones). The SANE atmosphere provided an opportunity for breaks and 'down time' to relieve tension. Officers are now able to focus their attention on victim interviews and the investigation of perpetrators.

> "That is if the police officer handled it appropriately, then we had somebody that was more cooperative. If the police officer didn't handle it appropriately, then we had somebody that didn't want to have anything to do with us or the system, feeling like that, you know, if there's not going to be any understanding at all in the course of the prosecution of the case, why bother? Post-SANE, the police are better prepared to deal with that in a better way." [PS#4]

> [Pre-SANE] "It was very uncomfortable because you were dealing with doctors and nurses coming in and out; the victim feeling very, very out of place...But with SANE, it's a lot easier to be more understanding and more patient and understand that their [victim] confusion is more the

incident or act that happened to them and not just their surroundings." [LE#3]

Informants reported an overall efficiency of the work environment allowed law enforcement more time to investigate cases of sexual assault.

> "Everything is done for us. They free up a lot of time for us so we can investigate our cases. So we can put in more quality time in to our cases." [LE#2]

Informants also reported improved communication with healthcare providers since the advent of SANE. Informants reported that the number of healthcare facilities and the turnover of staff made it difficult to establish working relationships in the pre-SANE era.

> "[Pre-SANE,] it depended on whether we spoke to the staff during previous cases and had built a relationship with those individuals and they could help us out in whatever way they could. Otherwise, there was no relationship; it was difficult to communicate with them." [LE#10]
>
> "Before SANE, there was a high turnover rate in all the agencies making it difficult to establish working relationships." [LE#4]
>
> "I don't know if you really had a chance to establish rapport with the medical personnel at all the different hospitals [pre-SANE] there wasn't a chance to establish long term friendships or work habits." [LE#5]
>
> "They [medical professionals] would cooperate as much as they could, but we were obviously in the way." [LE#3]

Change in the number of unfounded cases of sexual assault and number of cases cleared by arrest.

There was a greater percentage of unfounded cases (a case determined by law enforcement to not have merit) in the post-SANE era compared to pre-SANE (post-SANE: 11.6% vs. pre-SANE: 3.8%, p=0.0004). However, a greater percentage of cases in the post-SANE era were cleared by arrest compared to pre-SANE (post-SANE: 8.4% vs. pre-SANE: 3.8%, p=0.0189).

Seriousness of charges filed

Compared to pre-SANE, in the post-SANE era a significantly lower proportion of the charges in the district attorney data were for 1st degree criminal sexual penetration (CSP) (17.9% pre- vs. 12.2% post, p=0.0088), there was a non-significant increase in the relative proportion of

2nd degree CSP (31.1% pre vs. 35.5% post, p=0.1327) and a substantial and significant increase in the proportion of 3rd degree CSP (15.1% pre vs. 33.5% post, p<0.0001).

Law enforcement informants reported that the quality and consistency of the forensic evidence made for more consistent filing of charges.

> "I think there's a change in the consistency of them, in the charges filed. I mean, the seriousness I don't think is ever going to change, but I mean, like I said, putting together a better case, having a better statement, so filing charges are a lot more consistent." [LE#3]

Grand Jury and District Court Charges

Proportion of charges and cases moved forward

Exhibit 10 lists the progression of charges moved forward from law enforcement to grand jury and to district court. A greater proportion of charges were presented to the grand jury in the post-SANE era compared to pre-SANE (70.3% vs. 65.2%, p<0.0001). Likewise, a greater proportion of sexual assault cases were presented to the grand jury post-SANE compared to pre-SANE (49.5% vs. 37.7%, p=0.0164).

Change in the number of charges assigned per defendant

Exhibit 11 provides the number of charges per case resulting from grand jury indictment. The number of charges per case post-SANE was significantly larger than the number of charges per case pre-SANE (7.0 vs. 5.4, p<0.0001).

Judgment and sentence

Conviction rates

Exhibit 12 provides the proportion of charges that resulted in a conviction (guilty plea or jury trial) among the sexual assault cases pre-SANE compared to post-SANE. Conviction rates increased in nearly all charge types post-SANE and significant increases occurred for criminal sexual penetration, criminal sexual contact, child abuse, and criminal sexual solicitation.

Change in the percentage of plea agreements

Exhibit 13 specifies the outcome for the charges. The maintenance of the seriousness of the crime was tracked for plea agreements and trials. There is suggestive evidence that post-SANE guilty pleas for criminal sexual penetration maintained the seriousness of the crime compared to pre-SANE (86.8% vs. 80.5%, p=0.0848). A significantly fewer number of charges ended with a *nolle prosequi* (28.3% vs. 16.6%, p<0.0001). There was no difference in dismissals or acquittals. Similar results were observed among charges for criminal sexual contact.

Exhibit 14 lists the outcome at the case level. In contrast to the charge level data, there were no significant differences at the case level in outcome.

Time to case disposition

The average number of days from grand jury indictment to case disposition in district court was over 3 months faster (mean 135.1 days faster, 95% confidence interval: 94.4, 175.9 days) (Exhibit 15).

Sentence

Exhibit 16 provides sentencing outcome for cases pre- and post-SANE with respect to incarceration, probation, and community service. A significantly greater percentage of cases post-SANE received jail time and probation. There was no difference in the proportion who received community service.

Exhibit 17 provides the average sentence time for cases pre- and post-SANE with respect to incarceration, probation, and community service. Post-SANE length of incarceration and probation were significantly longer than pre-SANE; it was not possible to sort out sentencing for collateral charges from the sexual crime in the data.

Exhibit 18 provides the average incarceration time (in years) for both CSP and CSC individually and separately. Based upon a nonparametric analysis, the total incarceration time

was significantly longer in the post-SANE period compared to the pre-SANE era. There is suggestive evidence that longer sentences were made for CSP offenses post-SANE compared to pre-SANE. There was no statistical difference in the length of sentences for CSC offenses.

Victim cooperation with prosecution, willingness to testify

Informants reported that prior to SANE victims had minimal support and understanding of the judicial process and were reluctant to testify.

> "Pre-SANE, victims came through the courtroom reluctantly. It was a place that hadn't been explained to them. It seemed hostile, a hostile environment. Certainly the judge cannot appear to be on their side. The defense attorney certainly cannot appear to be sympathetic to what they're doing. Prosecutors are kind of in a position, once we begin a trial, where they are working and can't really offer much support or guidance to the victim for what they're about to go through, so it was a very imposing sort of system for the survivor or the victim to go through before. Now they've got a support structure in place where what they're going to go through is explained to them, the ramifications of the procedure are explained to them, some preparation is given to them for what they have to do once they get to the stand. And you know, to say that it is a kind or gentle place is wrong, but to say it's kinder and gentler may be appropriate." [PS#4]

More importantly, informants commented that the force of the evidence collected through SANE, especially photographic evidence of injuries, strongly supported the victim's testimony and often obviated the need for the victim to testify at all.

> "*Interviewer:* How about change in the proportion of cases where the suspect was indicted? *Respondent:* It probably increased. Again, the victim doesn't stand alone. And if the victim goes alone to the grand jury and offers her word and he offers his, there's a greater likelihood that the grand jury is not even going to indict. It's surprising how many times juries, grand juries and petit juries, you know, will consider some sort of buyer's remorse, you know, you want it and now you're dissatisfied with it and you complain. With the medical testimony, it doesn't happen." [PS#4]

Expert testimony

Informants reported both positive and negative aspects to relying on the SANE nurses for testimony. On the positive side, the SANE nurses are well trained to testify and they know that

providing testimony is part of their job. They document evidence during the exam that facilitates this role. The informants clearly appreciated the value of how the SANE nurse testimony related to the specific activities of evidence collection, preservation, and recording. On the other hand, informants stated that doctors hold more weight with juries than nurses, even though they may not be as well prepared, do not see testifying as part of their job, and are less cooperative and available. Therefore we might infer that the SANE advantage is that nurses are better prepared as factual witnesses and are better witnesses than ED nurses, but that the lack of MD testimony could be a disadvantage with juries, especially if expert medical testimony is needed.

> "[Pre-SANE,] their duty was to be a doctor treating somebody in an emergency room, and if they had to go to court as a result of this, that was just a burden. Very seldom did I have medical personnel who looked upon testifying, as part of their job." [PS #1]
>
> "We were very frustrated [before SANE]...with getting the doctors to just show up and participate...when they did, it was hit or miss. Either you got one of the few really great doctors or you got the doctor who had an attitude...as one doctor said, 'people are dying because I'm not in the emergency room. This better be important'....and that attitude reflected itself in front of the jury" [PS#2]
>
> "They do a real good job, the [SANE] nurses do testifying. We don't tend to use them as experts because they are not medical doctors or that sort of thing." [PS #2]
>
> "What we need them [SANE nurses] for, the things they do testify about, is so valuable. They are talking about evidence they collected and how they preserved it and collected it and all that. So we are able to say here is what the test showed later. Without that link we can't use it, so that's been a huge difference. And their testimony about the victim's demeanor and things like that have been great, a great help, they are very good at that. They are objective and they are good at it and they care so it all comes across really well." [PS #2]

Quality of the prosecutors' work

Prosecution informants reported that prior to SANE, cases involving sexual assault were frustrating and time inefficient. It was difficult to obtain and interpret medical records. Informants stated that SANE facilitated obtaining records, which contained more understandable

information. Prosecution informants also reported a greater confidence in the forensic evidence post-SANE compared to pre-SANE.

> "[Pre-SANE,] the uniformity wasn't there, so you could have a good doctor who was even very attentive to certain details, but miss other things just from lack of experience of sexual assault...They may have taken a hundred kits but never testified in a courtroom, so they really don't know what some of the issues might be." [PS#2]
>
> "I know in the case I did I could tell it was much better, a very detailed report, photographs of the injuries, she [SANE nurse] provided us with some back-up documentation about the opinions. [PS#6]
>
> "It was clear that the Nurse Examiners were always thinking about collecting evidence as well as treating victims." [PS#1]

They also stated that it was much easier post-SANE to obtain records and to work with medical personnel compared to pre-SANE.

> "[Post-SANE] it is so much easier for us to deal with and understand, and we are getting the records without having to fight with the hospital [like we did pre-SANE]. We are [now] getting them quickly." [PS#2]
>
> "My feeling and the feeling of my colleagues during those 5 or 6 years [before SANE] was that it was very frustrating the amount of time we had to spend in trying to analyze, swapping medical records and the amount of time we spent trying to convince the medical staff and various hospitals to cooperate with us so that we could proceed to trial was frustrating. Knowing how much time that took away from other things, it definitely did. Every hour we had to be dealing with that was an hour we didn't spend on something else. There was a lot of frustration then, a lot of wasted time. Sometimes, many hours of wasted time and still wouldn't get what we needed." [PS#2]

Cross-cutting Issues

Change in the community response to sexual assault

Informants reported that the creation of the SANE unit suggests that the community's response to sexual assault has changed. Rather than leaving the victims to navigate myriad uncoordinated systems, SANE has centralized services for victims of sexual assault, increased

the community awareness of sexual assault, improved education about sexual assault, and improved working relationships between agencies serving sexual assault victims.

The creation of the Albuquerque SANE Collaborative coincided with an increased community wide effort to combat sexual assault, including specialized training for law enforcement and prosecution, increased staffing in the prosecutor's office, and a general increase in community education.

> "I think awareness has definitely grown...well, a perfect example would be SANE. That was an awareness that people became aware that we needed this to exist, and awareness definitely brought SANE about." [LE#5]
>
> "Obviously community groups are aware. That's why we have the SANE unit now...people are recognizing the need to make a better facility in order to preserve evidence and privacy for the victim, trying to make the victims as comfortable as possible." [LE#8]
>
> "The fact that we are out there and we have set up a place called SANE for sexual assault expresses to the community that we have a problem with rape and there is a place you can come to, to help you with that." [VS#1]
>
> "I think, the public is better educated, I think initially, when SANE started and there was a blitz about 'here we are, this is what we do,' I think that really helped, and of course the Rape Crisis Center and community education efforts and SANE was part of that, all of that has helped to better educate. [VS#2]
>
> "Post-SANE working relationships between agencies... are much better...better all over...it all builds, it all relates." [VS#2]
>
> "Actually pre-SANE community education at Rape Crisis consisted of one person. Post-SANE we have three full-time educators, a violence against women coordinator. That's got to have an impact on community. We did 912 sexual assault presentations in 1999, reaching approximately 27,000 audience members, not including audience that you can't count that are so big like media audience, but specific presentations 912, reaching 27,000 people. In addition to 27 years of training volunteers, who then go out into the community and educate and become part of their life. So, I do feel that there's been a shift, that at least we're part way there." [VS#2]

Coordination of services

Informants consistently and repeatedly commented that one of the most significant aspects of SANE was to coordinate care. Prior to SANE, care was "very disjointed and fractionalized" [HC#2].

> "[Pre-SANE,] there were services out there but they weren't as trained, you know, it's like OK, you have this injury, you can go to a medical facility and you know, they kind of limped through it because it's not something they do everyday and so I think there were medical services, there were legal services, there were our services, I just don't think there was that continuity." [VS#1]

With the advent of SANE, service delivery is less chaotic. It is now centralized and communication has improved between agencies and with victims.

> "As I have said earlier SANE centralized the whole process for everybody, so it does cut out a huge chaotic piece that was never able to be brought to the table because it was so big...it centralizes the advocacy pieces, the beginning of the legal process, the medical treatment, and then consequently the therapeutic process. The potential is greater." [VS#2]

> "I think the best piece of SANE has been clearly the survivors experience in getting medical care, and then the advocacy that can happen there, and the communication with all the providers." [VS#2]

Collaboration between healthcare, victim services, law enforcement and prosecution

Informants reported that since SANE their working relationship with the variety of agencies involved with sexual assault has improved. They perceive that communication has improved and overall, stress has been reduced. SANE has created a focus where four different areas of service delivery come together. One informant commented that while at times strife between parties existed, there was now a mechanism to resolve conflict—out of ear shot of the victim.

> "[Pre-SANE,] we worked together but it wasn't a close working relationship...actually you got four different points of view. Now there's a lot less stress...you get to know them on a first name basis. You even have a better atmosphere where you can have more casual conversations getting to know the person and being more relaxed. Therefore there's a lot more interaction between everybody." [LE#3]

> "If there is any friction, it is not with the survivor there present. That's why we have our meetings that we do, we have a process that we call. All of us supervisors have pagers so if something is going on that's not going right at the SANE unit they page up the line to get us and we take care of it on this level so that the survivor and these people aren't involved and we deal with those issues separately from at that precise moment. Big difference" [VS#1]

Opportunities for improvement

Despite the overwhelmingly positive impact of SANE, there remain some opportunities for improvement. Follow-up, communication and training remain challenges.

Provision of care beyond the initial SANE visit remains challenging. While service providers acknowledge the importance of more support services, such as medical and mental health and social services, the SANE Collaborative has not yet effectively addressed this problem. While many informants suggested that follow-up has improved, additional strides are needed. One area identified as needing attention was the link between acute and convalescent care, especially for mental health and women's health.

> "What they need a lot of times, especially in the teenage group is psycho-social support, and because they are minors and they are dependent on families they really need that for families too...So really what I think is still missing...there is still not really a mental health component there [SANE]." [HC3]

> "There should be some sort of way to try to impact the victim to assure a greater response by the victim on secondary follow-ups such as counseling, medical exams, things like that...We need to try to look at the strategies that we have seen if there is anyway that we can improve, maybe raising the number of victims that come back, because once they don't come back, probably nothing occurs for them as far as medically, psychologically, or even prosecution wise. And that's a big problem, and I'm not sure I have the answer to that." [LE#1]

Additionally, now that services are more formal and less haphazard, ironically, the increased formalization and structure may have negatively affected collaborative relationships. For example, when the forensic evidence exam was conducted in the ED, the rape crisis advocate

was seen as being helpful. Now, the rape crisis advocate role is less defined and possibly perceived as duplicative with the SANE nurse.

> "Well I think we had a more important role prior to SANE, you know. Because we were the experts, now I think for the most part because of the collection of the forensic evidence the SANE nurse is [the expert]." [AFG][1]
>
> "There was more of a handshake at that time between the Rape Crisis Center and, and walking that person through, and 'Who's going to deal with the sentencing?' or, 'this person needs this' and that's not happening any more. They're [LE] not doing a whole lot of advocacy, they're either focusing on homicide high impact cases, and admittedly they have an overwhelming case load, by the same token they don't call us and say, 'we have a sexual assault survivor who needs some support, could you come to their services?' There just isn't that kind of give and take any more, it's become more territorial." [VS#2]
>
> "I have had really mixed experiences with SANE nurses, those that I've been able to have a really good relationship with and we can work together for the survivor and I have had other experiences where I have not been able to do that, where I really felt that my role was undermined...we were the experts in the past and now the medical personnel is more the expert and so I've felt that I am not seen as being at an equal level with this person because I'm just an advocate." [AFG]
>
> "[When I was working before SANE, I was getting more respect from the doctors and nurses,] because these people [doctors and nurses] didn't have a clue and the survivors they needed somebody to stand up to these people and tell them to get off their butt and get going and these people have been sitting here for four hours and obviously they don't need me to do that anymore because we've got a SANE nurse and we're in a completely different environment. [AFG]
>
> "But one of the other things too that I feel is missing as part of that collaboration is just kind of communication among the staff people and the volunteers with the staff people from the SANE unit as well as even training because I know we used to be a part of the training for the nurses, Rape Crisis used to be a part of that training and right now we're not, or we haven't been very much at all." [AFG]

While training has provided some of the most notable improvements in services to sexual assault victims, it is also an area that shows room for further enhancement. Prosecutors often

[1] AFG: Albuquerque Rape Crisis Center, advocate focus group participant

stated that the only training they've had has been on-the-job training, personal readings, and a few workshops. Victim service providers also stated that prosecutors might benefit from better training in how to interview victims, including child victims of sexual abuse. Some law enforcement interviewees also stated a lack of, or even a decrease in, training in working with sexual assault victims. Some healthcare providers stated that since SANE, although they have receive good training in exam and documentation procedures, they have not received any training in how to work with sexual assault victims. Victim services stakeholders confirmed this, stating a need to conduct more training sessions with healthcare providers in order to discuss the dynamics of working with sexual assault victims and to clarify the role of the advocate.

> "The law enforcement actually only as far as the academy goes only allows an hour or an hour and a half for the new officers that are coming on out of a four month training, so it's almost negligible." [AFG]
>
> "Yeah, and I know SANE is now doing like another hour but it's relatively small [and] it's relatively limited as far as an on-going basis with all of the first response, on line officers." [AFG]
>
> "The training component really not changed drastically, it's not like we're talking another 40 hours or anything like that." [AFG]

Discussion and Implications of Findings

Both the quantitative and qualitative data suggest that the establishment of the Albuquerque SANE Collaborative in October 1996, significantly and positively impacted healthcare, victim services, law enforcement, and prosecution.

Impact on Healthcare and Victim Services

The impact of SANE on healthcare and victim service providers has been striking. A common theme from all of the healthcare stakeholders was the invaluable service that SANE provided. SANE concentrates all services for sexual assault victims into one program and one location with the goal of meeting the immediate physical, emotional, and legal reporting needs of

the victim. The victim receives specialized and sensitive care by professionals who are more aware of the physical and psychological affects of sexual assault on victims. The chain of custody for evidence is more consistent and secure. Patient care has achieved a level of consistency in the standard of care for sexual assault victims who now are uniformly offered treatment for sexually transmitted disease, pregnancy prevention, referrals, and follow-up care. Another benefit provided by SANE is the introduction of a uniform common language regarding sexual assault. This has helped to unify healthcare providers in their triage and treatment of sexual assault victims. Finally, SANE has significantly reduced the workload of healthcare providers in the ED and has allayed their attendant concerns about treating sexual assault victims within the ED setting.

SANE has increased the comfort level of sexual assault victims, providing an environment that offers privacy, safety, and security during their treatment for sexual assault. Patient confidentiality has been greatly improved because the SANE unit provides a physically more secure environment for the patients to disclose information and to receive notification of their laboratory test results. SANE records are kept separate from traditional medical records offering increased victim confidentiality regarding insurers and third party payers. The SANE unit consistently provides a greater number and breadth of patient referrals. The SANE unit also has the capacity to provide follow-up care to sexual assault victims, but getting clients to return for follow-up remains difficult.

Sexual assault victims spent about an hour less time at SANE compared to the ED. Beyond this time savings, SANE provides a higher quality and comprehensiveness of services while streamlining service delivery. Waiting times are usually decreased—women no longer have to wait in a crowded ED waiting room. The time is spent collecting a greater quantity and quality of

evidence. The shorter waiting times may also improve the collection of time-dependent material such as oral DNA or urine for suspected drug-facilitated sexual assault.

While some tensions between victim service providers and the SANE unit were noted, victim service providers clearly stated that SANE has been an extremely positive force within the sexual assault community. The SANE unit has created some stress between traditional patient advocates (such as rape crisis advocates) and the forensic nurse examiners. Many respondents noted that the specific roles of the rape crisis advocates and the nurses needed clarification. Some of these challenges at the Albuquerque SANE Collaborative may have been specific to the staff personalities at these agencies. Nonetheless, the opportunity to clarify the roles of the forensic nurse examiner and the rape crisis advocate with respect to the patient and each other will be an ongoing process. The SANE units should recognize the value of having two distinct roles and personnel: one SANE, one rape crisis advocate. Each person has different priorities and strengths for the victims. The two also reduce the threat of system abuse, improve quality assurance, and assuage many risk management concerns.

SANE nurse examiners also potentially walk a thin line between being a detached healthcare provider and functioning as an agent of law enforcement. It remains uncertain how this new role of a healthcare provider affects patient autonomy, especially with respect to accepting or declining invasive examinations, medical treatments, and laboratory tests.

SANE units can collect consistent and high quality epidemiologic data about sexual assault, affording the opportunity to monitor the incidence and trends of sexual assault. SANE units can help identify new collaborative partners, *e.g.*, college campuses, domestic violence providers, and assisted living centers for the elderly and disabled. An expanded base of referral organizations combined with reliable and accurate sexual assault incidence data can provide the

basic data that advocates can use to motivate community and legislative leaders to recognize and address sexual assault.

Finally, all stakeholders recognized the need to improve the inclusion of psychological treatment for victims. Currently, these services are offered through follow-up services, but are often not used by victims. Psycho-social issues were a common theme among stakeholders who felt that families, teenagers, and victims of all ages need more support and counseling services to more effectively deal with the psychological and emotional after-effects of surviving sexual assault.

Impact on law enforcement and prosecution

At the front end, SANE units improve healthcare delivery. SANE's greatest impact, however, may be on improving law enforcement and prosecution services. SANE programs deliver a higher quality of forensic evidence to law enforcement and prosecution. This significantly increases the success of sexual assault crime prosecution while simplifying criminal justice work.

SANE units introduce and systematize the concept that there are two crime scenes with a physical assault: 1) the physical location/environment where the assault occurred and 2) the human body. Because of the special nature of sexual assault, evidence collection at the human body scene is difficult and intrusive. SANE and law enforcement each respond to the two different scenes with their unique expertise. They collaborate and combine their work to corroborate the victim's story.

Improved forensic evidence is perhaps SANE's most important contribution with respect to law enforcement and prosecution. SANE nurses are specifically trained in sexual assault forensic evidence exams, photographic techniques for the documentation of injuries, and using a

colposcope. The utility of forensic evidence only becomes apparent after the victim is willing to provide forensic evidence and to report to police. Most informants noted an increase in the number of women reporting sexual assaults within the Albuquerque area. This observation was corroborated by the difference in reporting to police that was observed in the pre- and post-SANE medical records. Another significant impact has been the ability of law enforcement to track trends within perpetrator types. This may be due to the increased consistency of evidence collection and an increase in contact and communication with SANE nurse examiners and law enforcement.

Because the SANE units provide a calmer, less hectic atmosphere to provide services for sexual assault victims, law enforcement officers stated they were able to interview victims who are less stressed and who were more willing to cooperate with law enforcement. According to the stakeholders, this aspect alone has assisted in building less stressful and more trusting relationships between the victim and law enforcement. Hence, there is an increase in successful prosecution due to more coherent and consistent interviews. Finally, law enforcement officers stated that another benefit of SANE was an atmosphere where they could 'bond' and develop sympathetic relationships with sexual assault victims. This has helped law enforcement gain an increased awareness and knowledge of sexual assault issues, which may help them prevent re-victimization.

A potentially concerning observation is the increase in unfounded cases in the post-SANE period compared to the pre-SANE period. Whether this may be attributed to the changes in willingness to report to law enforcement that may resulted by pressures created by SANE or due to the ease from which patients can be seen at SANE is unclear and deserves further clarification.

Not only are victims more likely to report, stakeholders reported a decrease in lost or damaged forensic evidence and an increase in the type and quality of forensic and interview evidence collected. The collection of photographic documentation of injuries and colposcopic evidence has increased the recognition of sexual assault as a violent crime by providing evidence for prosecution. The consistent standards of collection by SANE has maximized the effect of DNA and forensic evidence when cases go to trial.

SANE has assumed the responsibility of managing the chain of custody, from labeling, tagging, storage, and transport of forensic evidence. Indeed, SANE has established a significantly higher standard of forensic evidence collection for sexual assault victims and routinely includes colposcopic examination for evidence of injury. Recent studies have shown that the ability to document injury correlates with successful prosecution (McGregor, *et al.* 2002).

SANE programs are better equipped to respond to changes in forensic technology. For example, within the past decade, photography has advanced from Polaroid to digital technology. Whatever the advance, SANE units serve as the bridge between medical science, healthcare, law enforcement and prosecution. Because of their centrality, SANE units may be an ideal place to introduce and evaluate new technologies. SANE programs may need to proceed cautiously, however, and in full cooperation with law enforcement and prosecution as new technologies are being advanced without completely understanding how such techniques will be viewed in the courtroom or understood by juries.

Post-SANE, prosecution has increased confidence in forensic evidence and in the interview processes. The chain of custody for evidence is less often challenged by the defense. In addition, prior to SANE, the defense was far more likely to use documentation procured from medical records to infer that the "victim changed her story."

Equally important has been the increased consistency in the working relationships of SANE personnel with law enforcement and prosecution. SANE nurses are available for pre-trial interviews, court appearances, and to give explanations of medical findings. Law enforcement and prosecutors found it difficult to obtain information about victims from medical personnel, especially from ED doctors and nurses who often have rotating shifts, making contact difficult. Consistent and familiar faces among all service providers promote the exchange of ideas and the opportunity to solve commonly recognized problems. Finally, prosecutors' ability to read, understand, and work with medical records has vastly improved because of SANE data collection procedures and the increased contact and communication between prosecutors and SANE nurses.

Prior to SANE, this kind of collaboration between doctors and prosecutors did not exist. This alone has increased the efficiency of the prosecution by eliminating the frustration of trying to get medical professionals to participate in the legal process and by providing reliable and factual evidence. While some informants felt that physician testimony might carry more weight, they preferred the consistency and ease with which they were able to use SANE nurse testimony.

Prosecutors are able to bring a greater number of charges to grand jury where they have uniformly received indictments for the charges sought. There is evidence at the charge level that SANE has increased the number of guilty pleas from defendants, thereby obviating the need of the victim's testimony. The increased quality of evidence, availability of expert witness testimony, and a proven track record with the grand jury and the courts has improved the successful prosecution of sexual assault cases.

Crosscutting Issues

Training

All agencies benefit from cross-training related to sexual assault. Inter-agency training has focused on debunking popular myths about sexual assault victims. Law enforcement educates SANE on what to (and not to) ask and the reasoning or intent behind police investigation. Prosecution trains SANE on laws and courtroom demeanor, judicial process and building credibility. Training has improved for all areas of impact. Although pre-SANE training did exist, many law enforcement, prosecution, and healthcare providers reported that they had not received formal training, only informal 'on-the-job' experience and 'mentorship.' Many healthcare providers stated that they didn't receive any training to work with sexual assault victims prior to SANE, and some ED nurses stated that prior to SANE they were afraid of missing key evidence in the rape exam. Law enforcement officers confirmed this stating that pre-SANE the lack of training for healthcare providers led to improper evidence collection and tagging which could affect a victim's legal case.

Healthcare providers stated that training in rape exam procedures by SANE has greatly improved their confidence in forensic evidence exam procedures and in evidence collection overall.

The SANE Collaborative has trained both law enforcement and prosecution on frequently used medical terms and procedures used by healthcare providers that were previously not well understood by law enforcement and prosecution, greatly facilitating their understanding of medical issues. In addition, SANE has trained other providers on the types of physical trauma that sexual assault creates. SANE has facilitated the contact of medical providers with prosecution. SANE nurses have proven to be extremely informative and helpful in providing information about the medical aspects of sexual assault.

Collaboration

A multidisciplinary approach is the preferred approach to address problems and concerns with healthcare, victim services, law enforcement and prosecution. Multidisciplinary teams (MDT) not only improve relationships, but also assist in the training of new forensic evidence collection procedures, changes in technology, specialized training in sub-specialty areas, and interview and documentation guidelines. Derhammer *et al.* (2000) has also noted that a SANE unit improved the collaboration between law enforcement and medical providers in their region.

The impact of the SANE unit on cooperation and communication between agencies has been impressive. MDT meetings have greatly facilitated communication between agencies (which was poor prior to SANE) and problem-solving techniques have been successfully applied. As a result, stakeholders reported better communication and working relations between agencies, particularly with victim service organizations. The centralized location of SANE has facilitated building personal relationships between members of organizations and has facilitated developing positive interpersonal communications. There is now the capability of establishing long-term relationships between SANE and law enforcement; detectives report better communication with medical personnel. SANE units have brought healthcare to the table with law enforcement and prosecution.

Limitations

We looked only at women ages 18 years and older, thus we cannot comment on the impact that the Albuquerque SANE Collaborative may have had on male sexual assault or on adolescent sexual assault. A recent evaluation of sexual assault evidence collected by physicians in Florida showed that documentation of weapon use and traumatic injuries correlated with successful prosecution, especially among adolescents (Gary-Eurom *et al.* 2002). We cannot confirm this observation with our data.

We did not conduct a cost-benefit analysis of SANE. While the overall costs associated with ED care can be costly, the marginal cost of one additional patient in an ED (who might have been sexually assaulted) is quite low. A freestanding SANE unit needs to cover overhead expenses, including facility costs and personnel. EDs do not have this problem. SANE programs that manage patients in EDs can avoid some of these expenses. But the lack of a separate centralized location may not offer many of the convenience, privacy and confidentiality benefits that were noted in our evaluation.

It is not too surprising that stakeholders view SANE's impact as positive. Inherent to the SANE model is the alleviation of many of the difficult aspects of providing sexual assault services. SANE provides the time and place to provide compassionate healthcare, support for the victim in deciding whether or not to report to law enforcement or to undergo a forensic examination and collection of forensic evidence away from stakeholder agencies. This positive view is from the agency stakeholders. It is uncertain if the SANE model is viewed positively by victims.

Despite repeated efforts with multiple modalities, we were unable to solicit the input from the victims of sexual assault. We caution that the findings on victim satisfaction reported in this report are from the perspective of the service providers themselves. From the few victims with whom we were able to communicate, we found evidence of disconnect between the victim's stated experiences and the providers perception. We believe that it is very important to obtain the impact on the victims from the victims themselves. Because of the difficulty that we experienced in trying to reach this group, we believe that it is necessary to prospectively survey sexual assault victims soon after they have received services. Given the mobility of our patient population, we do not suggest that researchers attempt to contact sexual assault victims much beyond the assault

itself. Victim participation will depend upon each individual's readiness to talk about their experiences. Programs will need to balance readiness to speak about their experiences against the practical aspects of contacting a mobile population after the fact. If contact is desired, then permission to do so should be obtained at the time of the SANE evaluation.

We were unable to successfully link across the various datasets. Healthcare records clearly identify the victim but do a poor job in identifying the offender. Likewise, court records identify the offender (in the subset of cases that are adjudicated) but do a poor job in identifying the victim. Unfortunately, we found the quality of the law enforcement and prosecution records limited. We had hoped to link healthcare records to court records through this bridge. We were unable to do so. Even the probabilistic linkage strategy proved inadequate, largely because of the quality of the pre-SANE medical record identifying information. Nonetheless, we are confident that there was a clear difference in outcome measures as we were able to identify the pre- and post-SANE records in each of the datasets on the basis of the incident date which was found in all of the datasets. A common case identification number system across all of these data systems is needed to facility data linkage.

An inherent weakness to a pre-/post-intervention comparison is the difficulty in accounting for the potential that other system changes may have explained observed differences. While stakeholders did not feel that there were significant temporally related factors that would otherwise explain SANE's impact, there may have been some changes in the police administration or in the district attorney's office that impacted decisions on how sexual assault cases were prioritized. In the Albuquerque area, federal VAWA and VOCA funding has increased the number of community educators and victim advocates. This may have effected the

community's perception of sexual assault as a significant criminal justice problem and have increased the number of women who were willing to prosecute.

Our findings are for a small metropolitan area. Our findings might not hold for smaller communities whose magistrate court judges often do not have formal legal training.

Conclusion and implications of findings

The Albuquerque SANE Collaborative has universally had a positive impact on healthcare, victim services, law enforcement and prosecution. Both quantitative and qualitative data suggest that SANE has increased the efficiency of medical services by bringing services for sexual assault victims into a unified and central location within a hospital setting, and significantly reducing the stress associated with caring for sexual assault victims. All stakeholders stated that law enforcement's knowledge of sexual assault issues has increased and hence, law enforcement's perceptions about and treatment of victims has been greatly improved. SANE has increased the quality and quantity of forensic evidence and improved the chain of custody of forensic evidence, which in turn has led to more successful prosecution of sexual assault. DNA, colposcopic photography of vaginal tears and other injuries, and injury body maps were universally acknowledged as important contributions to the treatment of sexual assault victims and the prosecution of their offenders.

Our findings strongly suggest that a SANE unit can positively impact the prosecution of sexual assault while providing a higher standard of care to the patient. In addition, SANE centralizes sexual assault reporting and can improve our understanding of the magnitude of the problem. This may be especially useful for defining the problem in pockets of populations that are difficult to identify but who may be at increased risk, such as adolescents, the elderly and

vulnerable adults. SANE data can be used to show sleepy or ignorant communities the importance of sexual assault.

Centralization of sexual assault services might inhibit the delivery of services in some communities. This includes rural communities where services are not available and in communities whose members are distrustful of the 'system' and law enforcement. Loss of expertise in providing sexual assault services by emergency and women's health physicians may exacerbate this problem. Physicians must maintain basic skills in managing sexual assault to assist SANE units that are 'overcrowded' (when SANE units cannot respond to the volume of patients) and to provide services in communities without a SANE unit.

Not all communities will have the capacity or readiness to implement a SANE-style program. Nonetheless, we believe that many of the components of the SANE program might be incorporated into smaller or less ready communities. Intermediate steps to improve services include implementing on-call forensic examiners who can respond to a variety of healthcare locations, and multi-disciplinary trainings to achieve some of the success of a SANE unit. Having one point person at an emergency department or hospital who can communicate regularly with law enforcement and prosecution might significantly improve problem solving. Healthcare facilities should review their chain of custody procedures and consult with law enforcement on ways to improve and standardize evidence collection.

While not all existing SANE programs can undergo an extensive outcome evaluation, observations made in this evaluation may be useful. Areas of likely improvement include better follow-up for victims of sexual assault for both physical and mental health, and minimizing the impact of giving multiple interviews (to healthcare, law enforcement, etc.) by following a child sexual abuse model of videotaping or tape recording the interview. Intensive case management

may also be a successful strategy to improve post-care follow up. As the SANE unit coordinates a multiphase response to acute sexual assault, so might a SANE unit be able to coordinate follow-up services by providing a single contact phone number and a patient care coordinator. Follow-up is needed for a wide variety of services, including women's health, mental health (*e.g.*, PTSD and family support), and future sexual health.

Finally, the success of SANE begs the question of whether this model might successfully be applied to analogous situations, such as domestic violence or non-intimate battery. SANE in many ways is a highly specialized emergency facility—one that combines the expertise of many disciplines to deliver a high quality product to a somewhat reluctant clientele who did not plan on needing these services. The parallels with domestic violence are obvious.

Despite all the positives, there are some negative consequences that need to be considered. SANE units have decreased the opportunity to train resident physicians in emergency medicine and other specialties on how to provide sexual assault services. With the increase of SANE units nationwide and the decrease in physician experience with sexual assault, many residency training programs are beginning to recognize this lack of training as a significant problem. Residency training programs, including ours in Albuquerque, are working with SANE programs to train resident physicians in the principles of forensic evidence collection and sensitive treatment of the sexual assault victim.

Because of their intimate environment and highly specialized care, SANE units may lack the flexibility of providing 'volume' services for sexual assault. Whenever multiple cases of sexual assault present at the same time, a SANE unit may not be able to handle the volume of patients in a timely matter. At the Albuquerque SANE Collaborative, when multiple patients present at once, some clients are scheduled for a later time. This might pose negative consequences for the

collection of time dependent forensic data. This may be less of an issue in an ED, where more staff may be available to provide services.

Communities need to consider carefully the size and number of SANE units that their community can support. Unregulated services for sexual assault patients between competing SANE programs may undermine their effectiveness, ultimately diminishing the SANE impact. The specialization of a SANE program requires hospitals, criminal justice agencies, and community leaders to collaborate.

In summary, we find strong and compelling evidence that SANE has positively impacted healthcare, victim services, law enforcement and prosecution. Communities with access to SANE programs are better equipped to respond to the crime of sexual assault. Communities without a SANE program can start a coherent response by implementing incremental steps as presented in this report. There is clear evidence that the healthcare and victims services will improve while increasing the apprehension and conviction of sexual assault offenders.

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Appendices

Appendix A. Victim telephone survey contact protocols and survey instrument.

Appendix B. Qualitative data collection instruments.

List of Exhibits

Exhibit 1. Flow diagram of acute sexual assault services in Albuquerque at University of New Mexico Health Sciences Center (pre-SANE) or at the Albuquerque SANE Collaborative (post-SANE).

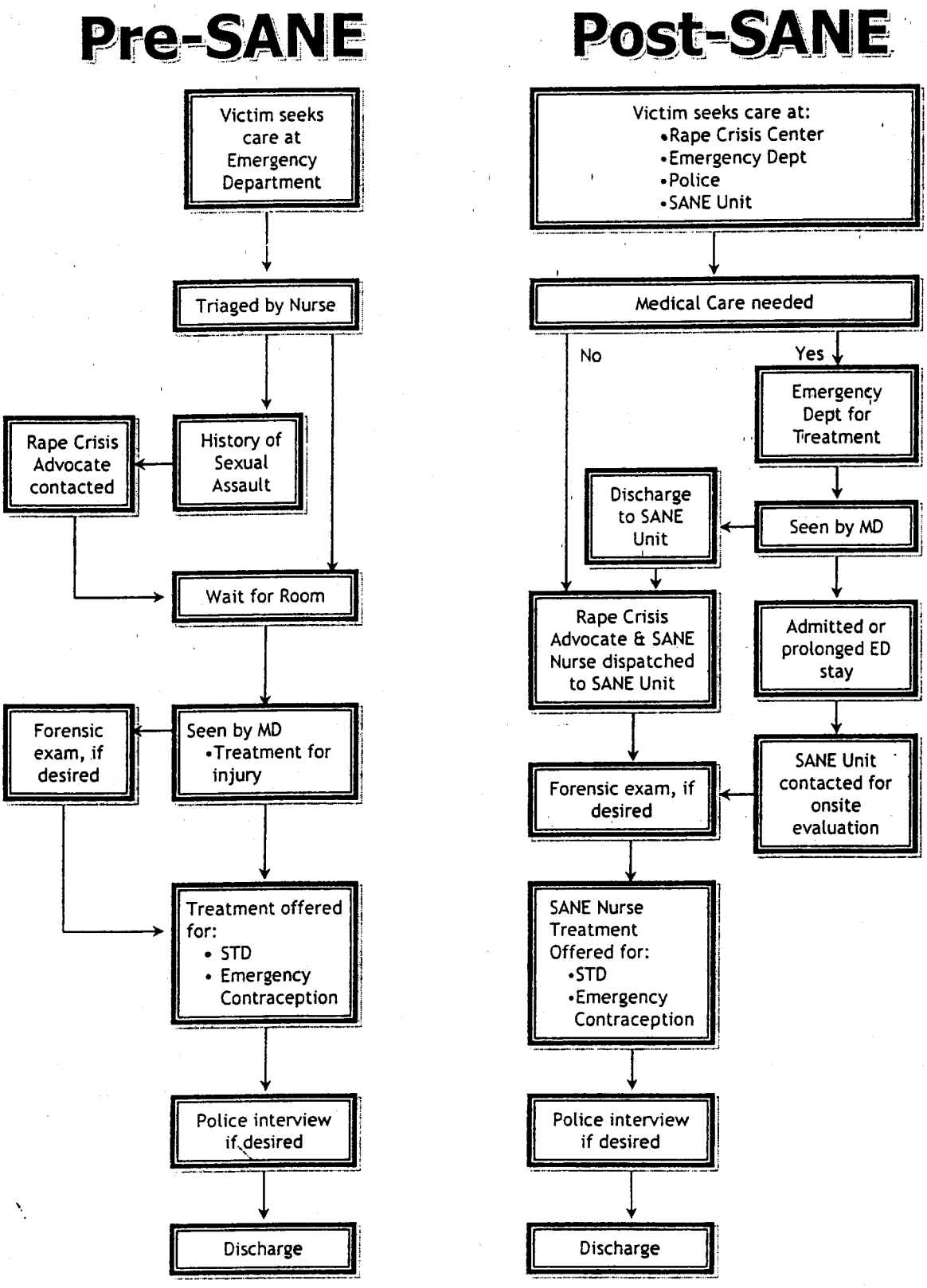


Exhibit 2. Matrix of evaluation questions, criteria, and data collection tools. Principal evaluation questions are numbered; criteria provided by stakeholders are in italics. Check marks indicate evaluation data source.

Questions	Data Collection Sources & Tools										
	Victim phone survey	Victim focus group	Advocate focus group	Victim services interview	Law Enforcement SA records	Law Enforcement Stakeholder Interviews	Court record review	Prosecution Stakeholder Interviews	Medical record review	Healthcare Stakeholder Interviews	SANE records
A. SANE's Mission and Goals											
1. Change community response				✓		✓				✓	
2. Increase coordination of services			✓	✓		✓		✓	✓	✓	
3. Decrease the trauma of the forensic exam for victims	✓	✓									
4. Decrease waiting time for victims *Change in length of time of exam* *Show up–d/c time* *Forensic exam* *Waiting to be seen by provider* *After exam to d/c*	✓								✓	✓	✓
5. Increase proportion of victims who consent to forensic exam *Is there a change in the % of forensic exams done?*	✓								✓		✓
6. improve quality of evidence *Change in the quality of evidence collected (including photos)* *Admissible* *Proves what you want proved* *Visualizes what you want to show* *Variety of evidence* *Chain of custody of evidence has been maintained* *Method by which evidence is collected is of highest standard* *Document evidence from collection to courtroom* *No question about the "real evidence"* *Evidence is not attacked in court* *High quality of preservation of evidence* *High quality evidence preservation—refrigerated, tagged, sealed, not allowed to mold* *Change in the process of collecting evidence (If so, what is the effect of that change on pleas, prosecution, etc.)*						✓		✓	✓		✓
7. Improve quality of expert testimony *Change in effectiveness of expert witness* *Defense attorney stipulates to nurse testimony* *No need for further action* *No questions by judge* *DA confidence in nurse testimony, ability* *Good witness, knowledgeable & confident* *Jury believes nurse, understands her, no attack from defense*								✓			
8. Increase conviction/plea offer rates							✓	✓			

Abbreviations: ED: emergency department, SA: Sexual Assault, SANE: Sexual assault nurse examiner, DA: District attorney

(Exhibit 2 Matrix continued)

Questions	Data Collection Sources & Tools										
	Victim phone survey	Victim focus group	Advocate focus group	Victim services interview	Law Enforcement SA records	Law Enforcement Stakeholder Interviews	Court record review	Prosecution Stakeholder Interviews	Medical record review	Healthcare Stakeholder Interviews	SANE records
B. Victim Satisfaction											
1. Change in the level of victim satisfaction in services? *Pre-exam interviews* *Exam by medical provider* *Advocacy/support* *Police* *Prosecution*	✓	✓	✓								
2. Change in atmosphere, degree of privacy, level of confidentiality due to the environment?	✓		✓			✓		✓		✓	
3. Change in (quality of, depth of, clarity of) explanation of purpose & procedures *Ability to refuse any services* *Victim perception of control* *Storage & disposal of evidence* *Consent*	✓									✓	
4. Change in access and utilization (are there cultural difference)		✓	✓	✓		✓			✓	✓	✓
5. Change in the way information is given to victims regarding reporting and prosecution? If so, how has it changed?		✓	✓								
6. Change in the pressure exerted on the victim to prosecute and/or testify?	✓	✓						✓			
7. Change in victim's perceptions toward law enforcement attitude (respect of victims, choice to prosecute or not)	✓	✓									
C. Recovery											
1. Change in length of time until victim returns to basic functioning (work, social, family)?		✓									
2. Change in the proportion of clients who have been seen for previous SAs?									✓		✓
3. Is there a change in re-victimization for victim (law enforcement & prosecution process)?	✓	✓									
D. Referrals											
1. Change in the proportion of referrals made (by medical provider)?	✓								✓		✓
2. Change in the comprehensiveness of referrals (scope of referrals from physical to emotional needs, alternative resources, etc.)?	✓								✓		✓
3. Change in victim's follow-through on referrals?	✓										
E. Quality of Service Delivery											
1. Change in quality of each aspect of service delivery (change in response)? *Police response* *Advocacy services* *Emotional support* *Collection of forensic evidence* *Legal advocacy by sex crimes detectives* *% of charges by DA's office*	✓			✓		✓	✓	✓		✓	

Abbreviations: ED: emergency department, SA: Sexual Assault, SANE: Sexual assault nurse examiner, DA: District attorney

(Exhibit 2 Matrix continued)

Questions	Data Collection Sources & Tools										
	Victim phone survey	Victim focus group	Advocate focus group	Victim services interview	Law Enforcement SA records	Law Enforcement Stakeholder Interviews	Court record review	Prosecution Stakeholder Interviews	Medical record review	Healthcare Stakeholder Interviews	SANE records
F. Prosecution											
1. Change in the number of prosecutions?							✓	✓			
2. Change in victim cooperation with prosecution? *Willingness to go forward with prosecution to testify*	✓						✓	✓			
3. Change in the number of pleas?							✓	✓			
4. Change in conviction rates?							✓	✓			
5. Change in the seriousness of charges filed?						✓	✓	✓			
6. Change in the quality of the prosecutors' work? *Time efficient* *Paperwork streamlined* *Only have to do something once* *Cooperative witness* *Confidence in evidence* *Successful prosecution*								✓			
G. Law Enforcement											
1. Change in ability of law enforcement and prosecution to identify and prosecute suspects?						✓	✓	✓			
2. Change in law enforcement's job? *Privacy and security for interview* *Accessibility of phones, supplies, equip.* *Victim attitude/preparedness to give statement* *Evidence collection procedure* *Quality and consistency of information* *Convenience* *Efficiency (less time)* *Attitude of nurse/rape crisis advocate regarding law enforcement* *Comfort in "female" atmosphere*						✓					
3. In what ways has SANE changed the quality of law enforcement work life? *Time efficient* *Paperwork streamlined* *Only have to do something once* *Cooperative witness* *Confidence in evidence* *Successful prosecution*						✓					
4. Change in the amount of time that law enforcement spends at the hospital?						✓					
5. Change in the types of offenders prosecuted?						✓	✓	✓			
6. Change in the number of false reports involving SA?						✓	✓				

Abbreviations: ED: emergency department, SA: Sexual Assault, SANE: Sexual assault nurse examiner, DA: District attorney

(Exhibit 2 Matrix continued)

Questions	Data Collection Sources & Tools										
	Victim phone survey	Victim focus group	Advocate focus group	Victim services interview	Law Enforcement SA records	Law Enforcement Stakeholder Interviews	Court record review	Prosecution Stakeholder Interviews	Medical record review	Healthcare Stakeholder Interviews	SANE records
H. Forensic Exam/Evidence/Documentation											
1. Change in the physical discomfort of the exam for victims?	✓	✓									
2. Change in provider attitudes toward exam?										✓	
3. Change in the amount of evidence lost due to procedure (chain of evidence)?						✓	✓	✓	✓		✓
4. Change in effectiveness of written medical documentation? *Is it used and understood by all* *Understood by all* *If it adds to closed case* *Corroborates other testimony (not conflicting)* *Does not include info that could damage case: prior sexual history, prior psychologivcal history, opinions about the character of the victim*								✓			
5. Difference between medical provider's notes (MD vs. SANE) with regard to notations that may call into question victim believability?								✓	✓		✓
6. Increase in DNA testing, colposcopy exam, photos?									✓		✓
7. Change in the percent of cases that use forensic evidence for trial?							✓	✓			
8. Change in the effectiveness of oral history taking? *Accurate and believable?*								✓			
I. Testimony/Expert Witness											
1. Difference in jury credibility between MD and nurse?								✓			
J. Collaboration											
1. Change in the quality of working relationships between all collaborative agencies *Respect between different parties/genders* *Good communication—memos, meetings, speaking face-to-face* *Written communication summarizes understandings* *Collaborators/players know one another, able to identify people* *Being on the same page about what the mission of SANE is* *Understanding of philosophical differ- ences between different service areas* *Level of trust/confidence among service orgs*				✓		✓		✓		✓	
2. Change in attitude of law enforcement toward medical facility?						✓					
3. Change in the types and numbers of law enforcement agencies that use SANE vs. EDs?						✓			✓		✓

Abbreviations: ED: emergency department, SA: Sexual Assault, SANE: Sexual assault nurse examiner, DA: District attorney

(Exhibit 2 Matrix continued)

Questions	Data Collection Sources & Tools										
	Victim phone survey	Victim focus group	Advocate focus group	Victim services interview	Law Enforcement SA records	Law Enforcement Stakeholder Interviews	Court record review	Prosecution Stakeholder Interviews	Medical record review	Healthcare Stakeholder Interviews	SANE records
K. Training											
1. Changes in the training process of law enforcement, rape crisis, medical professionals or prosecutors regarding sexual assault, issues of cultural diversity and disabilities, and dealing with the emotional issues of victims?				✓		✓		✓		✓	
L. Provider Attitudes/Characteristics											
1. Change in provider attitudes/treatment toward victims? *Medical, Advocate, Law enforcement. Prosecution, Other support services* *What would you attribute this change to (from providers'perspective)?*	✓		✓							✓	
2. Difference for victims in being treated by MDs vs. nurses?	✓		✓								
M. Outreach/Community awareness											
1. Change in level of community awareness regarding sexual assault services?				✓		✓				✓	
N. Healthcare											
1. Change in the demands on the medical community, specifically EDs?										✓	
2. In what way has SANE changed the quality of work lives of medical providers'?										✓	
3. Change in medical treatment for injuries?	✓										
O. Demographics											
1. Are there established procedures which standardize treatment (EDs vs. SANE)?										✓	
2. Change in the demographics of women who are seen either in the ED or at SANE for sexual assault *Age, Ethnicity, Geographic area, Victim/suspect relationship*									✓		✓
3. How many women lost to excessive wait in ED—leave before they are seen in ED for SA?									✓		✓
4. Change in the number of victims who report?	✓				✓				✓		✓

Abbreviations: ED: emergency department, SA: Sexual Assault, SANE: Sexual assault nurse examiner, DA: District attorney

Exhibit 3. Sample sizes for healthcare, law enforcement, prosecution and court data sources, by pre- and post-SANE periods, Bernalillo County, NM, 1994–1999.

Unit of observation	Pre-SANE N	Post-SANE N	Comment
Healthcare			
Medical records	242	715	Pre-SANE are UNMHSC medical records, Post-SANE are SANE records
Law Enforcement			
Police Suspects	384	1,046	Data from Albuquerque Police Department and Bernalillo County Sheriff's Department
Police Charges	673	2,218	
Prosecution			
Prosecution suspects	291	412	Data from the Second Judicial District Attorney's Office for Bernalillo County, NM
Prosecution charges	2,304	3,981	
Court			
Court Cases	194	273	Data from the Second Judicial District Court for Bernalillo County, NM
Court Defendants	194	275	
Initial Charges	707	1,542	
Final Charges	271	960	
Total Charges	978	2,502	
Suspect Sentenced	114	208	

Exhibit 4. Demographic characteristics of sexual assault victims. Data are from medical and law enforcement records, by pre- and post-SANE periods, Bernalillo County, NM, 1994–1999.

	Pre-SANE Medical		Post-SANE Medical		Pre-SANE Police		Post-SANE Police	
	N	(%)	N	(%)	N	(%)	N	(%)
Victim Characteristics								
Age group (in years)								
18 - 25	98	(43.2)	321	(44.9)	82	(44.3)	204	(46.3)
26 - 35	68	(30.0)	219	(30.6)	56	(30.3)	136	(30.8)
36 - 45	45	(19.8)	134	(18.7)	35	(18.9)	94	(21.3)
46 - 65	16	(7.0)	26	(3.6)	9	(4.9)	6	(1.4)
66 and older	0	(0.0)	12	(1.7)	3	(1.6)	1	(0.2)
Missing	15	(26.9)	3	(0.4)	0	(0.0)	198	(23.7)
Victim Ethnicity								
Anglo/Caucasian	25	(29.4)	302	(42.7)	93	(50.3)	224	(48.2)
Hispanic	22	(25.9)	285	(40.3)	70	(37.8)	169	(36.3)
American Indian	6	(7.1)	72	(10.2)	14	(7.6)	35	(7.5)
African American	4	(4.7)	24	(3.4)	3	(1.6)	21	(4.5)
Other	1	(1.2)	5	(.7)	1	(0.5)	3	(0.6)
Unknown	27	(31.8)	20	(2.8)	4	(2.2)	13	(2.8)
Missing	157	(64.9)	7	(1.0)	0	(0.0)	0	(0.0)
City of Residence								
Albuquerque	142	(93.4)	572	(82.4)	169	(88.0)	430	(91.5)
Other	14	(9.2)	60	(8.6)	16	(8.3)	30	(6.4)
Los Lunas	7	(4.6)	23	(3.3)	1	(0.5)	5	(1.1)
Belen	2	(1.3)	16	(2.3)	2	(1.0)	2	(0.4)
Rio Rancho	0	(0.0)	16	(2.3)	3	(1.6)	2	(0.4)
Bernalillo	2	(1.3)	7	(1.0)	1	(0.5)	1	(0.2)
Victim - Perpetrator Relationship								
Acquaintance	67	(33.0)	264	(37.3)	87	(40.5)	318	(50.1)
Stranger	57	(28.1)	234	(33.1)	9	(4.2)	31	(4.9)
Unknown	44	(21.7)	85	(12.0)	30	(14.0)	48	(7.6)
Spouse/Significant Other	12	(5.9)	78	(11.0)	2	(0.9)	8	(1.3)
Family Member	23	(11.3)	17	(2.4)	87	(40.5)	230	(36.2)
Date	0	(0.0)	29	(4.1)	0	(0.0)	0	(0.0)
Missing	39	(16.1)	8	(1.1)	0	(0.0)	4	(0.6)
Mode of Arrival to Medical Facility								
Ambulatory	101	(50.5)	620	(90.1)	-		-	
Ambulance	72	(36.0)	62	(9.0)	-		-	
Unknown	25	(12.5)	3	(0.4)	-		-	
Other	2	(1.0)	3	(0.4)	-		-	
Missing	42	(17.4)	27	(3.8)	-		-	
Who Victim Arrived With								
Law Enforcement	39	(18.9)	198	(29.8)	-		-	
Significant Other	12	(5.8)	181	(27.3)	-		-	
Self	54	(26.2)	170	(25.6)	-		-	
EMS	31	(15.0)	66	(9.9)	-		-	
Friend	19	(9.2)	20	(3.0)	-		-	
Family	7	(3.4)	24	(3.6)	-		-	
Other	0	(0.0)	5	(.8)	-		-	
Not documented	44	(21.4)	0	(.0)	-		-	

Exhibit 5. Assault characteristics for sexual assaults from medical and police data, by pre- and post-SANE periods, Bernalillo County, NM, 1994–1999.

	Pre-SANE Medical		Post-SANE Medical		Pre-SANE Police		Post-SANE Police	
	N	(%)	N	(%)	N	(%)	N	(%)
Assault Characteristics								
Location of Assault								
Other	61	(28.5)	192	(27.1)	-		-	
Victim's Home	34	(15.9)	184	(26.0)	-		-	
Unknown	77	(36.0)	98	(13.8)	-		-	
Perpetrator's Home	37	(17.3)	131	(18.5)	-		-	
Vehicle/Park/Street	5	(2.3)	101	(14.2)	-		-	
Other	0	(0.0)	3	(0.4)	-		-	
DV Related Assault								
No	-		526	(74.3)	95	(67.9)	53	(41.4)
Yes	-		93	(13.1)	45	(32.1)	75	(58.6)
Unknown	-		89	(12.6)	0	(0.0)	0	(0.0)
Day of Assault								
Sunday	19	(9.4)	135	(19.1)	-		-	
Saturday	31	(15.3)	130	(18.4)	-		-	
Wednesday	14	(6.9)	95	(13.4)	-		-	
Thursday	15	(7.4)	89	(12.6)	-		-	
Monday	18	(8.9)	84	(11.9)	-		-	
Friday	18	(8.9)	76	(10.7)	-		-	
Tuesday	16	(7.9)	69	(9.7)	-		-	
Unknown	71	(35.1)	30	(4.2)	-		-	
Time of Assault								
12 AM to 4 AM	98	(56.6)	253	(39.4)	-		-	
8 PM to 12 AM	26	(15.0)	140	(21.8)	-		-	
4 AM to 8 AM	14	(8.1)	71	(11.1)	-		-	
4 PM to 8 PM	9	(5.2)	69	(10.7)	-		-	
12 PM to 4 PM	11	(6.4)	61	(9.5)	-		-	
8 AM to 12 PM	15	(8.7)	48	(7.5)	-		-	
Weapons								
None - Hands, Feet, etc.	-		454	(64.0)	167	(90.8)	369	(92.9)
Unknown	-		130	(18.3)	0	(0.0)	0	(0.0)
Cutting Instrument	-		53	(7.5)	12	(6.5)	13	(3.3)
Gun	-		56	(7.9)	3	(1.6)	7	(1.8)
Blunt Instrument	-		7	(1.0)	2	(1.1)	2	(0.5)
Other	-		9	(1.3)	0	(0.0)	6	(1.5)

Exhibit 6. Medical and forensic services documented as provided by pre- and post-SANE groups, UNMHSC and the Albuquerque SANE Collaborative, 1994–1999.

	Pre-SANE		Post-SANE	
	N	(%)	N	(%)
Medical Services				
Pregnancy Test				
Yes	160	(77.3)	557	(80.6)
No	28	(13.5)	42	(6.1)
Declined	14	(6.8)	37	(5.4)
Not applicable	5	(2.4)	55	(8.0)
Not documented	35	(14.5)	24	(3.4)
Pregnancy Prophylaxis				
Yes	109	(60.9)	575	(83.7)
No	41	(22.9)	42	(6.1)
Declined	15	(8.4)	43	(6.3)
Not applicable	14	(7.8)	27	(3.9)
Not documented	63	(26.0)	28	(3.9)
STD Treatment				
Yes	146	(60.3)	586	(85.8)
No	18	(7.4)	33	(4.8)
Not applicable	17	(7.0)	64	(9.4)
Not documented	61	(25.2)	32	(4.5)
Referral to Rape Crisis Documented	99	(40.9)	544	(76.1)
Referral to Social Services Documented	31	(12.8)	342	(47.8)
Referral to STD Clinic Documented	22	(9.1)	105	(14.7)
Forensic Services				
Assault Reported to Police				
Yes	115	(47.5)	470	(66.6)
No	22	(9.1)	180	(25.5)
Not documented	105	(43.4)	56	(7.9)
Forensic Exam				
Yes	49	(21.4)	684	(97.2)
No	19	(8.3)	20	(2.8)
Not documented	174	(76.0)	11	(1.6)
Evidence Collected				
Yes	39	(47.0)	673	(98.0)
No	44	(53.0)	14	(2.0)
Not documented	159	(65.7)	28	(3.9)
Colposcope Used				
Yes	20	(8.3)	626	(87.6)
No	22	(9.1)	80	(11.2)
Not documented	200	(82.6)	9	(1.3)

Exhibit 7. Flow diagram of acute sexual assault services in Albuquerque at University of New Mexico Health Sciences Center (pre-SANE) or at the Albuquerque SANE Collaborative (post-SANE), with time interval descriptions and mean times (in minutes) observed, 1994–1999.

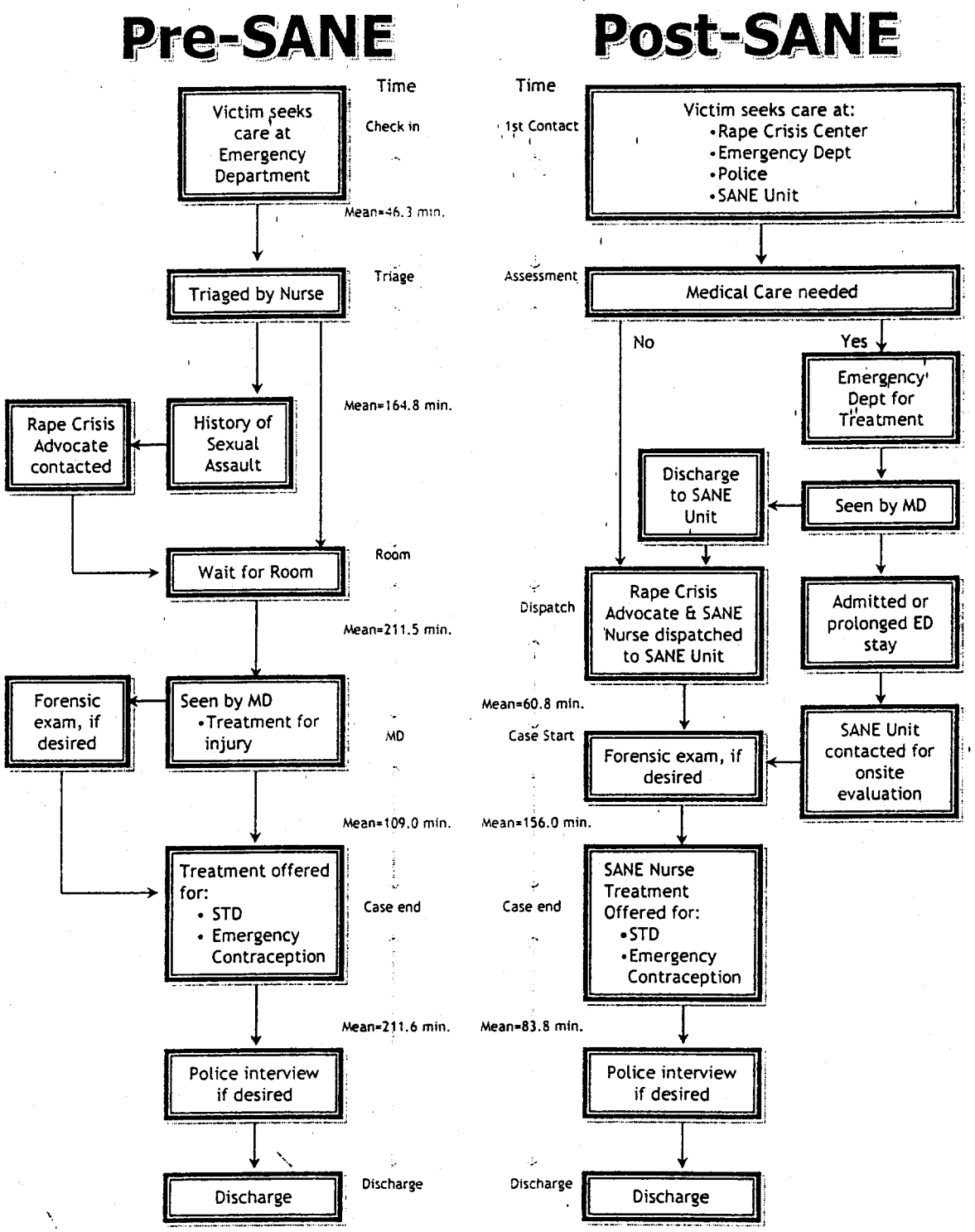


Exhibit 8. Comparable time intervals experienced by sexual assault victims pre- and post-SANE, 1994–1999.

		Time Intervals (in minutes)				
Pre/Post	**Time interval**	**N**	**Median**	**Mean**	**SD**	**p value**
Pre	Check in time to MD Time	117	118	139.5	97.8	<.0001
Post	Dispatch to Case Start	650	38	60.8	120.4	
Pre	MD to Case Completion	96	90	107.3	107.2	<.0001
Post	Case Start to Case Completion	630	137	156.0	101.6	
Pre	Case Completion to Discharge	86	5	226.3	511.1	<.0001
Post	Completion to Discharge	596	60	83.8	118.9	

Exhibit 9. Suspect characteristics and sexual assault case characteristics, by pre- and post-SANE periods, law enforcement, prosecution, and court data. Bernalillo County, New Mexico, 1994–1999.

	Pre-SANE Police		Post-SANE Police		Pre-SANE Prosecution		Post-SANE Prosecution		Pre-SANE Court		Post-SANE Court	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Suspect Characteristics												
Male	338	(90.4)	927	(88.6)	—		—		—		—	
Age group (in years)												
18 - 25	88	(24.1)	184	(17.8)	39	(23.5)	89	(33.1)	25	(23.1)	52	(17.7)
26 - 35	111	(30.4)	372	(35.9)	101	(60.8)	97	(36.1)	27	(25.0)	103	(35.0)
36 - 45	96	(26.3)	251	(24.2)	6	(3.6)	48	(17.8)	32	(29.6)	71	(24.1)
46 - 65	61	(16.7)	218	(21.0)	19	(11.4)	32	(11.9)	17	(15.7)	60	(20.4)
66 and older	9	(2.5)	11	(1.1)	1	(0.6)	3	(1.1)	7	(6.5)	8	(2.7)
Missing	19	(4.9)	10	(1.0)	27	(14.0)	22	(7.6)	10	(8.5)	34	(10.4)
Perpetrator Ethnicity												
Anglo/Caucasian	165	(43.0)	404	(38.6)	39	(23.2)	59	(43.7)	—		—	
Hispanic	128	(33.3)	407	(38.9)	101	(60.1)	38	(28.1)	—		—	
American Indian	61	(15.9)	123	(11.8)	7	(4.2)	15	(11.1)	—		—	
African American	25	(6.5)	83	(7.9)	19	(11.3)	21	(15.6)	—		—	
Oriental	5	(0.8)	29	(2.8)	2	(1.2)	1	(0.7)	—		—	
Other	—		—		—		1	(0.7)	—		—	
Unknown	—		—		25	(13.0)	156	(53.6)	—		—	
Domestic Violence Related												
Yes	114	(30.1)	213	(44.9)	89	(46.1)	125	(43.0)	—		—	
No	265	(69.9)	261	(55.1)	104	(53.9)	166	(57.0)	—		—	
Missing	5	(1.3)	572	(150.9)								
Alcohol Related												
Yes	120	(82.8)	—		72	(37.3)	96	(33.0)	—		—	
No	25	(17.2)	—		121	(62.7)	195	(67.0)	—		—	
Missing	239	(62.2)	—									
Drug Related												
Yes	20	(14.6)	123	(36.8)	37	(19.2)	65	(22.3)	—		—	
No	117	(85.4)	111	(33.2)	156	(80.8)	226	(77.7)	—		—	
Missing	247	(64.3)	830	(78.0)								
Habitual Offender												
Yes	—		—		3	(1.6)	7	(2.4)	—		—	
No	—		—		190	(98.4)	284	(97.6)	—		—	

Exhibit 10. Charges and cases moved forward to grand jury and district court, by pre- and post-SANE periods, Second Judicial District Court, Bernalillo County, NM, 1994–1999.

	Pre-SANE		Post-SANE		p value
	N	(%)	N	(%)	
Total number of initial charges	2,304		3,483		
Total number of cases					
Charge level					
Charges presented to Grand Jury	1,501	(65.2)	2,461	(70.3)	<0.0001
Charges filed in District Court	1,501	(65.2)	2,448	(70.7)	<0.0001
Case level					
Cases presented to Grand Jury	58	(37.7)	149	(49.5)	0.0164
Cases filed in District Court	58	(37.7)	149	(49.5)	0.0164

Exhibit 11. Number of charges assigned per defendant, pre- and post-SANE, Second Judicial District Court, Bernalillo County, NM, 1994–1999.

	Charges Assigned per Case					p value
Period	**N**	**Mean**	**SD**	**Min**	**Max**	
Pre-SANE	194	5.4	4.1	1	17	<.0001
Post-SANE	273	7.0	7.3	1	44	

Exhibit 12. Percentage of convictions resulting from grand jury indictment, by charge type, pre- and post-SANE, Second Judicial District Court records, Bernalillo County, NM, 1994–1999.

	Pre-SANE		Post-SANE		p value
Charge Type	**N convicted / N charges**	**%**	**N convicted / N charges**	**%**	
Criminal Sexual Penetration	211 / 360	58.6	541 / 781	69.3	0.0010
Criminal Sexual Contact	109 / 213	51.2	440 / 714	61.6	0.0082
Child Abuse	66 / 120	55.0	169 / 217	77.9	<0.0001
Kidnapping	32 / 60	53.3	100 / 202	49.5	0.7086
Assault	16 / 48	33.3	77 / 159	48.4	0.0935
Interfering with investigation	30 / 54	55.6	54 / 100	54.0	0.9877
Attempted felony	31 / 39	79.5	36 / 47	76.6	0.9516
Burglary/Property Damage	8 / 15	53.3	27 / 55	49.1	1.0000
Drug/Alcohol Abuse	5 / 10	50.0	12 / 23	52.2	1.0000
Firearm Posession/Enhancment	1 / 4	25.0	3 / 16	18.8	1.0000
Criminal Sexual Solicitation	17 / 34	50.0	59 / 75	78.6	0.0052
Violation of Protective order	2 / 2	100.0	2 / 8	25.0	0.1330
Habitual Offender	1 / 1	100.0	6 / 6	100.0	—
Motor Vehicle Violation	4 / 7	57.1	2 / 4	50.0	1.0000

Exhibit 13. Charge outcome by highest applicable initial charge filed pre- and post-SANE. Bernalillo County, NM, 1994–1999.

	Pre-SANE		Post-SANE	
	N	(%)	N	(%)
Total CSP Charges	360		781	
Charge Outcome				
Convicted	211	(58.6)	541	(69.3)
Guilty Plea	193	(90.6)	524	(96.9)
Same degree CSP	*157*	*(80.5)*	*455*	*(86.8)*
Lesser degree CSP	*35*	*(17.9)*	*67*	*(12.8)*
Other Felony	*1*	*(0.5)*	*2*	*(0.4)*
Jury trial	18	(8.5)	17	(3.2)
Same degree CSP	*16*	*(88.9)*	*16*	*(94.1)*
Lesser degree CSP	*2*	*(11.1)*	*1*	*(5.9)*
Other Felony	*0*	*(0.0)*	*0*	*(0.0)*
Nolle Prosequi	102	(28.3)	130	(16.6)
Dismissal	39	(10.8)	91	(11.7)
Acquittal	7	(1.9)	18	(2.3)
Other	1	(0.3)	1	(0.0)
Total CSC Charges	213		714	
Charge Outcome				
Convicted	109	(51.2)	440	(61.6)
Guilty Plea	95	(87.2)	401	(91.1)
Same degree CSC	*72*	*(75.8)*	*352*	*(87.8)*
Lesser degree CSC	*18*	*(18.9)*	*47*	*(11.7)*
Other Felony	*5*	*(5.3)*	*2*	*(0.5)*
Jury trial	14	(12.8)	39	(9.7)
Same degree CSC	*13*	*(92.9)*	*37*	*(94.9)*
Lesser degree CSC	*1*	*(7.1)*	*1*	*(2.6)*
Other Felony	*0*	*(0.0)*	*0*	*(0.0)*
Nolle Prosequi	73	(34.3)	171	(23.9)
Dismissal	23	(10.8)	80	(11.2)
Acquittal	8	(3.8)	12	(1.7)
Other	0	(0.0)	1	(0.1)

Abbreviations:
CSP: Criminal sexual penetration
CSC: Criminal sexual contact

Exhibit 14. Case outcome, by highest applicable charge per case, pre- and post-SANE, Bernalillo County, NM, 1994–1999.

	Pre-SANE		Post-SANE	
	N	(%)	N	(%)
Total Cases with Highest Case Charge: CSP	141		209	
Charge Outcome				
Convicted	70	(49.6)	111	(53.1)
Guilty Plea	61	(87.1)	99	(89.2)
Same degree CSP	*52*	*(85.2)*	*85*	*(85.9)*
Lesser degree CSP	*5*	*(8.2)*	*9*	*(9.1)*
Other Felony	*2*	*(3.3)*	*5*	*(5.1)*
Jury trial	9	(12.9)	12	(10.8)
Same degree CSP	*8*	*(88.9)*	*9*	*(75.0)*
Lesser degree CSP	*1*	*(11.1)*	*3*	*(25.0)*
Other Felony	*0*	*(0.0)*	*0*	*(0.0)*
Nolle Prosequi	37	(26.2)	54	(25.8)
Dismissal	29	(20.6)	39	(18.7)
Acquittal	4	(2.8)	5	(2.4)
Other	1	(0.7)	0	(0.0)
Total Cases with Highest Case Charge: CSC	88		148	
Charge Outcome				
Convicted	41	(46.6)	73	(49.3)
Guilty Plea	35	(85.4)	61	(83.6)
Same degree CSC	*26*	*(74.3)*	*48*	*(78.7)*
Lesser degree CSC	*7*	*(20.0)*	*10*	*(16.4)*
Other Felony	*2*	*(5.7)*	*3*	*(4.9)*
Jury trial	6	(14.6)	12	(19.7)
Same degree CSC	*4*	*(66.7)*	*7*	*(58.3)*
Lesser degree CSC	*2*	*(33.3)*	*4*	*(33.3)*
Other Felony	*0*	*(0.0)*	*1*	*(8.3)*
Nolle Prosequi	24	(27.3)	41	(27.7)
Dismissal	18	(20.5)	25	(16.9)
Acquittal	5	(5.7)	9	(6.1)
Other	0	(0.0)	0	(0.0)

Abbreviations:
CSP: Criminal sexual penetration
CSC: Criminal sexual contact

Exhibit 15. Average time from grand jury indictment to district case disposition, pre- and post-SANE, Bernalillo County, NM, 1994–1999.

Period	Time to case disposition (in days)*					
	N	Mean	SD	Min	Max	p value
Pre-SANE	118	469.7	219.6	4	1,167	<0.0001
Post-SANE	213	334.6	154.6	8	1,274	

*Average number of days between Grand Jury indictment and case disposition.

Exhibit 16. Sentencing outcome of sexual assault cases, pre- and post-SANE, Second Judicial District Court records, Bernalillo County, NM, 1994–2000.

	Pre-SANE		Post-SANE		p value
	N	(%)	N	(%)	
Total	194		274		
Incarceration Time					
Yes	89	(45.9)	151	(55.1)	0.0490
No	105	(54.1)	123	(44.9)	
Probation					
Yes	111	(57.2)	184	(66.9)	0.0324
No	83	(42.8)	91	(33.1)	
Community Service					
Yes	16	(8.2)	17	(6.2)	0.3890
No	178	(91.8)	258	(93.8)	

Exhibit 17. Sentence times imposed on convicted sexual assault offenders, pre- and post-SANE, Second Judicial District Court records, Bernalillo County, NM, 1994–2000.

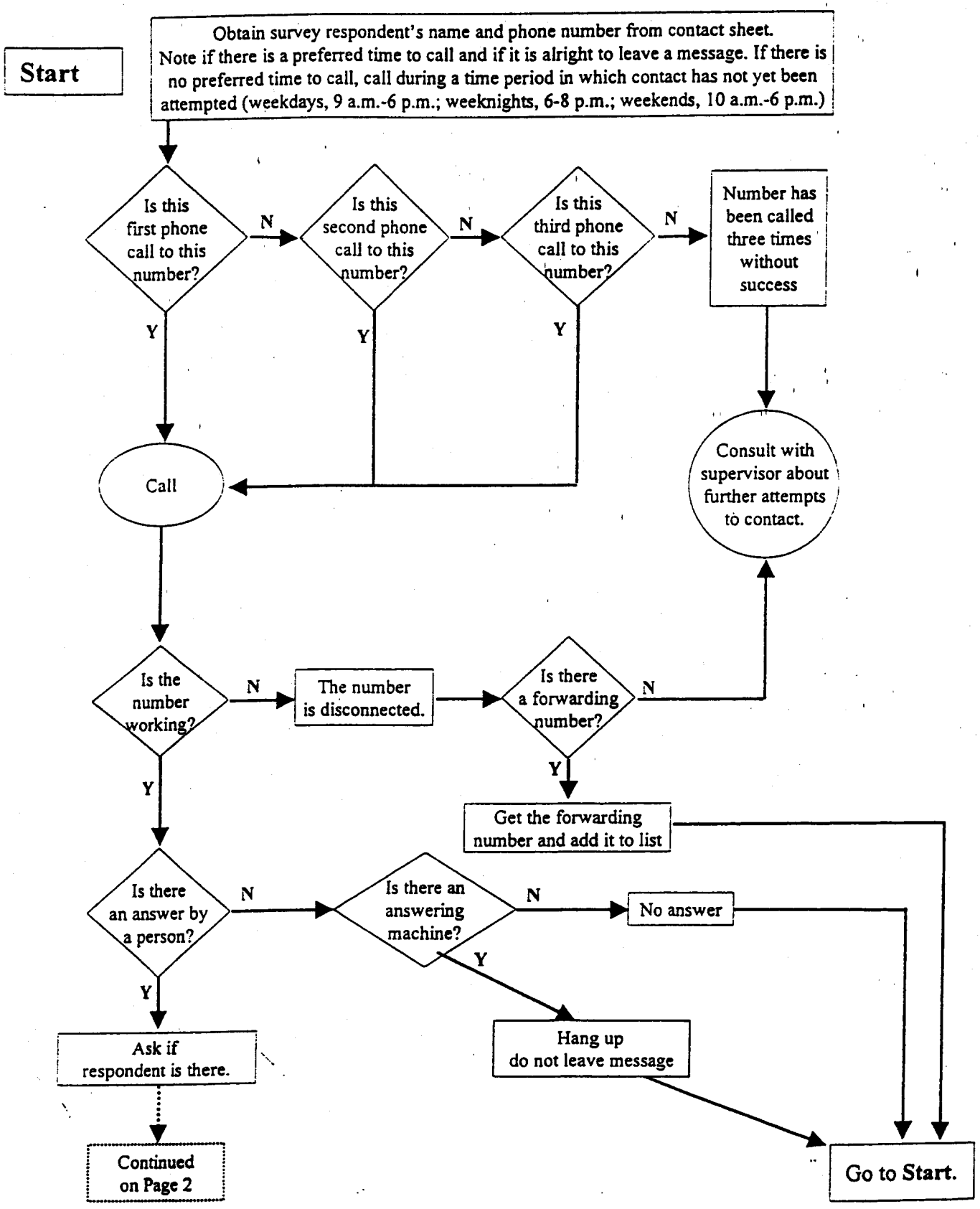
Period	Sentence	Sentence Time					p value
		N	Mean	SD	Min	Max	
Pre-SANE	Incarceration time (Years)	55	1.2	13.8	364 days	72.0	
Post-SANE	Incarceration time (Years)	78	5.1	22.1	364 days	164.0	<0.0001
Pre-SANE	Probation time (Years)	41	3.6	1.4	1.0	5.0	
Post-SANE	Probation time (Years)	39	4.0	2.5	364 days	16.9	<0.0001
Pre-SANE	Hours of community service	16	12.5	50.0	0.0	200.0	
Post-SANE	Hours of community service	2	75.0	35.4	50.0	100.0	0.2048

Exhibit 18. Sentence imposed on convicted sexual assault offenders for any charge and by CSP and CSC as highest sexual assault charge, pre- and post-SANE, Second Judicial District Court records, Bernalillo County, NM, 1994–1999.

Period	Sentence (in years, for all charges)	Sentence Time					p value
		N	Mean	SD	Min	Max	
Pre-SANE	Total Incarceration Time	55	1.2	13.8	0	72.0	<0.0001
Post-SANE	Total Incarceration Time	78	5.1	22.1	0	164.0	
Pre-SANE	CSP Incarceration Time	21	4.3	7.5	364 days	72.0	0.0925
Post-SANE	CSP Incarceration Time	30	8.5	18.4	364 days	164.0	
Pre-SANE	CSC Incarceration Time	34	1.1	17.5	0	17.0	0.1658
Post-SANE	CSC Incarceration Time	48	15.2	16.0	0	22.0	

Sentence time is adjusted for credited or deferred sentence time. Times reflect the sentence for all charges associated with the case.
For CSP and CSC breakdown, CSP was the highest sexual offense; CSC was the highest sexual offense.
CSP = Criminal sexual penetration
CSC = Criminal sexual contact

University of New Mexico Department of Emergency Medicine
Impact Evaluation of a SANE Unit in Albuquerque, New Mexico
Flowchart for Survivor Telephone Survey—Survey Contact



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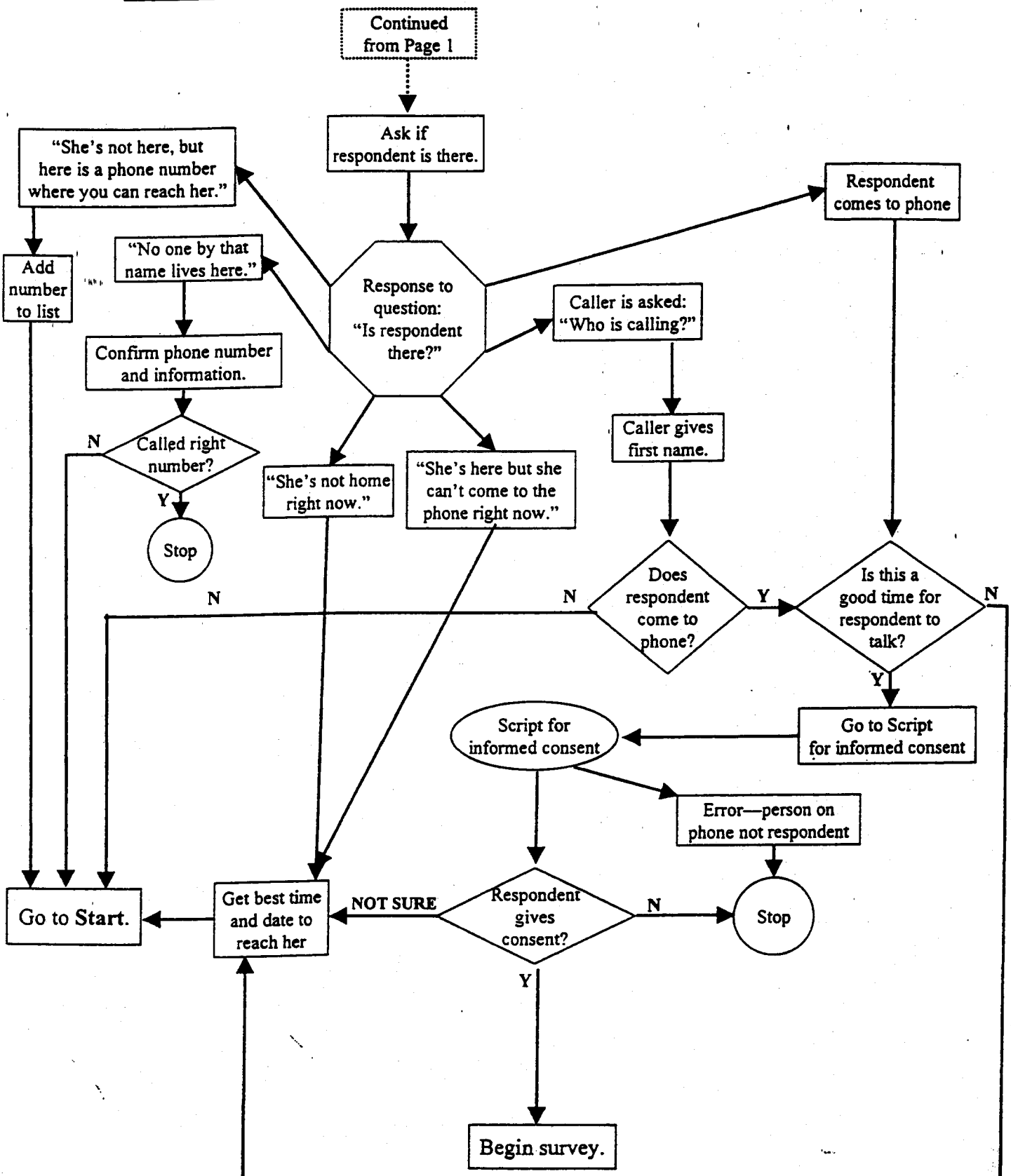

THE UNIVERSITY OF NEW MEXICO • HEALTH SCIENCES CENTER
SCHOOL OF MEDICINE

Department of Emergency Medicine
David P. Sklar, M.D., Chair
David Doezema, M.D., Vice-Chair

Name
Address
City, State, Zip

Date

Dear Ms. _____:

The University of New Mexico Health Sciences Center and the Sexual Assault Nurse Examiner Collaborative (SANE) are working together to improve services for sexual assault treatment and prevention. This project, which is funded by the National Institute of Justice, will help us to understand what kinds of medical, legal, and support services are most beneficial. As part of this project, we are collecting information by telephone from female sexual assault survivors to find out which services were most helpful to them.

Your name was chosen from a list of women who were seen for sexual assault at University Hospital or the Albuquerque Sexual Assault Nurse Examiner (SANE) Collaborative. A woman from SANE called you and got your permission to have us contact you. We are confirming that you agreed to complete a short telephone interview. A woman interviewer from the University of New Mexico Center for Injury Prevention Research and Education will call you to conduct the interview, which will last approximately 20 minutes. If she calls at a time that is not good for you to talk, you may ask her to call back another time.

The interviewer will ask about your opinion of the healthcare and legal services you received. Your answers to the questions will be kept private. We will not report your name or any of your individual responses. Instead, we will combine your answers with those of the other participants for an overall report.

Your participation is totally voluntary. Your decision will not affect any future services you receive at University Hospital or the UNM Health Sciences Center. You may refuse to answer any of the questions in the survey, and you may end the survey at any time.

If you choose to participate you will receive a $10.00 gift certificate from Target to compensate you for your time.

You may not benefit directly from this research. We believe that this study will help us improve services for sexual assault survivors in the future. You may feel good about participating in a process that will help other sexual assault survivors. There may also be risks, however, to participating in this research. You may feel that you are re-experiencing the trauma by talking to the interviewer about your experiences with

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the health care and legal system. We do not know how often people will benefit from participating in this telephone survey, or how often they may become distressed by it. If you find the interview process upsetting and would like to talk to someone, the Albuquerque Rape Crisis Center 24-hour hotline (266-7711) is available for support.

Only you can decide if you should participate in this study. If you have questions about it, please call me at (505) 272-5062. I will be happy to answer any of your questions. We thank you in advance for your assistance in completing this important survey. With your help, we hope to improve the services available for sexual assault treatment and prevention.

Sincerely,

Cameron Crandall, MD
UNM Center for Injury Prevention Research and Education

Hello, I'm _____ calling from the University of New Mexico. I would like to speak with (respondent).

(WHEN ON-LINE, REINTRODUCE.) I am with the UNM Health Sciences Center Department of Emergency Medicine. We are conducting a research study about ways to improve services for sexual assault survivors. I understand that you have already been contacted by _____ and that you may be interested in helping us by answering some questions about the care and services that you received. Is that right? Did you receive the letter from us explaining the study? *If "NO"*, ask: would you like me to send you one? If "YES", ask: What is your address? (Verify address on form). In a moment I will be giving you some numbers. Do you have a pen or pencil ready? This interview should take about 20 to 30 minutes. Is this a good time for me to talk to you?

IF SHE ANSWERS YES, CONTINUE.

IF SHE ANSWERS NO: Is there another time when it would be more convenient for us to talk? IF YES, RESCHEDULE INTERVIEW. IF NOT INTERESTED, THANK HER FOR HER TIME AND END CALL.

Let me remind you again about the purpose of this study and how it works. As part of this study, we are collecting information by telephone from women who were seen at (SELECT ONE):

- University Hospital
- the Albuquerque SANE Collaborative

As one of these women we want to know what made your experience easier, and what made it more difficult, so that we know how to improve services for sexual assault survivors.

The questions in this telephone survey will only ask for your opinions of the medical and legal services you received. If you choose to participate in the survey, your answers will be kept private. We will not report your name or any of your individual responses. Instead, the answers that we receive from all of the participants will be combined for an overall report.

You may not benefit directly from this research; however, you may feel good about participating in a process that will improve services for other sexual assault survivors. Only you can decide if you should participate. You may refuse to answer any of the questions in the survey, and you may end the survey at any time. There may also be risks to your participation. Even though we will not ask you to talk about the assault, you may feel you are re-experiencing the trauma by answering questions about your opinion of the health care and legal system. We do not know if people may benefit from participating in the telephone survey, or if they may become distressed by it.

If you feel distressed by the interview and you would like to talk to someone, the Albuquerque Rape Crisis Center hotline is available for support 24 hours a day at 266-7711. If you have any questions or concerns about the survey, you may contact the study's principal investigator, Dr. Cameron Crandall, through the University Hospital Emergency Department during office hours at 272-5062 or after hours at 272-2411. If you choose not to participate, we will respect your decision and will not attempt to contact you again. Your decision will not affect any future services you receive at University Hospital or the UNM Health Sciences Center. Your participation is totally voluntary. As is customary with surveys like this we offer $10. 00 for you time and help

Do you have any questions about the survey? ANSWER QUESTIONS. Would you like to participate in the survey?

IF YES, BEGIN INTERVIEW. IF NO, THANK HER FOR HER TIME

LIST OF CONTACT NAMES AND TELEPHONE NUMBERS
University of New Mexico SANE Impact Evaluation

Principal Investigator, Cameron Crandall, MD
Questions re: Patient confidentiality, protocol, study design and purpose
272-6521 (w), 272-5062 (w). 561-0478 (pager)

Co-Investigator, Deborah Helitzer, ScD
Questions re: protocol, study design and purpose
272-1601 (w)

Project Coordinator, Anne Worthington
Questions re: protocol, scheduling
272-1209 (w), (505) 984-2013 (h)

Research Coordinator, Jonathon LaValley
Questions re: data and forms
272-8670

Albuquerque Rape Crisis Center
Referral for survivors
266-7711

Commonly Asked Questions

1). How did you get my name?

Your name was chosen from a list of people served by SANE and the University of New Mexico Health Sciences Center.

2). I have never been assaulted. Why are you calling me?

Am I speaking to _____(name of patient) who was born in ____(year of birth on contact sheet)? (if she answers no) or (if she answers yes that is her name and birth year but she wasn't assaulted) **I'm sorry, we must have made a mistake.**

3). Who is Dr. Crandall?

The principal investigator on this project.

5). Why is the University of New Mexico doing this?

To evaluate sexual assault services for women and find out if services need to be improved. SANE is not doing the project because we want an independent evaluation.

6.) When will the confidential data be destroyed?

At the end of the study. The study should be finished the beginning of next year.

7). How many questions are on the survey?

The number of questions depends on individual responses. However, the survey takes about 15 to 20 minutes.

8). When will this project be finished?

The beginning of next year.

9). Can you fax or email me the letter?

Yes. Can I have your fax or e-mail address?

10). How do you get to the Emergency Department?

The letter will be available at the administrative office of the Emergency Department which is open 9 to 5 Monday through Friday. You need to call first at 272-5062 to get directions.

Interviewer_____ start time _____ end time _____ Study ID#_____

An Impact Evaluation of a SANE Unit in Albuquerque, New Mexico
UNM Center for Injury Prevention Research and Education
Sexual Assault Survivor Telephone Survey

1. I'm going to ask you a series of questions to find out what—in your opinion—would make an **ideal** service for women who have been sexually assaulted. I'll ask you about medical, law enforcement, and legal services. Before we talk about your own experience, I would like you to imagine what would make up an ideal service for survivors. If you could create an ideal **medical** service, how would you rate the importance of the following factors on a scale from 1 to 5, with 1 being "very unimportant", 2 being "somewhat unimportant", 3 being "neutral", 4 being "somewhat important" and 5 being "very important."

	1 VERY UNIMPORTANT	2 SOMEWHAT UNIMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY IMPORTANT	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
a. The patient is seen by a medical provider in a reasonable amount of time.								
b. The patient receives any medical treatment that is necessary due to the assault.								
c. The patient feels safe in the medical facility.								
d. The medical provider is understanding.								
e. The medical provider is competent.								
f. The patient feels comfortable talking about the incident to the medical provider.								
g. The information the patient provides to the medical provider is kept confidential.								
h. The patient's privacy is respected.								
i. The physical environment of the medical facility is soothing.								

	1 VERY UNIMPORTANT	2 SOMEWHAT UNIMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY IMPORTANT	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
j. The patient is made as physically comfortable as possible during the rape exam.								
k. The rape exam is conducted by a specially trained nurse. *(if they ask – SANE)*								
l. The rape exam is conducted by a doctor.								
m. It is important to collect physical evidence, even though it might make the patient feel more uncomfortable.								
n. The patient has a rape crisis advocate available to her.								

Now I'm going to ask you some questions about police and legal services. If you could create ideal police and legal services, how would you rate the importance of the following factors on a scale from 1 to 5, with 1 being "very unimportant", 2 being "somewhat unimportant", 3 being "neutral", 4 being "somewhat important" and 5 being "very important."

	1 VERY UNIMPORTANT	2 SOMEWHAT UNIMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY IMPORTANT	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
o. The survivor has access to police at the medical facility.								
p. The police are thorough in their investigation of the case.								
q. The survivor feels respected by the police.								
r. The survivor receives support for either wanting or not wanting to prosecute her offender.								
s. The district attorney's office is competent in the prosecution of the offender.								
t. The survivor is kept informed about the prosecution process.								

Interviewer _____ Study ID#_____

- In your opinion, what is a reasonable amount of time in which a sexual assault survivor should be seen after they arrive at the medical facility. *(Record response here)* _____
- Are there things that are not on this list that you think would be ideal for services for sexual assault service? ___Yes___No
- *If "YES", obtain supplemental factor page. If " NO", go to Question #2.*

2. Now I'm going to ask you a different kind of question with a different rating scale. These questions will be based on your own experience with sexual assault services. The first set of questions is about medical services.

a. Did you seek medical treatment after the assault?
_____Y _____N _____Don't know _____Not applicable _____Refused to answer

- *If "NO" ask the following question and proceed to Question #3.*

Can you tell me why?_____

- *If "YES" continue below. For all other responses, mark "not applicable" for items b through p and proceed to Question #3.*

b. Was a rape crisis advocate present for you at the medical facility?
_____Y _____N _____Don't know _____Not applicable _____Refused to answer

Please rate how strongly you agree or disagree with the following statements on a scale from 1 to 5, with 1 being "strongly disagree" , 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

	1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
c. I was seen by a medical practitioner in a reasonable amount of time.								
d. My needs for medical treatment were fully met.								
e. I felt safe while at the medical facility.								
f. The medical provider was understanding.								
g. The medical provider was competent.								
h. I felt comfortable talking to the medieal provider about the incident.								

Interviewer_____ Study ID#_____

	1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
i. I felt that the information collected by the medical provider would be held in confidence.								
j. My privacy was respected.								
k. The physical environment of the medical facility was soothing to me.								

If respondent gave additional factors on the Supplemental Factor Page, go to Part II (on the 2nd page of the SFP) and ask questions.

l. There are a number of reasons why people seek medical treatment after an assault. The following is a list of possible reasons. Was it?

For an exam to collect physical evidence	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
For possible pregnancy prevention	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
For injuries requiring treatment	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
For sexually transmitted disease prevention	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Because you were encouraged to go by police	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Because you were encouraged to go by family	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Because you were encouraged to go by a friend	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Were you forced to seek medical treatment?	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused

If so, by whom?_____

Was there another reason I have not mentioned?

Other _____

m. Where did you seek treatment? *If not SANE unit skip to item o.*

_____University Hospital
_____SANE unit at St. Joseph NE Heights Hospital
_____Other hospital
_____Private doctor's office
_____Other_____
_____Don't know
_____Not applicable
_____Refused to answer

n1. Did you go directly to the SANE unit, or did you go to the emergency room and then to SANE?

_____Went directly to SANE *If "YES", go to item o.*
_____Went to emergency room first, then referred to SANE from there

n2. Were you treated at the emergency room and then sent to SANE, or did the ER refer you to SANE immediately?

_____First treated at ER, then sent to SANE
_____Referred directly to SANE from the ER
_____Other _____
_____Don't know
_____Refused to answer

o. About how many times not including this visit, since you were fifteen years old have you been a patient in a hospital emergency room?

_____times as a patient in a hospital emergency room

_____Don't know
_____Not applicable
_____Refused to answer

p. How soon after the assault did you seek medical care?

_____Right away
_____Within 24 hours
_____2-3 days after
_____4-7 days after
_____More that 1 week but less than 1 month after
_____After 1 month
_____Don't know
_____Not applicable
_____Refused to answer

3. Did a medical provider perform a special exam to collect physical evidence of a rape?
_____Y _____N _____Don't know _____Not applicable _____Refused to answer

➘ *If "NO" ask the following question and proceed to Question #4 on page 7.*

a. Can you tell me why you did **not** have the exam?

Too uncomfortable	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Too traumatic	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Concerns about chain of evidence	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Concerns about handling of evidence	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Did not want legal evidence taken	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused

Was there another reason that I haven't mentioned?_____

➘ *If "YES"continue on next page.*

➘ *For all other responses, proceed to Question #4 on page 7.*

Interviewer_____ Study ID#_____

Please rate how strongly you agree or disagree with the following statements on a scale from 1 to 5, with 1 being "strongly disagree" , 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

b. I was made as physically comfortable as possible during the exam.

c. I expected the exam to be conducted by a nurse. (if they ask - SANE) (specially trained -)

d. I expected the exam to be conducted by a doctor.

e. It was important to collect the physical evidence, even though it might have made me feel uncomfortable.

f. The medical provider asked for my consent to do the rape exam.

g. The medical provider explained the procedures of the rape exam.

h. I understood why the procedures of the rape exam were necessary.

i. I understood how the physical evidence would be stored and disposed.

j. I felt that I could refuse part or all of the rape exam.

1	2	3	4	5			
STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEUTRAL	SOMEWHAT AGREE	STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

k. On a scale from 1-10, can you tell me how the rape exam was for you, with 1 being "not at all traumatic" and 10 being "very traumatic,"?

1	2	3	4	5	6	7	8	9	10			
NOT AT ALL TRAUMATIC									VERY TRAUMATIC	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

l. Who did your exam?

_____MD
_____SANE nurse
_____Other_____

_____Don't know
_____Not applicable
_____Refused to answer

Interviewer_____ Study ID#_____

4. These next questions are about police services.

a. Did you report your assault to the police?
_____Y _____N _____Don't know _____Not applicable _____Refused to answer

➘ *If "NO" ask the following question and proceed to Question #5 on page #9.*

b. Can you tell me why you did **not** report your assault to the police? Was it because you *(read statement)...*

Were afraid	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Distrusted police	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Were concerned about privacy	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Didn't want anyone to know	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer

Are there other reasons I have not mentioned?_____

➘ *If "YES" continue below. For all other responses proceed to Question #5 on page #9.*

Based on your experience with police services, please rate your agreement or disagreement with the following statements on a scale from 1 to 5, with 1 being "strongly disagree" , 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

	1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
c. I had access to police at the medical facility.								
d. The police were thorough in their investigation of my case.								
e. I felt respected by the police.								
f. I received support for wanting or not wanting to prosecute my offender.								

I'm now going to ask you some more questions about your experience with the police.

g. First, who reported the incident to the police?

_____Self reported
_____Medical facility reported
_____Rape crisis center reported
_____Family member reported
_____Friend reported
_____Other_____
_____Don't know
_____Refused to answer

h. How soon after the assault were the police notified?
Write in number of hours, days, etc.

_____Hours
_____Days
_____Weeks
_____Months
_____Other_____
_____Don't know
_____Refused to answer

i. Were you interviewed by a uniformed officer or by a sex crimes detective?

_____Uniformed officer
_____Sex crimes detective
_____Both uniformed officer and sex crimes detective
_____Other_____
_____Not interviewed
_____Don't know
_____Refused to answer

j. On how many different occasions did the police interview you?

_____ times
_____Not interviewed
_____Don't know
_____Refused to answer

Interviewer_____ Study ID#_____

5. Did the district attorney's office try to prosecute your offender?

_____Y _____N _____Don't know _____Not applicable _____Refused to answer

➘ *If "NO" ask item a below and then proceed to item g.*

a. Why do you think that was? *Do not prompt respondent.*

_____I didn't want to
_____No identified assailant
_____Insufficient evidence
_____Chain of evidence disrupted
_____Insufficient police investigation
_____I signed a waiver not to prosecute
_____Other_____
_____Don't know
_____Refused to answer

➘ *If "YES", continue below. For all other responses, proceed to item g..*

Please rate your agreement or disagreement with the following statements on a scale from 1 to 5, with 1 being "strongly disagree", 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

	1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
b. The district attorney's office was competent in the prosecution of my case.								
c. I was kept informed about the prosecution process.								
d. I supported the district attorney's decision to pursue prosecution.								

The following questions also relate to your experience with the district attorney's office.

e. Did you feel pressured to prosecute?

☐ Yes, I felt pressured
☐ Neutral, neither pressured nor not pressured
☐ No, did not feel pressured
☐ Other response_____

➘ *If "YES", felt pressured, continue on Page #10. For all other responses proceed to ~~Question #6~~.* item h on page 10

Interviewer_____ Study ID#_____

f. By whom did you feel pressured? Did you feel pressure from *(read statement)*...?

Medical provider	☐ YES ☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Rape crisis advocate	☐ YES ☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Police	☐ YES ☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Prosecutor	☐ YES ☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused to Answer
Other_____				

g. We are interested in whether or not you supported the decision **not** to prosecute. Please rate your agreement or disagreement with the following statement on a scale from 1 to 5, with 1 being "strongly disagree", 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

	1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER
I supported the district attorney's decision not to pursue prosecution.								

h. Did you feel pressured **not** to prosecute?

Felt pressured	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Neutral, neither pressured nor not pressured	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Did not feel pressured	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Other response_____					

➘ *If "YES", continue below. For all other responses, skip to Question 6.*

i. By whom did you feel pressured? Did you feel pressure from the *(read statement)*...?

Medical provider	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Rape crisis advocate	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Police	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Prosecutor	☐ YES	☐ NO	☐ DON'T KNOW	☐ N/A	☐ Refused
Other_____					

Interviewer_____ Study ID#_____

6. Now I'm going to ask you some questions about follow-up services. We're interested in the types of services people go to following a sexual assault. I'll read a list of possible services and ask which ones you used.

a.	Did you use the rape crisis center?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
b.	Were you referred by a medical provider to the rape crisis center?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
c.	Did you use legal services?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
d.	Were you referred by a medical provider to legal services?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
e.	Did you use the battered women's shelter?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
f.	Were you referred by a medical provider to the battered women's shelter?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
g.	Did you use services for incest survivors?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
h.	Were you referred by a medical provider to the services for incest survivors?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
i.	Were you referred by a medical provider to other health services (STD, HIV, family planning)?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
j.	Did you use the Crime VictimReparation services?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
k.	Were you referred by a medical provider to the NM crime ~~survivor~~ victim reparation services commission?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
l.	Did you use the alcohol/drug treatment center?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
m.	Were you referred by a medical provider to the alcohol/drug treatment center?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
n.	Did you use counseling, therapy services?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
o.	Were you referred by a medical provider to counseling or therapy services?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused
p.	Were there services that you needed that you did not receive?	☐ Y	☐ N	☐ DN	☐ N/A	☐ Refused

If "YES", write response below. For all other responses, go to question # 7.

If so, what were they?_____

_____

_____

Interviewer_____ Study ID#_____

We're nearly at the end of the survey.

7. For statistical purposes, can you tell me how you describe your ethnicity? *Do not prompt respondent.*

_____African American/Black
_____American Indian
_____Asian/Pacific Islander
_____Caucasian/White
_____Hispanic
_____Other_____
_____Don't know
_____Refuses to answer

8. Before we stop, do you have anything to add, or any suggestions for improving services for sexual assault survivors?

_____

_____

_____

Thank you very much for taking the time to complete this survey. Your participation is very important to us and helps us to better understand the issues facing women who have been sexually assaulted.

Please remember that the Albuquerque Rape Crisis Center hotline is available for support 24 hours a day. That number is 266-7711. You are welcome to call if you'd like to talk to someone.

Are you alright? As part of this research project we are going to conduct a focus group with sexual assault survivors sometime in the next few months. If you are interested, it will be an opportunity to talk further about the services available for sexual assault survivors. Participation in the focus group is completely voluntary. We don't yet know exactly when it will be scheduled but, if you would like to be included, we will call you when we know the date and time of the meeting.

Would you be willing to participate in the focus group? _____Yes _____No

If yes: Is this phone number the correct number to reach you? *Note to interviewer: Write her phone number on the contact sheet. Do not write any identifying information on the survey.*

Thank you again for participating.

END OF INTERVIEW

Interviewer _____ Study ID# _____

Sexual Assault Survivor Telephone Survey
Supplemental Factor Page

What factors are not on the list that you think would be important for an ideal sexual assault service? (Can you list them please.)

Factor 1: _____

Factor 2: _____

Factor 3: _____

Part I.

If you could create an ideal service, how would you rate the importance of these factors on a scale from 1 to 5, with 1 being "very unimportant", 2 being "somewhat unimportant", 3 being "neutral", 4 being "somewhat important" and 5 being "very important."

F1. *Rephrase Factor 1 as a statement and write in:* _____

1 VERY IMPORTANT	2 SOMEWHAT IMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

F2. *Rephrase Factor 2 as a statement and write in:* _____

1 VERY IMPORTANT	2 SOMEWHAT IMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY IMPORTANT	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

F3. *Rephrase Factor 3 as a statement and write in:* _____

1 VERY IMPORTANT	2 SOMEWHAT IMPORTANT	3 NEUTRAL	4 SOMEWHAT IMPORTANT	5 VERY IMPORTANT	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

Interviewer _____ Study ID# _____

Part II.

Based on your own experience with sexual assault services, please rate how strongly you agree or disagree with the following statements on a scale from 1 to 5, with 1 being "strongly disagree", 2 being "somewhat disagree", 3 being "neutral", 4 being "somewhat agree" and 5 being "strongly agree."

F1. *Rephrase Factor 1 as a statement and write in:* _____

_____

_____

1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

F2. *Rephrase Factor 2 as a statement and write in:* _____

_____

1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

F3. *Rephrase Factor 3 as a statement and write in:* _____

_____

1 STRONGLY DISAGREE	2 SOMEWHAT DISAGREE	3 NEUTRAL	4 SOMEWHAT AGREE	5 STRONGLY AGREE	DON'T KNOW	NOT APPLICABLE	REFUSED TO ANSWER

Supplemental factor page