

An evaluation of a rapid conversion to teleSANE in response to COVID-19

Jessica Shaw¹  | Hannah Feeney²  | Joan Meunier-Sham³ | Karen Hazard³ | Pamela Plante³ | Randi Petricone³

¹Department of Psychology, University of Illinois at Chicago, Chicago, Illinois, USA

²RTI International, North Carolina, USA

³Massachusetts Department of Public Health Sexual Assault Nurse Examiner Program, Boston, Massachusetts, USA

Correspondence

Jessica Shaw, Department of Psychology, University of Illinois at Chicago, 1007W, Harrison St, 1050D BSB, Chicago, IL 60607, USA.
 Email: jlshaw2@uic.edu

Abstract

Sexual Assault Nurse Examiners (SANEs) provide expert, comprehensive medical forensic care to patients who present for services following a sexual assault. Because SANEs are not consistently available, telehealth technology is being explored as a means to provide access to this expert care (i.e., teleSANE). During the COVID-19 pandemic, teleSANE offered additional potential benefits by reducing the length of time spent and number of providers in patient exam rooms, the need for personal protective equipment that was in high demand and short supply, and provider anxiety related to providing in-person care. In the summer of 2020, the Massachusetts SANE program rapidly and temporarily converted five hospitals from in-person SANE care to teleSANE. An evaluation team interviewed 23 providers using a rapid research and evaluation methods approach to assess the temporary model and inform the future of SANE care. Evaluation findings reveal it is possible to rapidly and temporarily convert hospitals from in-person to teleSANE care in a time of broad uncertainty, and that such a change requires intensive and thoughtful planning; a shared commitment to being supportive, flexible, and responsive; and specific experience and expertise. Considerations for communities exploring how best to ensure consistent, equitable access to SANEs are discussed.

KEYWORDS

COVID-19, evaluation, rapid research and evaluation methods, sexual assault, Sexual Assault Nurse Examiner, teleSAFE, teleSANE

Highlights

- Sexual Assault Nurse Examiners (SANEs) provide expert comprehensive medical forensic care to sexual assault patients.
- Telehealth technology is used to provide access to SANE expert care in some communities (teleSANE).
- TeleSANE offers unique potential benefits in the midst of a global pandemic, like COVID-19.
- With intensive planning and expertise, in-person SANE services can be rapidly converted to teleSANE.
- SANEs should be available to all patients seeking post-assault care.

INTRODUCTION

Sexual Assault Nurse Examiners (SANEs) provide expert, comprehensive, first-response medical forensic care to patients who present for services following a sexual assault. Prior research has documented that SANEs provide a

markedly improved response to patients reporting sexual assault as compared to the traditional emergency department (ED) response (see Shaw et al., 2017 for a review). Unfortunately, though, SANEs are not uniformly and consistently available across all communities (e.g., see Ruiz, 2020). This presents an equity issue, as some

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survivors in some communities have the opportunity to access this expert care, while it is not available to others. In an effort to ensure equitable access to SANE care to those who would otherwise have no opportunity, communities across the country have begun to pursue telehealth technology as a means to provide this expert care, an approach often referred to as teleSANE (Meunier-Sham et al., 2019; Miyamoto et al., 2020, 2021; Walsh et al., 2019). For example, in Massachusetts (MA), the Massachusetts Department of Public Health (MDPH) SANE program provides an in-person SANE response in 30 hospitals, and a teleSANE response in 10 hospitals through the Massachusetts Department of Public Health National TeleNursing Center (MDPH NTC).

In the midst of the Covid-19 pandemic, the MA SANE program recognized that teleSANE may be particularly well-suited for responding to an array of emerging critical needs: reducing the number of healthcare providers in a patient exam room to mitigate the risk of exposure to and transmission of the virus; rationing limited personal protective equipment (PPE); and being responsive to their SANEs' concerns about providing services while EDs were flooded with Covid-19 patients. Within months of the first COVID-19 outbreak in the state, the MA SANE program developed a modified pandemic protocol that, among other things, prioritized collecting the most probative evidence to reduce the length of the exam, thereby reducing the risk of exposure between patient and provider. The MA SANE program also rapidly and temporarily converted five of their in-person SANE hospitals to teleSANE sites. To do this, the SANE program made adaptations to how they typically provide teleSANE care through the NTC. The MA SANE program partnered with a team of external evaluators to evaluate the development and implementation of this Temporary TeleSANE Model (hereafter, the Temporary Model). The evaluation focused on specific changes made to the typical teleSANE model for rapid implementation of the Temporary Model; the preparation for and roll-out of the Temporary Model; the patient and provider experiences in implementing the Temporary Model; and what the evaluation findings mean for the future care of patients reporting sexual assault. Details on the specific changes made to the typical teleSANE model are presented in a separate manuscript (Shaw et al., 2022). This manuscript reports on the evaluation findings related to preparing for and implementing the Temporary Model; the patient and provider experiences; and implications for future medical forensic care of patients who present following a sexual assault. This manuscript also serves as one example of how a longstanding researcher-practitioner partnership founded upon the principles of ecological inquiry (Trickett et al., 1985) can make possible a collaborative, rapid, responsive evaluation project.

The traditional emergency department, SANE, and teleSANE response

Following a sexual assault, survivors may choose to go to a hospital for post-assault medical care. Most often,

survivors seek post-assault medical care to attend to their physical healthcare needs, or for validation of what they experienced (Du Mont et al., 2009). Medical providers can conduct a medical forensic exam. This includes taking a history from the patient of the events that transpired; collection of the patients' clothing; a head-to-toe physical examination to identify, document, and treat injuries; specimen collection from the patient's body with swabs and photographs; documentation of biological and physical findings; testing and prophylaxis treatment for sexually transmitted infections (STIs), pregnancy, and other concerns as indicated; and referrals and information regarding follow-up and next steps (Office on Violence Against Women, 2013). Traditionally, medical forensic exams have been completed by ED medical providers. However, ED providers are often reluctant to treat these patients, as they prioritize other patients who they perceive to have more urgent health needs and may be concerned about the potential of having to testify in court should the criminal case progress (Shaw et al., 2017). This results in long wait times for survivors, with most waiting in a busy ED for 4–10 hours, all while being instructed not to eat, drink, or use the bathroom so as to maintain any potential physical evidence of the assault. Survivors treated by ED medical providers (i.e., non-SANE) also often experience significant gaps in the specific services provided (e.g., emergency contraception, STI prophylaxis), as well as insensitive and harmful interactions with medical providers (see Campbell, 2005; Campbell & Raja, 2005; Shaw et al., 2017).

Prior research has documented that SANEs provide a markedly improved response to patients reporting sexual assault as compared to the traditional ED response. Specifically, prior studies have found that patients treated by SANEs spend significantly less time at the hospital; receive more comprehensive and appropriate medical services; and report an overall positive experience with SANEs (see Shaw et al., 2017 for a review; Shaw & Coates, 2021). While survivors most often seek post-assault medical care to attend to their physical and emotional needs (Du Mont et al., 2009), some survivors also choose to report the sexual assault to police and pursue criminal legal processes (Downing et al., 2022). Survivors whose cases are treated by SANEs have higher quality forensic evidence collection, and are more likely to be charged, prosecuted, and result in a conviction (see Campbell et al., 2014; Shaw et al., 2017). Unfortunately, SANEs are not uniformly and consistently available across all communities (e.g., see Ruiz, 2020), as communities may not have adequate resources to support the development and ongoing operation of a SANE program. Most often, SANE programs are hospital- or community-based, and require significant investments, financial and otherwise, from their broader institution or local community to operate. Such programs are often also dependent on individual champions to initiate, develop, and maintain the program. This can be difficult for communities already stretched thin, having to make difficult decisions about

how and where to allocate limited resources. Even if a community does have adequate resources (i.e., human, economic, physical, and temporal resources; see Tseng & Seidman, 2007), it may not see the volume of patients necessary for trained SANEs to remain competent in examination and evidence collection procedures. This is true for many tribal and rural communities, and is particularly problematic as individuals in these communities experience high rates of sexual victimization (Annan, 2006; Rosay, 2016). Without local access to SANE expertise, these survivors may receive substandard care that retraumatizes them and compromises potential forensic evidence, or they may forego medical care altogether. This presents an equity issue, as some survivors in some communities have the opportunity to access this expert care, while it is not available to others.

In an effort to ensure equitable access to SANE care for those who would otherwise have no opportunity, communities across the country have begun to pursue telehealth technology as a means to provide this expert care, an approach often referred to as teleSANE. Since 2012, the US Department of Justice, Office for Victims of Crime (OVC) has funded a series of pilot and demonstration projects to test teleSANE. MA SANE was the first grantee of this funding stream, and was awarded funds to develop, implement, and evaluate the first national teleSANE center; MA SANE has been operating the NTC since 2012. In 2016, OVC funded a demonstration project at Pennsylvania State University to develop a statewide teleSANE program (Office for Victims of Crime, 2016). Then, in 2019, OVC funded a new cohort of demonstration sites to develop statewide teleSANE programs, as well as the International Association of Forensic Nurses to serve as a technical assistance provider to the new cohort of sites (Office for Victims of Crime, 2019). Much like the initial development and widespread adoption of in-person SANE programs (see Shaw et al., 2017), teleSANE programs are being explored, developed, and implemented in communities across the country at a faster pace than research and evaluation efforts to understand their impact. While several evaluations are currently underway as part of the 2019 OVC-funded cohort demonstration project, the available limited literature in this area consists of descriptions (Meunier-Sham et al., 2019; Miyamoto et al., 2020) and process or implementation evaluations (Miyamoto et al., 2021; Walsh et al., 2019) of the first two teleSANE programs. These early research and evaluation findings position teleSANE as a promising practice that may improve the provider and patient experience, though additional research is needed.

The MDPH NTC

Like other SANE programs across the country, the MA SANE program provides patients with access to SANE-trained medical professionals who provide post-assault expert first response care and medical forensic exams for

children, adolescents, and adults (see Office on Violence Against Women, 2013 for a discussion of SANE programs; Shaw, 2015). Unlike other SANE programs, MA SANE operates as part of the MDPH, and is the sole provider of SANE care across the Commonwealth, seeing adult/adolescent patients (i.e., 12 years of age and older) in-person in thirty MDPH-designated SANE hospitals and younger patients in 10 Child Advocacy Centers. MA SANE is also unique in that it oversees and operates the MDPH NTC—the first federally-funded center to provide access to SANE care and expertise using telehealth technology. Established in 2012 with grant funding from the US Department of Justice, OVC (Cross et al., 2019; Office for Victims of Crime, 2012), the NTC operates in a central brick-and-mortar setting on a community hospital's campus outside of Boston (see Meunier-Sham et al., 2019). From its centralized brick-and-mortar location, expert teleSANEs with a history of providing in-person SANE care provide a teleSANE response to 10 hospitals across MA, in addition to the 30 hospitals that currently receive an in-person SANE response. When a patient presents for post-assault medical care at one of the ten teleSANE sites, the hospital calls the MDPH NTC's call center, which notifies the on-call teleSANE, who has sixty minutes to travel to the NTC. The non-SANE trained on-site medical providers, referred to as Remote Site Clinicians (RSCs), obtain patient consent for teleSANE services and the medical forensic exam. After consent is obtained for the teleSANE's involvement, the teleSANE initiates the NTC's three-phase professional practice model (Meunier-Sham et al., 2019). The model consists of (1) the pre-encounter, which takes place outside of the patient's presence and involves the teleSANE and RSC discussing the RSC's experience and concerns in conducting medical forensic exams, any relevant patient- or case-specific information that should inform how they engage the patient, and what signal they will use once in the room with the patient for the RSC to indicate when they need additional assistance; (2) the encounter, which begins once all parties are in the exam room and the videoconferencing has been activated, and ends when the medical forensic exam is complete; and (3) the post-encounter, where the teleSANE works with the RSC to review documentation and packaging of evidence, and to debrief about what went well and could have been improved upon in the patient encounter. To date, the NTC has served over 550 patients.

MA SANE's response to COVID-19

MA was one of the first states in the country to experience a COVID-19 surge (Solis, 2020). As the number of cases grew in March 2020, the state prepared for a surge to hit mid-April. Hospitals anticipated massive demands for and potential shortages of acute care capacity, intensive care unit capacity, and PPE. Before the initial statewide stay-at-home order was even issued (Governor's Press Office, 2020), MA SANE anticipated the challenges on the horizon and

began discussing how best to ensure continued care for their patients. MA SANE knew that in-person SANE care would require SANEs to use local hospital's PPE, a high-demand, limited resource that the hospitals may not be willing or able to spare (Cohen & van der Meulen Rodgers, 2020). MA SANE even considered approaches should hospitals limit SANE's ability to enter EDs to provide care. Much like other healthcare providers at the time, MA SANE also knew that their SANEs were nervous about providing care in EDs while EDs were being flooded with Covid-19 patients. MA SANE quickly got to work developing a modified Covid-19 protocol to reduce the length of time providers would be in the room with patients, for example, by prioritizing the most probative evidence collection. MA SANE also decided to rapidly and temporarily convert a subset of their in-person SANE hospital sites to teleSANE sites. While MA SANE had extensive experience with teleSANE through their NTC, this temporary conversion would attend to emerging challenges presented specifically as a result of the pandemic (e.g., the need for rapid onboarding), while ensuring continued access to SANE expert care. This temporary conversion would also allow MA SANE to pilot an

alternative teleSANE model. MA SANE was interested in exploring varied ways of providing teleSANE care, as varying specific aspects of the model may help ensure equitable, consistent access for all patients across the Commonwealth (see Table 1). For example, the Temporary Model could perhaps be used to provide back-up to sites already receiving in-person SANE care.

To explore the potential future use of the Temporary Model, MA SANE knew an evaluation was needed. At the time the Temporary Model was being developed and implemented, MA SANE, and a community psychologist researcher (first author) had been working together for some time. Nearly five years earlier, MA SANE leadership and the researcher met when the researcher was engaged in ecological inquiry, and conducting ecological reconnaissance to get to know her new community and the key players within it (Trickett, 1987; Trickett et al., 1985). In these early conversations, the researcher emphasized goals of learning more about the MA SANE program, and working to develop a long-term, mutually-beneficial, reciprocal relationship that was grounded in their shared commitment to serve survivors (Trickett et al., 1985). MA SANE and the researcher also cared deeply about

TABLE 1 Distinguishing features of the MDPH NTC and The Temporary model

	The MDPH NTC model	The Temporary TeleSANE model	Initial rationale for the modification
Working from home	TeleSANEs take call and provide care from a central brick-and-mortar location, the MDPH NTC, located at a hospital.	TeleSANEs take call and provide care from a secure, private, approved location in their homes.	Requiring teleSANEs to take call from the brick-and-mortar location limited who could serve as teleSANEs (e.g., lived too far from the center). Taking call from home removed this barrier and reduced potential exposure to the virus.
Technology	TeleSANE sites are outfitted with a mobile cart equipped with a computer and camera. TeleSANEs use a desktop computer and camera at the MDPH NTC.	TeleSANE sites and TeleSANEs use iPads.	iPads are cost-effective and were able to be secured and supplied to sites quickly; there was not enough time to equip sites and teleSANEs working from home with the typical teleSANE equipment.
Selection and preparation of RSCs	A subset of medical providers at each site are selected to act as RSCs in providing teleSANE care. Selected providers complete a 6 hour training before providing care, and ongoing training and consultation.	All ED medical providers are eligible to act as RSCs in providing teleSANE care. RSCs do not complete training before or during the Temporary Model implementation.	The rapid implementation of the temporary model in response to Covid-19 did not allow for extensive training before implementation of the Temporary Model.
Patient history and documentation	RSCs take the patient history and complete documentation, with the support of the teleSANE.	TeleSANEs take the patient history and complete part of the documentation. TeleSANEs use secure, encrypted email to send their documentation to the RSC.	RSCs had not received training on how to take the patient history and complete the documentation before implementation of the Temporary Model. This would also reduce the burden on the RSCs who were used to in-person SANEs completing the entire exam/documentation, and were managing Covid-19 and other patients.
Leaving the room	RSCs remain in the room for the entire exam as the teleSANE guides them through the process.	RSCs are offered the opportunity to leave the room while the teleSANE collects the patient history.	Allowing RSCs to leave the room reduces exposure time and risk of transmission of the virus for the patient and RSC. The RSC can also use that time to attend to other patients, tasks, and assignments in busy EDs.

Abbreviations: MDPH, Massachusetts Department of Public Health; NTC, National TeleNursing Center; RSC, Remote Site Clinicians; SANEs, Sexual Assault Nurse Examiners.

value-based intentionality in their work, always centering the survivor in deciding what to do, and how to do it (Kelly, 1979; Prilleltensky, 2001). These early meetings laid the foundation for an ongoing partnership that did not start and stop with a single project, but is active today as we work together to develop, implement, and make use of research and evaluation projects that can inform survivor-centered policy and practice.

For the current evaluation, MA SANE partnered with the evaluation team to explore three key questions: (1) what were the successes and challenges in preparing for and rolling out the Temporary Model?; (2) what went well and not-so-well in the provider and patient experiences?; and (3) what should the future of SANE care look like? Evaluation findings on the specific features altered for the Temporary Model are reported in a separate manuscript (Shaw et al., 2022). From May 27, to July 13, 2020, the MPDH SANE Program and NTC provided teleSANE care in five hospital EDs that had previously only received an in-person SANE response. During this time, the MDPH SANE Program provided teleSANE to 20 adult/adolescent patients (i.e., the three-phase encounter model described above), and provided consultation to RSCs on an additional two cases. From July 30, to September 9, 2020, an external evaluation team interviewed providers and leadership to learn about their experiences and to inform future decision-making about how best to serve patients presenting for care following a sexual assault during and beyond the COVID-19 pandemic.

METHODS

The evaluation team interviewed key stakeholders involved in developing and implementing the Temporary Model: this included all RSCs and TeleSANEs who treated a patient presenting for post-assault care in any of the five EDs during implementation of the Temporary Model; all MA SANE leadership; and hospital ED nurse educators, nurse managers, and SANE liaisons. To recruit participants, the evaluation team emailed 48 individuals to invite them to participate in an interview; 28 people replied to the recruitment email to express interest in participating or ask questions about participating (e.g., confirming they were eligible to participate). The evaluation team interviewed $n = 23$ people due to nonresponses from 5 people after expressing initial interest. Interviews asked about participants' (1) background and experience; (2) hopes, concerns, and expectations for the Temporary Model before it began; (3) experiences with the Temporary Model; (4) reflections on their entire experience with the Temporary Model; (5) recommendations for the future of teleSANE care in MA; and (6) basic demographics (i.e., race and gender). The evaluators interviewed 10 teleSANEs; six members of hospital leadership; four members of SANE leadership; and three RSCs. Several interview participants held multiple roles during the implementation of the Temporary Model, and thus could discuss their

experiences from multiple perspectives (e.g., both a teleSANE and a member of SANE leadership; both a hospital leader and an RSC). Noting these often-overlapping roles is important as while the evaluation team only interviewed three individuals whose roles were exclusively as RSCs, the evaluation findings reflect the perspective of 5 individuals who served in this capacity. Each participant was interviewed one time via Zoom. Each interview lasted 45–90 min and was audio recorded with the participant's permission. On average, TeleSANEs had 16.6 years of experience as a trained SANE (range: 6–24 years), and the vast majority had provided teleSANE care in some capacity before the onset of the Temporary Model. The RSCs had an average of 6.8 years of nursing experience, with all having worked in an ED for at least four years (range: 4–8.5 years). All interview participants identified as white women.

Interview data were analyzed using Miles et al. (2020) three-phase process for qualitative data analysis within a broader rapid research and evaluation methods (REAM) approach (McNall & Foster-Fishman, 2007). REAM is a set of techniques used to produce quickly trustworthy, actionable information that can inform decision-making in critical moments. REAM may be used in a variety of studies and contexts, though is often helpful in the healthcare context during complex health emergencies (see Johnson & Vindrola-Padros, 2017 for a review), and has even been applied to assess healthcare delivery in the context of Covid-19 (Vindrola-Padros et al., 2020), and to examine telehealth technologies (Pickard et al., 2016). REAM approaches have also been successfully used by community psychologists seeking to support community partners in real time, particularly those with acute, emergent needs (e.g., see Houston-Kolnik et al., 2021; Neal et al., 2015). This approach requires targeted evaluation questions, and simultaneous data collection and analysis (McNall & Foster-Fishman, 2007). Accordingly, the evaluation team did not transcribe verbatim the full interviews. Instead, they directly analyzed the digital audio recordings, documenting all information (i.e., verbatim quotes and brief summary statements) relevant to the focal evaluation questions. More specifically, each audio recording was analyzed by one of the two members of the evaluation team (first and second author). After conducting an interview, the evaluation team member would listen to the audio recording of the interview, and record verbatim quotes that were relevant to any of the focal evaluation questions focused on successes and challenges in developing and implementing the Temporary Model, and the future of SANE care. Employing Miles and colleague's matrices approach (2020), data were organized into tables that allowed for cross-comparisons of each participant's data and role in direct response to the targeted evaluation questions, and for data to be thematically grouped. More specifically, tables were generated in which each row of the table listed a single idea (e.g., one thing that went well; one that that did not go well) raised by a participant. Participants often had multiple lines within a table, and

a column was used to indicate the source of the idea (i.e., participant number). Once all ideas were listed, the table was reviewed and organized to group together similar ideas and develop broader themes. One member of the evaluation team sorted and themed the ideas, which were then reviewed by and discussed with the second evaluation team member. This study was approved as exempt by the University of Illinois at Chicago Institutional Review Board.

RESULTS

Preparing for and implementing the Temporary Model

MA SANE had to act quickly to convert the select hospitals to the Temporary Model. Planning for and implementing this model in such a short amount of time was a significant undertaking; research participants identified both successes and challenges in preparing for and rolling out the Temporary Model.

Successes

Intensive planning by MA SANE

First, participants identified the intensive planning by MA SANE as a key contributor to the successful rollout of the Temporary Model. Several interview participants described all that went into planning for the implementation of the Temporary Model, from high-level decision-making that made the model possible in the first place, to the development of specific procedures and materials that would guide and facilitate the provision of care. One member of SANE leadership, Participant 136, described some of the high-level coordination that was required to plan for and implement the Temporary Model, and how the pandemic actually provided an opportunity to pilot teleSANE care in a new way,

If we had been trying to pilot at another time, it would have taken so much longer, probably three to four times as long, an entire year to get all the groundwork laid ...So we were moving at a different pace and urgency because of COVID.

Several teleSANEs who were less involved in high-level decision-making focused more on the development of specific materials, including the development of detailed procedures and manuals. TeleSANE staff were provided a “big binder” (Participant 109) that included all the information a teleSANE might need when responding to a given ED, from the Temporary Model protocol, to information on where the technology was located at each hospital site. Participant 101, a teleSANE, explained,

I think the prep we did as a program to make the booklet, put things together so it was easy to follow, that helped a lot. There was an awful lot of planning involved so that everyone would feel comfortable.

Another teleSANE, Participant 104, explained how “it was the effort of our staff that really made it successful.”

In addition to developing procedures and materials for teleSANEs, MA SANE also developed procedures and materials for the hospital sites and ED RSCs. Participant 112, an RSC, explained how the level of detail and specificity provided was particularly valuable,

I found the guidebook helpful. There just wasn't much gray area. They were bullet-pointed, they were numbered. It was all right in front of you. The guidebook and the cart, it all flowed well, it was connected to the next.

Participant 114, another RSC, expanded on this. Participant 114 didn't learn about the Temporary Model until a patient presented for care, Participant 114 called for a SANE response, and the SANE informed her that she would be providing support via teleSANE. Participant 114 explained how the well-thought-out and well-organized procedures and materials made things so easy in the moment,

They were well-organized. So when I found out about the exam and that it would be through the iPad, I was a little bit surprised, but fine with it. They had everything set up perfectly, like they had the iPad in the cart, they had it charged...and the instructions for how to call the nurse, it was all really well put together.

Support, flexibility, and responsiveness

The quick rollout of the Temporary Model required MA SANE staff to be flexible and responsive to needs and challenges as they emerged, and to ensure that all involved in the transition to the Temporary Model were well-supported. MA SANE staff discussed the many changes they made to their typical operation to support the success of the Temporary Model. This included increasing the number of MA SANE leadership meetings from once a month, to three times a week, and increasing the frequency of regular communication with all SANEs to keep them updated on the implementation of the Temporary Model. Several interview participants explicitly spoke about how the success of the Temporary Model was a direct result of MA SANE staff's supportive, flexible, and responsive approach to making this work. Participant 134, a member of SANE leadership, explained how preparing for and implementing the Temporary Model was just one key initiative being pursued at this moment in time, and that

these different efforts were successful because of the team. Participant 134 explained,

I don't know if it's so much the model, but I'm so proud of our team. They just jump in and make it happen. At the same time we were doing this, we were setting up a homeless shelter for folks with COVID.... I am just so proud of them and who they are, their willingness and flexibility to innovate when they need to.

This support provided by MA SANE leadership was felt by those engaged in the work as they knew they were not alone, and could always call for back-up. Participant 110, a teleSANE, stated, "I felt like we had good support. If we had any questions in real time, [I felt] that we had someone that we could call to get help."

In addition to a team of supportive, flexible, and responsive MA SANE staff and leadership, the hospital sites also rose to the challenge of preparing for and implementing the Temporary Model in a very short amount of time. Some hospital sites responded to the impending changes in service provision by quickly providing training to their staff to prepare them for working with sexual assault patients. Participant 146, a hospital leader, explained how they acted quickly to get their staff the training they needed,

We realized that there were a few nurses that had never been through our evidence collection training. They had fallen through the cracks.... I had one of my SANEs come in on her own time and set up times to talk to the nurses about evidence collection

Participant 149, a hospital leader from this same hospital site, relayed how this training was important, "one of the [RSC] girls who did a kit came to one of the trainings, and I think it really, really, really helped her." A second hospital also provided some training for their staff nurses in anticipation of the Temporary Model. Participant 126, an RSC, stated she would have felt "more anxious and nervous," without the training.

Hospital sites' willingness to do what they could to be flexible, responsive, and support the transition to the Temporary Model was noticed by SANE leadership, too. As Participant 134, a member of SANE leadership, explained, "the receptivity of the hospitals [was key]... they did this with us." Participant 134's description of how hospitals, "did this with us," was also indicative of the important role of preexisting relationships between MA SANE and the hospital sites. Participant 146, a member of hospital leadership, explained how, "having that rapport already, we've always been able to speak to each other candidly. Had it been someone I didn't feel comfortable talking to, it would have been a different experience."

Challenges

Supporting the SANEs who typically provide in-person SANE care

Under the Temporary Model, the SANEs who typically provided in-person care to the selected hospital sites were essentially furloughed. Though some of these SANEs routinely covered a lot of shifts on a per-diem basis, SANEs did not raise concerns related to losing this source of income. Instead, SANEs were upset about not being able to see their patients and were concerned that their patients would not receive the same level of care with the Temporary Model as they would receive from an in-person SANE. They were also concerned with how this change in care would affect hospitals, and were worried that these hospitals might not go back to providing in-person care. Several interview participants described the SANE's concerns, and even what it was like to have to respond to these concerns in real time. Participant 133, a member of SANE leadership explained how, "it was stressful. It was very stressful...So I just tried to show the support as much as I could. And try to keep contact going, keep communications going, and be there as much as I could."

Participant 133 was not the only participant to bring up the importance of clear communication with the SANEs to try and respond to and mitigate their concerns. Several members of SANE leadership explained that communications with the regular SANEs were not as clear as they could have been, partially because the Temporary Model was implemented so quickly. Decisions related to precisely when the Temporary Model would begin and end were not entirely clear from the beginning, making it difficult to tell the regular in-person SANEs when they could expect to be back to work. Still, SANE leadership identified specific ways communication could be improved in the future. Participant 135 explained,

The SANEs, whose region we took over, still watched the pager and were worried that we weren't responding to their pages fast enough because we weren't great about putting in the response code...I think we could work on emphasizing our response a little bit better.

The challenges in supporting the SANEs who typically provide in-person care for these hospitals led some teleSANEs and SANE leadership to worry that some regular SANEs might decide not to come back once the Temporary Model ended. One teleSANE, Participant 106, explained that, "personally, my biggest worry, constantly, every time we talked to somebody, was that you're going to lose the nurses, [you're going to] lose your SANEs." Fortunately, this did not come to fruition, as all of the regular in-person SANEs came back on once the Temporary Model ended.

Preparing the hospitals for the transition

Though MA SANE engaged in intensive planning to prepare for the transition to the Temporary Model, it



proved difficult to communicate this change to hospital staff. As Participant 136, a member of SANE leadership, put it,

[It's] always a challenge to communicate change, and this is a change. And hospital systems are complex. The ways that they're staffed are complex and us, as an outside organization, it's hard for us to get information in, in a really useful way.

Because MA SANE was an outside organization, they worked with and relied on hospital leadership at each hospital site to share information about the transition to the Temporary Model, and what it entailed. Unfortunately, this information did not reach many hospital staff at each hospital site. The reason for this communication breakdown seemed to be twofold. First, work email was a primary means used to convey information about the transition to the Temporary Model. However, many hospital staff did not access or otherwise receive these email communications. Second, the numerous webinar trainings provided to each hospital site at various times of day were often poorly attended or primarily attended by hospital leadership and were not recorded for hospital staff to view at a later time. MA SANE recognized that these hospitals were experiencing daily pandemic-related stressors and acute crises, thereby making such trainings a low priority for ED staff. However, as a result, many hospital staff did not know about this transition to the Temporary Model until they were assigned to care for a sexual assault patient. As Participant 104, a teleSANE described it, "I don't think people were really aware of the pilot or what was happening. I think she [the RSC] was taken by surprise, she was like, "I'm going to do what?""

Participant 109, another teleSANE, described how under normal circumstances, more hospital staff may have read the email, or attended the webinar training, and thus would have known about the transition to the Temporary Model. However, the Covid-19 pandemic presented unprecedented challenges that likely contributed to so many hospital staff being only peripherally aware or unaware of this change. Participant 109 explained that, "these nurses had a lot on their plate at the time, so maybe they knew and they forgot, I'm not sure, or maybe they got an email that says, "SANE," and they think that doesn't apply to me because we have SANE nurses that come in." Participant 109 expanded on this, though, to make clear that, "It wasn't a big deal, it wasn't a panic thing. ... Everyone was adaptable and we made it work."

Even though hospital leadership knew about the transition, breakdowns in communication contributed to the lack of a shared understanding of *why* the transition was being made in the first place. Participant 149, a member of hospital leadership, explained how hospital staff were frustrated and angry because it wasn't clear exactly why this was happening, and because they didn't have much of a say in the decision to implement the

Temporary Model. Like many hospital leaders, Participant 149 took the time to provide more information on what was happening and why, even though she too was uncertain of what was to come. Participant 149 explained,

There were a lot of nurses that I worked with that didn't understand that it was just temporary and they thought that SANE was just getting funding cuts through the state. And they were very upset until I explained to them that... this was just a pilot program that we were going to just be starting in this region just to see how this would work... And to be frank, it wasn't explained the same to us the second time...

Though uncommon, the exact purpose of the transition to the Temporary Model was unclear to at least one hospital leader. This hospital leader, Participant 143, thought it was not wise to try out such a model in the midst of a global pandemic, and thought perhaps SANE was no longer coming in due to an order from the Governor,

I understood it was a trial, a pilot program. I think a pilot program in the midst of COVID-19 was not good timing. I don't know if they decided to do the trial because of Covid, or if it was in the midst for some time, that would have been good to know. I think if it was done during another time, staff would have been more amenable to it. But if they're state employees and they're nonessential, and the Governor says nonessential employees don't need to work, I would imagine, that is my understanding of why they did it.

In addition to challenges in communicating these changes to hospital staff, another challenge emerged in that hospital staff felt frustrated, angry, and anxious upon learning that SANEs would no longer be coming in to treat patients presenting for care after a sexual assault. This was brought up in the interviews by teleSANEs, RSCs, and hospital leadership. Many interview participants discussed how RSCs felt anxious and apprehensive about providing care for these patients as they were worried they wouldn't be able to provide what the patient needed, that they would do something incorrectly, or that they would appear incompetent in front of the patient. One hospital leader, Participant 141, explained how, "nursing staff are still very apprehensive about taking these patients. As much education as we can put forward...it's just a population that scares people. They don't want to mess it up or do the wrong thing." Participant 126, an RSC, succinctly put it, "I hope I'm not worsening an already bad experience for [the patient]." RSCs were particularly concerned about the potential to be called to court to testify, should the case be prosecuted. Participant 146, a hospital leader, explained how she, too, shared this concern,

The nurses were concerned, “what if I miss something, or don't get the evidence they need, or I document something wrong and am sitting in court getting it pulled apart?” So it was less nerves about talking to the patients, and more about what happens after they leave the hospital and this is in court two years later. And they're asked [in court], “what kind of training did you get?”... and I'm like, “well you can only be honest.”

In addition to RSCs feeling anxious and apprehensive to take these cases, several RSCs were also frustrated and angry. They felt that they were risking their own health and that of their loved ones by working in the ED, while SANEs were opting out. Participant 143, a member of hospital leadership, explained how “staff thought, “So they get to choose not to come in and be a nurse during COVID.” They had difficulty with that. Like, “we can still take care of patients, why can't they?”...There was some resentment there.”

Several teleSANEs described how they were aware of and concerned about RSCs becoming resentful, particularly because these were sites that were accustomed to having in-person SANE services. Participant 135, a teleSANE, described how RSCs might have been more amenable to this change if they had never had SANE services at all, as there would be no basis for comparison. Participant 135 explained how, “there was a risk that they would think we were being selfish and abandoning them during this crisis time, and we really didn't want that to happen for these nurses.”

In addition to communication challenges and hospital staff's emotional reactions to the implementation of the Temporary Model, some hospital sites implemented the model differently than intended. As previously described, SANE leadership worked with and relied on hospital leadership to inform their staff about the transition to the Temporary Model. This placed hospital leadership in a sort of “gatekeeping” role (Participant 134) as they determined how to inform staff about the transition to the Temporary Model, and how exactly to implement it. At one hospital, the educator made it a priority to ensure that every ED staff member knew about the planned implementation of the Temporary Model, and their role in it. The educator developed an additional checklist for staff to use and walked them through the process one-on-one. This approach helped ensure that all staff knew about the coming change. However, interview participants reported that this required a tremendous amount of effort on the part of the educator at this hospital and may have made the rollout of this Temporary Model more complicated than it needed to be. This same hospital also modified how the Temporary Model was to be implemented in that instead of having all ED medical personnel serve as potential RSCs, the nurse manager made a list of SANE-trained hospital staff to be prioritized for call when a patient presented following a sexual assault. While hospital

leadership understood this was not how the model was intended to be implemented, they took this approach to “sell” the Temporary Model to their ED staff and lessen their anxiety (Participant 142). While other hospitals did not make an explicit practice to only use SANE-trained hospital staff, at least one hospital waited for a shift change before treating a patient, as staff knew a SANE-trained hospital staff member was coming in on the next shift. This resulted in a game of “hot potato,” as RSCs hesitated or declined to treat these patients, resulting in delays in care (Participant 108).

The provider and patient experience

There are at least 3 key individuals involved in every teleSANE encounter: the teleSANE, the RSC, and the patient. In reporting findings on the provider and patient experience, it is important to reiterate that we did not interview patients. Our findings on the patient experience are based on what we learned from interviews with the teleSANEs, RSCs, SANE leadership, and hospital leadership.

The provider experience

TeleSANEs and RSCs worked well together

Overall, the teleSANEs and RSCs felt that the vast majority of their encounters went well, and that this was due in large part to how well the teleSANEs and RSCs worked together as a team. One teleSANE, Participant 101, stated, “I was confident in how we worked together—very fluid.” Another teleSANE, Participant 110, explained, “I just felt like I was part of the team in the room with the patient.” This team orientation was also evident in interviews with SANE leadership. Participant 135 explained how you want “a remote site clinician saying to the patient in a teleSANE encounter, we're going to be a team, and we're going to get through this. That's the attitude that you want them to have.”

Like the teleSANEs, the RSCs focused on how well the teleSANEs and RSCs worked as a team. Participant 114, an RSC, described their role on the team to be “the primary nurse...there to be the physical component, the physical connection.” Several of the RSCs who saw patients under the Temporary Model were actually SANE-trained. While these SANEs were initially somewhat reluctant to have to use the teleSANE, they too enjoyed having the opportunity to work as a team and respond in pairs. They recognized that these cases and patients' needs are often complex and valued having the opportunity to discuss with a colleague how best to respond to the patient and meet their needs. One SANE-trained RSC, Participant 142, described the addition of the teleSANE in the room as a “gift” and “angelic presence,” as the teleSANE brought that much more experience and expertise into the room to respond to the patient.



Several teleSANEs called attention to the specific skills and qualities of ED nurses that resulted in such a quality encounter for the teleSANE and RSC in a rapidly-changing environment. One teleSANE, Participant 104, explained that “she [the RSC] just went with the flow, ER nurses are pretty adaptable.” Participant 107, another teleSANE agreed, “ED nurses are ready for anything. They are used to things changing with a moment's notice. They don't tend to get flustered and are easily ready-to-roll with whatever needs to happen.” TeleSANEs described the RSCs as “*competent*,” “*savvy*,” “*lovely*,” “*thoughtful*,” and “*efficient*” (Participants 102, 103, and 105). This was even the case for those RSCs who didn't know that the Temporary Model had been implemented and learned of the approach when they first spoke with the teleSANE. A teleSANE, Participant 110, explained, “I do feel like the nurse that I worked with did a great job and rose to the occasion. Initially, when I listened to the shock in her voice, I was thinking this is not going to be good, but it was actually fine.” A couple of teleSANEs also described very specific strategies for ensuring the RSC and teleSANE worked well together. These strategies focused on preparing the RSC for the encounter so that the RSC and teleSANE could present themselves to the patient as a coordinated team. TeleSANEs developed these strategies from their years of experience responding to and training others on how to respond to sexual assault patients. Participant 107, a teleSANE, explained,

The last thing you want to do is make the patient think that the primary nurse doesn't know what they're doing. So you talk with the primary nurse ahead of time to make a plan together. And you present it to the patient as, “we are a team. We are going to do this together. The primary nurse is going to be my hands.”

One RSC, Participant 112, discussed this approach,

Going through the set-up before the exam was helpful. [The teleSANE] had told me to go through the envelopes, label everything, go through the nitty gritty prior to starting. So I wasn't juggling the exam, and labeling... it was just grab it and go... her tips and tricks to get through it as quick as possible and then take my time on my own without being in the room with [the patient] was helpful.

RSCs also discussed what it was about the teleSANEs that made for such a positive experience and successful patient encounter. Participant 112 went on to describe how the encounter went much better than she thought it would,

To be honest, I didn't think it was going to go as smooth as it did, but I cannot speak highly

enough of my teleSANE who went above and beyond and made it seem very, very easy to do. I had voiced to her that it was my first one and there were some dynamics that made it [the case] a little different... [the teleSANE] was incredibly helpful.

Participants 114 and 126, two other RSCs, discussed how teleSANEs were helpful, supportive, and made them feel comfortable to ask any question. Participant 114 stated, “I felt—not dumb—but was asking multiple questions. And [the teleSANE] was super calm, super patient. Any question I asked, she answered, even if we had to clarify something 2-3 times.” Participant 126 expanded on this same idea,

[The teleSANE] was amazing at her job. She was really calm the whole time, very patient. I definitely asked a lot of stupid questions throughout the process and she never thought anything was a stupid question. Answered everything. I felt very comfortable working with her.

Participant 146, a member of hospital leadership, also explained how the teleSANEs were supportive,

The rapport between the SANEs and my nurses [made this a success]. Being able to see that we're all in this together. Not that I was surprised by it, but I was comforted by it. I think we've had some other experiences with other services where other people come in and they treat you like you don't know what you're doing. So validating that it is ok to be nervous and uncomfortable, and that doesn't make you stupid or less of a nurse.

Indeed, while hospital staff were initially anxious, angry, and frustrated about the shift from in-person to teleSANE, hospital leadership and RSCs that participated in the Temporary Model described having a positive experience. One RSC, Participant 126, explained,

I'm glad I got that experience... Now if I had to do a second one, I would probably even feel comfortable doing it myself. I would like having them there in the background as comfort, but I'd be fine doing it again.

Participant 146, a member of hospital leadership, explained,

It definitely changed my outlook on it [the Temporary Model] after the first case we did, because overall it was pretty seamless and much better than I anticipated...As much as I

hated it in the beginning and was angry that it was coming, in retrospect I was happy that they [MA SANE] saw the forest through the trees.

TeleSANEs took a lot of call

Though the teleSANE and RSC worked quite well together, there were some challenges that came up in providing care. One of the anticipated strengths of the Temporary Model was that the teleSANE could be immediately available for a patient encounter, as the teleSANE did not have to travel to the MDPH NTC. Accordingly, teleSANEs were required to respond within 15 minutes of receiving a call from the hospital. This proved challenging, as teleSANEs volunteered to take a lot of call during the Temporary Model and felt as though they could not step away from their devices out of fear of missing a call. One teleSANE, Participant 103, “was afraid to go out and turn my sprinkler on.” Participant 109 explained,

It is a lot of call, a lot of call.... I was nervous to even go for a walk in my neighborhood, because if they called me, I wanted to be able to call them immediately...I can open my window, get some fresh air that way, but that's it.

Participant 101 expanded,

It's just being on-call for that length of time was hard. Because when I'm on call [for in-person SANE]...I can still run around and go to the grocery store because everything is so close. But with this, I had to be ready at a moment's notice. And I couldn't leave. I did one shift that was 24-hours and I was like, “what am I nuts?” because I couldn't go anywhere. I couldn't even take a walk around the block because I needed to be available on the fly.

Requiring teleSANEs to be available almost immediately was to ensure that the hospital and the patient were never waiting on the teleSANE for care. However, this meant that the teleSANE often ended up waiting for the hospital to be ready. One teleSANE, Participant 108, explained that, “I could have driven there, done the case, and been home [if I were responding in-person] before I started the case [with teleSANE, as the hospital wasn't ready].” This may have been due in part to hospitals not knowing that the teleSANE would be available right away. One RSC, Participant 112, explained,

We'd activated the SANE but there was some glitch in not realizing that the SANE would be

available immediately. So [the teleSANE] had to wait about an hour or so for everything to be squared away and ready.

TeleSANEs missed being in the room

In reflecting on their experience providing care remotely, many teleSANEs discussed how one of the most important differences was not being able to provide the type of intangible care that only comes from being in the room with the patient. This challenge is not unique to the Temporary Model, but rather applies to teleSANE more broadly. TeleSANEs described how not being in the room limits their ability to read their patient's nonverbal cues and body language, making it more difficult to confirm they were meeting the patient's needs. Participant 109 shared,

Being right next to the patient, you can just notice a lot more. The iPad was super clear. But maybe they might be twiddling their hands and I can't see that on the iPad...I have to say there is something super important about being face-to-face with a patient.

Participant 133 also discussed how when you're in-person,

You can read body language better. It's a different level of interaction. Like if patients need a break, and you can read their body language, or they're sighing, or a simple touch of the shoulder to provide comfort. You can provide that [in person], and you can't provide that virtually.

Like Participant 133, Participant 101 also highlighted the important role of touch when working with a patient who presents for care after a sexual assault, “It's hard when you can't reach out and touch somebody. Put a gentle hand on someone's arm or whatever. That's the part I didn't like the most.” The RSCs also took note of how the telehealth encounter could not replace a real human connection. One RSC, Participant 114, discussed what it was like to try and provide that human connection for the patient given the teleSANE was only on the screen,

I will say the [teleSANE] nurse was incredibly supportive and I think it went well, and I want to make sure to express that. But you just can't replace the human connection part of it. So it's a very traumatic emotional exam, the patient was very upset, and pretty much I was her only support. The [teleSANE] nurse on the iPad was great, but wasn't there to hold her hand or talk to her face-to-face. I was the bridge, was holding her, letting her cry on me. I know it

was COVID-19 and we weren't supposed to be close, but she was crying on my shoulder.

Not being able to be in the room with their patient may have been particularly difficult for teleSANEs as rape crisis advocates were also absent from the exam room. Due to COVID-19, many rape crisis centers were no longer providing in-person advocacy services, and most patients were declining virtual advocacy services. Rape crisis advocates are key when responding to survivors, and several teleSANEs mentioned how they missed having the advocate in the room. One teleSANE, Participant 108, explained how it felt when the advocates were back,

I have three rape crisis centers in my region and [one of them] is back in-person...I almost cried when the advocate walked into the room. I just, I needed it. They're back in person, and it's the best thing in the world.

The welcome return to in-person care

Though all teleSANEs and RSCs reported the Temporary Model to be a success, they also were happy when these hospitals returned to providing in-person SANE care. As one teleSANE, Participant 109, put it,

I think it was a very good option at that time. I think it was, in the moment when I was with the patient, I did feel like I was helping them, and helping the nurse and staff at the hospital. Since I've gone back to being in-person with patients, it's hard to put into words, but I think there is such a value about being in-person. You know, just being there.

Hospital staff agreed. Participant 149, a member of hospital leadership explained,

I think, overall, it was a good band aid at the time when we were having questions and concerns about staff safety during in-person exams, for sure. I think it did its job. I don't think you can fully replace the in-person experience with the teleSANE for the patients. I think that's always going to be your number one best case scenario.

The patient experience

Given the timing and tight timeline for the implementation of the Temporary Model, and the care and intentionality required to include sexual assault survivors in research and evaluation, the evaluation team did not interview patients as a part of this evaluation project. Still, we are able to

glean some insight into the patient experience from interviews with the teleSANEs, RSCs, SANE leadership, and hospital leadership. Based on these interviews, it seems as though the Temporary Model allowed patients to be treated more quickly, though there were some delays in care; and allowed patients to receive quality care, though there were specific shortcomings and issues that arose in some patient encounters.

Shorter encounter times that were sometimes delayed

TeleSANE's experience and expertise allowed them to complete the patient encounter more quickly than would be expected with a non-SANE medical provider. Several teleSANEs described how their involvement in the care of the patient once the encounter began allowed it to move more quickly than it would have if the RSC were conducting the exam alone. One teleSANE, Participant 109, explained that the exams "didn't take super long. They were definitely hours and hours, but they would have been much longer were the teleSANEs not there to guide the process." The teleSANEs were also required to be immediately available, ensuring the patient and hospital never had to wait on the teleSANE to begin the exam. However, there were a couple of cases with significant delays in beginning the patient encounter, as hospital staff played what Participant 108, a teleSANE, referred to as, "hot potato," with patients. ED nurses felt hesitant about taking on sexual assault patients, did not prioritize these cases, and at times explicitly refused to serve these patients. They instead called and waited for a SANE-trained RSC to come in, or for the next shift to start. Though uncommon, this resulted in significant delays for patients.

Quality care that was sometimes inconsistent

For the most part, interview participants thought that the patients received quality care. Several teleSANEs commented on how they perceived the patient experience, and how patients seemed to be grateful for having the teleSANE in the room. Participant 102 described how the patient, "seemed incredibly grateful and happy that there was this specialized person guiding her care. I think in a lot of ways it made her feel better that there was this expert providing care."

Participant 106 explained how, "the two [patients] that I had, they kept saying thank you for being here. And they were saying "here," which kind of made me think that I am making a difference [in the room]."

Participant 141, a member of hospital leadership, voiced the same sentiment as the teleSANEs as she explained that, "the communication, the SANEs, the expert nurses, really did a great job in how they interacted with the patient." One teleSANE and one RSC also provided insight into how well they thought patients took to the technology in the room. Participant 114, the RSC, explained how the patient, "talked to the iPad as if she [the teleSANE] were in the room. There wasn't a disconnect."

Something particularly unique to this implementation of the Temporary Model in the midst of the Covid-19 pandemic was that all providers that engaged with the patient in-person were wearing PPE. The teleSANE on the screen, though, was able to interact with the patient mask-free, meaning the patient could see their face. Several teleSANEs explained how they were happy to be the one face in the room that the patient could actually see, that this provided more quality care for the patient, and that this was an unexpected benefit of the Temporary Model. One teleSANE, Participant 103, explained that,

We both didn't have to wear masks. That was kind of nice. We were able to talk freely without masks, which in Covid, I think that's a benefit. It's really hard to talk to people through these masks and get their whole facial expression. I did like that. I think that was a bonus.

Participant 104, another teleSANE, expanded on this,

Another nice thing about this was, and this wasn't something we thought about ahead of time, but in the hospital when the pandemic was full blown and everyone was wearing protective equipment, they would have a mask on or shield over their face, they would have a gown on. And they would come into the room, and that's not really personal looking because you're not looking at me or my face... I was able to look right at her with no equipment on. And it was a friendly face. So that was a bonus we hadn't thought about... Such a little thing, but I think it was a big deal.

Still, there were some specific issues that arose and compromised some aspects of the care provided. These issues ranged from what might be considered more minor challenges, to more significant issues affecting the quality of care received by the patient.

Swabbing. RSCs varied in the level of training they had on sexual assault kit collection. Several teleSANEs highlighted how RSCs often did not have adequate training on how to correctly collect a swab. This wasn't a major hurdle, as the teleSANEs were able to instruct the RSCs on how to correctly collect the swab in real time (e.g., light touch, roll the swab). However, as Participant 126, an RSC, explained,

You don't know how to do the swabs until you do them, and I hope I did them right. I hope I went deep enough with the swabs and in the correct fashion. But a little more education on that beforehand may have been helpful.

Distracted, disorganized, rushing, or unreachable RSCs. RSCs were often collecting a sexual assault kit for the first time

while juggling other ED patients. Several teleSANEs described particular instances where their RSC was distracted, disorganized, or seemed to be rushing. In one case, the RSC had a coinciding case that involved a patient receiving a conscious sedation. The RSC kept yelling to other people who were outside of the room while in the room with the sexual assault patient. In at least one case, there was a need to contact the RSC after they had stepped out of the room, and there was no way to get in contact with them. In this case, while alone with the teleSANE on the iPad, the patient began to medically decline and the call button in the room did not work. The teleSANE quickly called the hospital by phone to get someone into the room, but unfortunately had the same experience occur again during the same patient encounter.

Lack of trauma-informed, patient-centered care. On several different cases, patients did not receive the most trauma-informed, patient-centered care from the RSCs. As one teleSANE described to us, there was at least one case in which an RSC proceeded with a speculum exam despite being told by the teleSANE that it was unnecessary. The teleSANE noted how the providers on-scene did not notice or dismissed signs of discomfort on the part of the patient during the speculum exam. Participant 103, a teleSANE, explained how,

Everyone was feeling fine, except the patient, because she was in discomfort. And that's the most important. And I noticed that but it went completely unnoticed by the nurse and the physician because of the drape, and the nurse is just taking the swab and looking in the opposite direction.

In another case, one RSC, Participant 114, described her interaction with a patient where she described prioritizing completion of the exam and consequently being dismissive of the patient, actions demonstrating a lack of a trauma-informed, patient-centered response. As Participant 114 told it,

I was like, "ok I understand you're on the phone [with an advocate], but we have to start the exam. I understand that person is giving you support, but we're also here to give you support"... The patient was getting a little bit frustrated. She was just saying, "I don't want to keep reliving this." And I said I have to make sure we get all the details and that [the teleSANE] on the iPad is getting all of the information.

Finally, in a third case, Participant 108, a teleSANE, shared with us how the patient did not have a good experience with anyone other than the teleSANE, "The last patient that I had, she said, "you're the only one that's been nice to me." It was pretty sad."



The future of SANE care

Interview participants relayed that in-person SANE care is the “gold standard of care,” (Participants 104, 108, and 141) and preferred treatment model. Despite this preference, though, participants acknowledged that this approach may not be feasible for a variety of reasons. In considering how to provide SANE care across the state, Participant 136, a member of SANE leadership, stated, “the best SANE program that we can be includes both,” referring to both in-person and teleSANE care. In these circumstances, teleSANEs, RSCs, teleSANE leadership, and hospital leadership, had suggestions for how SANE care should be provided moving forward.

First, some participants suggested updated criteria for making decisions regarding which hospitals receive teleSANE versus in-person care. More specifically, when selecting new teleSANE sites, more rural areas or those with a lower volume of sexual assault patients should be prioritized. Participants explained that expanding teleSANE in this way may allow for increased access and faster response times to patients that may not be seen by SANEs otherwise, and for SANEs to be more efficient in their provision of care.

Next, for sites that receive in-person SANE care, participants suggested that teleSANE should be available as a back-up for cases of inclement weather and when multiple sexual assault patients present for care at the same time, preventing an in-person SANE from responding in a timely manner. Employing a multitiered approach that prioritizes in-person SANE care delivery, followed by teleSANE care offered through the MDPH NTC, and then teleSANE care from home, may help to ensure that all patients across MA have access to a SANE, regardless of where they are assaulted, where they seek care, and if there are other patients in need of the same service at the exact same time. As Participant 101, a teleSANE, explained, “I think the most important thing is to give some level of service to every hospital. The level of inequity is not okay.” Taking steps to ensure that all patients have access to a SANE, and that non-SANE medical providers do not have to respond to these patients on their own was incredibly important to hospital sites, too. At least one of the hospital sites participating in implementation of the Temporary Model did so with the hope that they would have teleSANE care available as a back-up option, even after the pilot program was complete. Participant 142, a member of hospital leadership, explained that they were able to sell this pilot to their staff by explaining that if the pilot worked, teleSANE would be there as a back-up going forward, and they would never have to respond to these cases on their own. Participant 142 explained that they hope this comes through, as that is what their staff are expecting,

Ideally, the entire state would be covered by teleSANE to ensure that no matter where a

patient went for care, they would get in-person or teleSANE [care] and there wouldn't be a non-SANE ever providing this care to these patients [alone].

Participant 142 succinctly summed things up in stating that, “The bottom line is that every sexual assault patient deserves a SANE nurse. How can we make that happen?”

DISCUSSION

Though SANEs provide a markedly improved medical forensic response for patients presenting for care following a sexual assault, SANEs are not uniformly and consistently available in all communities. TeleSANE provides an opportunity to increase accessibility to expert SANE care for all sexual assault patients. TeleSANE also offers unique, unexpected benefits in the context of a global pandemic as it allows patients to continue to receive this critical care while minimizing risk of spreading the virus. Prior literature on teleSANE has described specific programs and reported on process or implementation evaluations (Meunier-Sham et al., 2019; Miyamoto et al., 2020, 2021; Walsh et al., 2019). The current study extends the limited, existing literature by documenting successes and challenges in teleSANE implementation in a very specific context (i.e., during a pandemic). Through this evaluation, we found that it is possible to rapidly and temporarily convert hospitals from in-person to teleSANE to be able to meet the needs of this important patient population in a time of broad uncertainty. To do so successfully requires intensive planning by those leading the change, and a shared commitment to being supportive, flexible, and responsive for all parties involved. This evaluation provides key insights for communities considering how best to meet the needs of this patient population in a changing environment, and the important role of research and evaluation in informing care provision.

Implications and recommendations for providing SANE care

In-person SANE care was the preferred modality of providing care among our interview participants at the time of their interview. However, teleSANE may be a better fit for certain settings (e.g., rural settings or settings with low caseloads), or under certain circumstances (e.g., in the midst of a global pandemic). What is most important is that patients have access to SANE expert care, whether it be in-person, or through telehealth technology. These findings point to specific recommendations for communities who are considering changing the mode of SANE service provision for select sites (i.e., from in-person to teleSANE or from teleSANE to in-person); onboarding a new teleSANE site; or actively providing teleSANE services.

For communities who are changing the mode of SANE service provision from in-person SANE to teleSANE care, or vice versa, it is important to develop mechanisms for clear, consistent communication with SANE program staff who may be impacted by changes to the provision of care, particularly as it relates to the changes being made, the reasons for such changes, and the timing of them. There is sometimes uncertainty in how a new program, or adaptations to an existing program, will be rolled out. This, too, should be communicated, so impacted parties can adjust their expectations accordingly. For example, if it is unknown how long a particular pilot program will last, make clear that is currently unknown, and why. Information, training, and tangible materials, should also be provided for non-SANE hospital staff so that they can learn about the changes to the provision of care, and their role in it. This should include resources for RSCs (e.g., webinars for ED nurses) and hospital leadership (e.g., checklists and scripts for hospital leadership to discuss the changes with their staff) to ensure consistency in how hospitals communicate with their staff and ultimately implement the changes in the provision of care.

Similarly, communities onboarding new teleSANE sites (i.e., never had teleSANE or in-person SANE care before) should provide information and training on any changes to the provision of care for hospital staff, and develop written policies that require staff to review such information and attend such trainings. Training should include baseline information on the sexual assault kit itself with the intention of demystifying the process. Some information on trauma-informed care should also be included, as well as information on what clinicians can expect should a criminal case progress to prosecution for a patient for whom they have provided care. Information on teleSANE care and responding to sexual assault patients could also be part of annual skills review. Communities that already provide teleSANE in some hospitals could also create a series of video testimonials from RSCs who have treated patients with the assistance of teleSANE. RSCs at new teleSANE sites are likely to feel nervous or anxious about their new role. We found that RSCs who actually participated in a patient encounter described it as a positive experience and short video testimonials saying as much may boost confidence in RSCs at new sites.

When providing teleSANE services, communities should be mindful of how much call their teleSANEs take, and intentional in deciding how long teleSANEs have to respond to a hospital once they are called/paged. TeleSANEs taking call in the Temporary Model were required to be ready to provide care and respond to the hospital within 15 minutes of receiving a call. Often times, hospitals were not ready for the SANE, and the SANE ended up waiting on the hospital. To make the experience more manageable, teleSANE protocols could require teleSANEs to provide confirmation of the call/page within 15 minutes of receiving it, then be required to be ready to begin the encounter 30 minutes after that. TeleSANEs should also complete a pre-encounter on every case. The pre-encounter is a key part of the standard

MDPH NTC teleSANE protocol, but was not standardized to the same extent with the Temporary Model. In this evaluation, teleSANEs still described doing work with the RSC before engaging with the patient, and RSCs identified this as a very useful part of the process. Once the encounter begins and before asking the RSC to leave the room, providers need to ensure that the call button in the room works, or there is another mechanism in place to immediately contact an RSC for assistance. This step should be included in all teleSANE protocols. Finally, communities should explore ways to integrate advocacy services more seamlessly into the teleSANE model so that advocacy is always available (remotely, or in-person), and so that the patient perceives it as part of the process rather than a cumbersome add-on.

Limitations and recommendations for future research and evaluation

Despite the strengths and contributions of this evaluation to informing SANE care service provision, there are several limitations worth noting that provide direction for future research and evaluation. First, this study was conducted in a very unique context. MA is the only state in the country with a fully-funded, statewide SANE program that operates out of the state department of public health. MA SANE was also the very first teleSANE center to be awarded federal funds for its initial development and operation; has had nearly a decade to develop, employ, and refine its protocols and practices; and relies exclusively on a cadre of expert SANEs with experience providing in-person care to serve as teleSANEs. Accordingly, it is expected that other communities would likely not be as successful in rapidly developing and implementing a temporary conversion to teleSANE. Future research is needed across a variety of contexts to develop further our understanding of what ensures program success. Additionally, like the currently available literature on teleSANE (Meunier-Sham et al., 2019; Miyamoto et al., 2020, 2021; Walsh et al., 2019), this evaluation did not include patients as interview participants. All insight into the patient experience was based on the perceptions of the providers. Future research and evaluation should utilize trauma-informed approaches to prioritize centering survivors and hearing directly from them regarding what this experience is like, what is working well, and what needs to be improved. For example, teleSANEs report the benefits of being physically in the room with the patient; we do not yet know if this is also important for the patient. Future research should also examine the extent to which teleSANE actually improves equitable access to this expert care, serving patients and communities who would otherwise go unserved.

Finally, it is important to reflect on the key researcher-practitioner partnership that made this project possible. A member of the evaluation team (first author) and SANE leadership had been working together for almost five years

at the time of this project. As SANE leadership prepared for the Temporary Model, they identified that there was an opportunity to use research and evaluation to examine if what they planned worked. The evaluation team identified an opportunity to help by putting their skills to use. Given the speed with which the Temporary Model was developed, implemented, and terminated, this project likely would not have been possible without this preexisting relationship and a shared commitment to improving policy and practice through research and evaluation evidence. This project demonstrates the importance of long-term, mutually-beneficial researcher-practitioner partnerships that extend beyond the completion of a single project (Trickett et al., 1985).

CONCLUSIONS

All individuals, regardless of who they are or the circumstances of their sexual assault, should have access to expert SANE care. TeleSANE provides an opportunity to provide equal access for all survivors, even in the midst of a global pandemic. This evaluation documents the successes and challenges in rapidly preparing for and implementing a Temporary Model during the height of the COVID-19 pandemic. Through strong researcher-practitioner partnerships, innovative thinking, and a firm commitment to survivors, we can continue to advance how we provide care and promote justice and healing.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

TWITTER

Jessica Shaw  @docjshaw
 Hannah Feeney  @feeneyh

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