

Process Evaluation of the Harris County Sheriff's Office Tele-Health/CORE Pilot Program

Final Report Submitted to Arnold Ventures

October 2020

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Harris County Sheriff's Office or The Harris Center. This report was prepared in cooperation with the Harris County Sheriff's Office and The Harris Center.

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Acknowledgements

The research team would like to thank Arnold Ventures for funding this process evaluation of the Harris County Sheriff Office's (HCSO) Clinician and Officer Remote Evaluation (CORE) Program. Without support from the Arnold Ventures team, and especially Arnold Ventures Criminal Justice Manager Catie Bialick, the research team would have been unable to complete this important work. The research team would also like to thank HCSO and The Harris Center for Mental Health and IDD (The Harris Center) for their partnership in this effort.

In particular, the research team acknowledges the support from members of the HCSO Crisis Intervention Team/Mental Health Unit. This project would not have been possible without the guidance of HCSO's CORE Project Manager, Mr. Frank Webb as well as Sargent Jose Gomez, and Sargent Megan Herrin who coordinated and oversaw the day-to-day activities of the CORE Pilot Program. We would also like to thank Harris County Sheriff Ed Gonzalez and Major Mike Lee for their support of this evaluation.

Our thanks are also extended to those at The Harris Center who were integral to the success of this evaluation including, but not limited to, Chief Executive Officer, Mr. Wayne Young, Chief Operating Officer, Mrs. Keena Pace, Program Director, Ms. Ann MacLeod, Program Director, Ms. Kisha Lorio, Information Technology Manager, Mr. Fausto Bernal, Chief Information Officer, Mr. Mustafa Cochinwala, and Director of Outcomes Management, Dr. Scott Hickey.

Additionally, the research team would like to thank our partners at Datatude Inc., Dr. Kristin Cotter Mena and Ms. Diane Pinkston, for their significant contributions to this project and Lighthouse For the Blind of Houston for their transcription services.

We would also like to thank the University of Houston – Downtown (UHD) for the institutional support this project and the research team has received. We would specifically like to acknowledge our student research assistants, Michelle Arrieta, Jill Costa, Mirna Grant, and Jamie Guzman, for their dedication to this work. Finally, the research team would like to express our appreciation to the UHD administration and specifically to the Office for Research and Sponsored Programs, especially Mr. Jacob Lipp, Dr. Jerry Johnson, Ms. Brandi Smith-Irving, and Ms. Heather Davis for their support of and assistance with this project.

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Executive Summary

The Harris County Sheriff's Office (HCSO) is the third largest in the country, serving a population of more than 4.5 million residents. The Center for Disease Control and Prevention (CDC) estimates that one in five U.S. adults experience mental illness symptoms, thus, an estimated 900,000 Harris County (Houston) residents may be vulnerable. The current study was a process evaluation of the 12-month (December 2018-December 2019) Phase III Tele-Health Pilot Program for which HCSO partnered with The Harris Center for Mental Health and IDD (The Harris Center). The Pilot Program was later named the Clinician and Officer Remote Evaluation (CORE) Program. The goals for Phase III of the CORE Pilot Program, which was implemented with 20 volunteer HCSO deputies, were to increase safety, improve triage of mental health crisis calls in the field, fill gaps for mental health services, and prevent unnecessary arrests and transports of people living with mental illness to the Harris County Jail, treatment facilities, and/or hospital emergency rooms.

Evaluators utilized a mixed-methods data collection approach, including ride-along observations with CORE deputies and supervisors, quantitative administrative data from HCSO CORE deputies, and semi-structured qualitative interviews and focus groups with HCSO deputies, staff and administrators, and The Harris Center clinicians, staff, and administrators. This report highlights quantitative findings from secondary analysis of HCSO administrative data collected from CORE calls and emerging themes from content analysis of the process evaluation's qualitative data.

Quantitative analyses revealed that the Phase III CORE Pilot Program was implemented as intended and that it was meeting the goals HCSO set out for the Program. During the evaluation period there were 361 calls analyzed. Time on the iPad during a CORE call averaged

21 minutes and connectivity was reported as being good by the participating CORE deputies in 98% of the analyzed calls. In addition, CORE deputies felt the iPad usage resulted in avoiding the need to rely on Crisis Intervention Response Team (CIRT) co-responder units (88%), avoiding hospital transport (78%), deescalating the consumer (86%), connecting the consumer with mental health resources (89%), deciding the best course of action to resolve the call (93%), and minimizing the time spent on the call (88%).

Related to the goal of diversion, slightly less than half of the CORE calls analyzed during the evaluation period (n=151; 42%) were resolved on scene, with another 45% of CORE consumers being transported to a hospital emergency room or behavioral health treatment center. Only two consumers were brought to a criminal justice facility, resulting in fewer charges filed. For 46% of consumers (n=167), the CORE call was their first known encounter with The Harris Center, the County's community mental health provider, which addressed the goal of increasing access to mental health services. Additionally, cost savings due to jail diversion only were estimated to be over \$780,000.

For qualitative analyses, similar qualitative code segments were clustered together and produced six themes related to the implementation process, program fidelity, program acceptability, and program effectiveness. The program underwent some software and technological adaptations to iPads, wireless Internet signaling, and the telehealth software in previous pilot study phases, so the Phase III CORE Pilot Program implementation itself went smoothly. However, comments by HCSO deputies and staff and The Harris Center staff revealed shifts in program implementation in terms of deputies' and clinicians' understanding of consumer eligibility criteria for CORE assessment. While deputies tended to endorse positive views of clinician involvement (i.e. affirmation of their judgment as deputies and reassurance

when less certain about a disposition), clinicians tended to perceive shifting criteria as a source of confusion and potential barrier to effective interprofessional collaboration. Even so, the majority of stakeholder participants readily endorsed the acceptability and future effectiveness of the Program, and supported its permanent implementation and expansion.

Key recommendations stemming from the CORE Phase III Pilot Program process evaluation include the following:

- We recommend that HCSO and The Harris Center continue their partnership to operate the CORE program. Qualitative data suggests there is wide scale stakeholder support for this Program and the program is meeting the goal of providing resources to law enforcement to assist them in effectively responding to mental health crisis calls.
- As the program expands, fidelity to the model depends on deputies, clinicians and their managers having clear guidelines for practice. We recommend that HCSO and The Harris Center work together to develop a comprehensive CORE Handbook, which focuses on expected practices for both HCSO and The Harris Center staff related to the CORE Program. Since this program spans two agencies, a single handbook will help inform deputies, clinicians and their respective supervisors of the expectations for all CORE collaborators. Handbook topics should include guidelines for when telehealth should be used in the community. Internal policies should also be developed to address fidelity monitoring strategies, training, and supervision of CORE deputies and clinicians.
- We recommend that HCSO continue updating the CORE Implementation Guide as needed to inform law enforcement agencies and other organizations about the benefits of telehealth in responding to mental health crisis calls and the steps to set up similar programs in other jurisdictions.

- We recommend that HCSO and The Harris Center continue data collection on CORE calls for further internal assessment, so that adjustments can be made to the CORE Program based on data from ongoing program monitoring and user feedback.
- We recommend that HCSO ensure the CORE Program is distributed as needed to meet mental health needs throughout Harris County. Tracking and regularly examining internal data on CORE usage will be necessary. Also, flagging possible mental health calls at dispatch will assist in identifying where CORE can be best utilized.
- We recommend that future research evaluate CORE as currently implemented with additional funding by the Harris County Commissioners Court. These evaluations should take into account the overall number of mental health crisis calls received by HCSO, CORE consumer satisfaction, the use of Field Training Officers as CORE participants, and focus on longer term outcomes potentially with randomized control trial methodology.

Introduction

This report presents the process evaluation of Phase III of the joint Harris County Sheriff's Office (HCSO) and The Harris Center for Mental Health and IDD (The Harris Center) Pilot Telehealth Program, now known as the Clinician and Officer Remote Evaluation (CORE) Pilot Program. The goals of CORE are to increase safety, improve triage of mental health crisis calls in the field, fill gaps for mental health services, and prevent unnecessary transports to the Harris County Jail, treatment facilities, and/or hospital emergency rooms. The primary purpose of this process evaluation is to: (a) document and evaluate the implementation of the intervention (i.e. CORE) and (b) manualize the process for dissemination among law enforcement agencies nationwide.

Included in this report is a general description of telehealth as well as the partners engaged in this work and the populations they serve. This is followed by a description of the process evaluation methodology, the development of the CORE Implementation Guide, and presentation of quantitative and qualitative findings. Limitations of the process evaluation are described as well as dissemination and recognition of this work, and recommendations for the continued implementation and evaluation of the CORE Program.

Literature Review

Prior to COVID-19 impacting the lives of Americans in early 2020, telehealth was a beneficial, but less utilized tool for both physical and mental health care providers. COVID-19 has made telehealth more commonplace for providers and consumers alike, providing an additional layer of safety until an effective prevention and treatment plan for COVID-19 can be established. With the need for mental health services growing, the need for telehealth for mental health crisis response has also grown. By implementing their Tele-Health Pilot Program in 2017,

well before the outbreak of COVID-19, HCSO and The Harris Center were well prepared for the changes to come in 2020.

The term telemedicine was first referenced in the literature in the late 1940s (Field, 1996; McCarty & Clancy, 2002). It was not until the 1970s, however, that the first federally funded experiments were conducted with this new form of treatment provision. It would be decades later before the term telehealth would replace telemedicine and telepsychiatry, recognizing that this technology could be used beyond medical and mental health treatment in areas such as social work (Barrett & Brecht, 1998; McCarty & Clancy, 2002). Telehealth is defined by Texas Senate Bill 1107 (SB 1107, 2017, pg. 1) as “A health service, other than a telemedicine medical service, delivered by a health professional licensed, certified, or otherwise entitled to practice in this state and acting within the scope of the health professional’s license, certification, or entitlement to a patient at a different physical location than the health professional using telecommunications or information technology.” Telehealth “provides an ‘audiovisual hookup’ that allows patients to be virtually screened and examined, while also allowing health care providers to collect patient data” (Cohen & Silver, 2020, pg. 1).

Although defined differently by Texas Senate Bill 1107, in general, the existing literature on telehealth most closely related to the current evaluation examines the use of telepsychiatry programs. In 2007, Shore, Hilty, and Yellowlees developed guidelines for the use of telepsychiatry in emergency management to guide future development of telepsychiatry services. At the time of their publication, the literature on telepsychiatry was sparse, consisting of “a case report, and 4 program descriptions” (pg. 2). Later, the Joint Task Force for the Development of Telepsychology Guidelines for Psychologists (2013) introduced the guidelines for the practice of telepsychology which addressed the following: competence with technology and understanding

of the impact of the technology, ethical and professional standards of care and practices, informed consent, maintaining confidentiality, data security measures, consideration of unique issues for applying assessments designed for in-person implementation, and compliance with laws and regulations across jurisdictional borders. Best practices also came from a study of the Department of Veterans Affairs and its use of telehealth for remote assessment of suicidality, given that telehealth provides the opportunity for remote assessment and interventions (Godleski, Nieves, Darkins, & Lehmann, 2008).

In a systematic review of 68 studies on telepsychiatry, Lauckner and Whitten (2015) described that telepsychiatry had been found to be effective for treatment of mental illness and increasing access to care. However, they noted that more research on sustainability and methods of reducing costs of telepsychiatry were needed. Examining specific treatment needs and populations, Mahmoud and Vogt (2018) found telepsychiatry to be a useful tool to respond to opioid addiction. In addition, Whaibeh, Mahmoud, and Vogt (2019) found that telepsychiatry can overcome barriers to mental health treatment for the LGBT community and offer that remote treatment can be enhanced through educational improvements, increased training on cultural competency, and by offering more culturally affirming telehealth programs. Even more recently, researchers have addressed the role of telehealth in the treatment of substance abuse disorders in the face of COVID-19 (Kleykamp, Guille, Barth, & McClure, 2020).

Applied to criminal justice populations, Adjorlolo and Chan (2015) described how videoconferencing and remote forensic assessment made its way into the judicial system for the same reasons as using telehealth, to “overcome geographical barriers, thereby helping to reduce costs while preventing or minimizing the hurdles associated with traveling for court assessment purposes” (pg. 186). In addition to courts, the use of telepsychiatry, or telemental health, has

grown in correctional facilities due to the shortage of psychiatrists, geographic limitations, and reluctance for mental health providers to work in correctional settings (Mahmoud & Epshteyn, 2020). It has long been recognized that correctional settings are not designed for the treatment of mental health issues (Al-Rousan, Rubenstein, Sieleni, Deol, & Wallace, 2017) which brings us to a primary goal of CORE – diversion.

The Need for an Innovative Telehealth Diversion Program

National mental health resources are decreasing as needs for mental health services are on the rise. In 1955 there were 340 public psychiatric beds per 100,000 people. That number fell to 17 beds per 100,000 in 2005, a 95% decrease (Torrey, Entsminger, Geller, Stanley, & Jaffe, 2008). There is a projected shortage of 250,000 workers in selected behavioral health professions by 2025 (Torrey et al., 2008). There is also a national shortage of psychiatrists due to retirement, among other reasons (Hawkins, 2018). On average, there are estimated to be 8.9 psychiatrists per 100,000 people nationwide. Due to this, the majority of counties in the United States (96%) report having unmet needs for psychiatrists (Thomas, Ellis, Konrad, Holzer, & Morrissey, 2009).

At the same time, law enforcement mental health calls are increasing. Not only are law enforcement agencies seeing significant increases in mental health calls (Steele, 2016), hospital emergency rooms are inundated with community members brought in by law enforcement for mental health evaluations, and costs for such visits were estimated to be over \$1000 in 2017 (Consumer Health Ratings, 2020). While community members in crisis are brought in for evaluations, following assessment, the majority of these community members are not admitted. Community members in mental health crisis not brought to hospitals or psychiatric centers are often brought to jail if their behavior warrants a criminal charge. Jails and prisons in the U.S. have become the “new asylums” and are often the largest provider of mental health services in

jurisdictions across the United States (Treatment Advocacy Centers, 2016). Increases in mental health need and decreases in the capacity to treat the mentally ill have created a conundrum that increases costs and decreases safety within our community. It is in response to these issues that the initial HCSO CORE Pilot Program was developed.

Mental Health Response in Harris County

Harris County is the largest urban area in Texas with a population of 4,713,325 as of July 2019 (Census Bureau, 2019). A study by the Kinder Institute of Urban Research and the Hobby Center for the Study of Texas identifies Houston as the most ethnically-diverse metropolitan area in the United States (Emerson, Bratter, Howell, Jeanth, & Cline, n.d.). Given that the Centers for Disease Control and Prevention estimates one in five adult Americans have symptoms of mental illness, a population the size of Harris County would have more than 900,000 individuals who experience mental health issues (Centers for Disease Control and Prevention, 2018). According to the Robert Wood Johnson Foundation (2018), there is estimated to be only one mental health provider per 960 residents in Harris County; in addition, approximately 21% of Harris County residents are estimated to be uninsured, further impeding access to needed mental health treatment.

HCSO is the largest Sheriff's Office in Texas and the third largest Sheriff's Office in the United States. HCSO is responsible for the Harris County Jail, generally noted as the largest mental health provider in Harris County. This trend is largely due to the lack of available alternatives, as well as the challenges patrol deputies face in diverting community members in mental health crisis from institutionalization (either in the Harris County Jail or in a hospital setting). As of October 28, 2020, 67% of Harris County Jail inmates presented mental health indicators (Harris County, 2020). According to HCSO, while it costs approximately \$57 per day

to house a Harris County Jail inmate in general population, costs rise to \$67 per day if an inmate requires psychotropic medication and to \$232 a day if an inmate the inmate's condition is severe enough to be housed in the Harris County Jail's Mental Health Unit. Additionally, if an inmate is found incompetent and legally unable to proceed to trial, the costs to house these inmates and restore competency grows exponentially. Thus, while these accused persons are often in pre-trial detention for a minor offense, they are some of the costliest inmates to house.

With the recognition of increasing mental health needs in the community and rising costs for both HCSO and hospital emergency rooms, HCSO partnered with The Harris Center to implement Phases II and III of the CORE Pilot Program. The purpose of this Pilot Program is for deputies to be able to respond to a wider array of community members in mental health crisis at the scene. The telehealth technology enables CORE deputies to utilize an iPad to connect to a Masters-level mental health clinician at The Harris Center who can consult with a psychiatrist if needed. According to HCSO, goals of CORE include (a) increasing deputy and community safety by providing patrol deputies increased access to the expertise of Masters-level mental health clinicians via the use of technology; (b) improving the triage of crisis calls in the field; (c) filling gaps between patient demand for mental health services and the limited supply of mental health providers; and ultimately (d) preventing unnecessary transports to the Harris County Jail, The Harris Center's NeuroPsychiatric Center (NPC) and other behavioral health centers, and/or hospital emergency rooms, providing a time and cost savings to both law enforcement and medical care providers.

Clinician and Officer Remote Evaluation (CORE) Program

HCSO refers to the CORE Pilot Program as a "force multiplier" since it increases the capacity of HCSO deputies working with The Harris Center clinicians to reach far more

community members in crisis than previously possible. With the CORE Pilot Program in place, CORE deputies, equipped with iPads, can connect remotely to a clinician rather than waiting for a Crisis Intervention Response Team (CIRT) co-responder unit to arrive on scene. Additionally, the Program offers a cost savings. HCSO estimates that the cost for nine full-time, Masters-level mental health clinicians from The Harris Center working for the CIRT co-responder program is approximately \$900,000 annually while the cost to equip 100 patrol deputies with an iPad with which they can connect remotely to a Masters-level mental health clinician at The Harris Center is approximately \$905,000. While having a clinician on scene is valuable and the CIRT co-responder program is still in place, the CORE Pilot Program increases the capacity for deputies to consult with a clinician on multiple cases per shift to assist with decision-making for mental health crisis calls. Prior to having the opportunity to consult with a clinician, a deputy may err on the side of caution when transporting a community member in mental health crisis to the hospital or to jail, depending on the situation. As mentioned, a goal of the CORE Pilot Program is to eliminate unnecessary transports by providing the deputy an opportunity to consult with a clinician so a more informed decision can be made regarding the outcome of the call.

While deputies do rely on the clinician's expertise, as well as information available on the community member in crisis, CORE deputies also have undergone Crisis Intervention Team (CIT) training. In 2005, through The Bob Meadours Act, Texas mandated 16 hours of CIT training for Texas peace officers (SB 1473, 2005). This was increased to a 40-hour requirement in 2017 with the passage of The Sandra Bland Act (SB 1849, 2017). These state mandated 40 hours encompass information on the Texas Health and Safety Code, crisis intervention, myths about mental illness, mental health disorders and medications, conducting a three-point assessment, building rapport, deinstitutionalization, victimization of the mentally ill, and jail

diversion, among other topics. HCSO requires CIT-trained deputies to undergo an annual eight-hour CIT Refresher to be updated on content changes that may have taken place during the year. Additionally, HCSO requires CORE deputies to complete an additional two-hour training on the CORE Pilot Program and the equipment and processes utilized for CORE assessments.

Phases of HCSO CORE Pilot Program Implementation

While the purpose of this study was to evaluate Phase III of the CORE Pilot Program, the previous pilot phases will be briefly described to provide context for Phase III. In December 2017, HCSO, in partnership with JSA Health Telepsychiatry (JSA), began piloting the first phase of their CORE Pilot Program to address mental health crisis response in Harris County. Using Cloud 9 and Verizon Wireless, the goals of this brief pilot were to (a) test the concept of accessing psychiatrists via an iPad; (b) test the software and hardware; (c) improve triage of calls; and (d) diversion. Over the course of three weeks, three deputies responded to 31 calls. While Phase I used psychiatrists exclusively, the concept was proven successful through a pro bono evaluation by the University of Texas Health Science Center Houston with 45% of calls being diverted and an estimated cost savings of \$26,244.

Starting with Phase II in July 2018, The Harris Center became the primary collaborator in the CORE Pilot Program. The Harris Center is the “state-designated Local Mental Health Authority and Local Intellectual and Developmental Disability Authority serving Harris County” (The Harris Center, 2020, pg. 1). The Harris Center is largest behavioral and developmental disability care center in Texas whose “core values include collaboration, compassion, excellence, integrity, leadership, quality, responsiveness, and safety” (The Harris Center, 2020, pg. 1). Additional partners were Verizon Wireless and Apple Computers (i.e. use of iPads). The goals of Phase II were to (a) test the use of Masters-level mental health clinicians rather than

psychiatrists; (b) test various video conferencing software; (c) improve the triage of calls; and (d) diversion. Phase II lasted eleven weeks and the same three deputies were used in Phase II as in Phase I. The deputies responded to 49 calls with 59% of these being resolved on scene. The software (i.e. Lifesize) was deemed successful, as was using exclusively clinicians instead of psychiatrists to evaluate the mental health crises and make recommendations to deputies. No official evaluation was conducted of Phase II of the CORE Pilot Program.

Phase III began in December 2018. Phase III integrated the Arnold Ventures-funded mixed-methods process evaluation of the CORE Pilot Program. HCSO continued to partner with The Harris Center, Verizon Wireless, and Apple Computers (i.e. use of iPads). Goals of Phase III were to (a) expand the program by adding deputies, (b) fill the gap of limited mental health services, (c) increase safety, (d) improve triage of calls, and (e) divert mentally ill consumers from jail and hospital emergency rooms. An additional goal was to complete a process evaluation of the CORE Pilot Program. Phase III lasted one year (December 2018-December 2019) and incorporated 20 patrol deputies with clinicians at The Harris Center providing assessment via the iPad. It should be noted that clinicians at The Harris Center do have access to a psychiatrist for consultation if needed although psychiatrists are not often utilized for CORE assessment, nor do they speak directly to community members being assessed.

All deputies in Phase III of the CORE Pilot Program successfully completed the 40-hour HCSO CIRT/Mental Health Training Course and received additional training on (a) the objectives of telehealth; (b) the logistics of using the iPads and software; (c) presentations on The Harris Center's NPC, the Judge Ed Emmett Mental Health Diversion Center, and the Houston Center for Sobriety; and (d) a tour of the new Houston/Harris County Joint Processing Center. The CORE Pilot Program was available to deputies during daytime and evening shifts to

connect community members with The Harris Center's Masters-level mental health clinicians so that appropriate triage and crisis intervention could take place on the scene, thereby leading to diversion from the Harris County Jail and/or hospital emergency rooms.

Modifications to the Phase III CORE Pilot Program with Implications for Fidelity

During the one-year evaluation period, there were modifications in the implementation of the CORE Pilot Program that may have had an impact on measurement of program fidelity. The first of the modifications was the introduction of community member/patient informed consent after the Phase III evaluation period had already begun. HCSO and The Harris Center have their own methods for obtaining consent for the services they are providing. According to HCSO, when responding to a mental health crisis call where the iPad could be utilized, deputies verbally explain the Program and ask the community member in crisis if he/she would like to speak to a clinician via the iPad. As all deputies wear body cameras, this verbal consent from the community member is captured on video. Once the community member agrees and is handed the iPad, prior to beginning assessment The Harris Center began having clinicians obtain written consent from the community member via a form that appears on the iPad. The community member signs the form with his/her finger. This form/written informed consent process was recommended by The Harris Center legal staff. While no significant impact was anticipated or reported, concern was noted that requiring consumers in crisis to sign a written consent may dissuade them from participating in the call.

In addition to informed consent, a follow-up process was instituted by The Harris Center staff following a CORE call. Once a CORE assessment has been completed, The Harris Center makes a follow-up contact with the community member to identify if other services or referrals

are needed. These services may include treatment or other options given the mental health crisis presented by the community member at the time of the initial call.

Finally, near the end of the evaluation period, HCSO implemented mini-pilot programs with “super users” of the CORE Pilot Program. These were deputies who were most likely to utilize the iPad in response to a mental health crisis call, communicated with the CORE supervision team regularly, and were generally assessed to be dedicated to the use of the program. In one mini-pilot, a “super user” was assigned to respond to only mental health crisis calls. While the “super user” concept was an interesting one, it was not planned at the outset with the research team; however, the team was able to work with HCSO to obtain data from the “super user” mini pilot(s) to help identify any data anomalies that may occur based on this change. Findings are discussed in the Quantitative Findings section of this report.

While these modifications were not thought to be major changes to the Phase III CORE Pilot Program impacting the present evaluation, it is important that they are mentioned to understand what occurred during the implementation of the CORE Pilot Program. In addition, future researchers may want to include these, particularly the introduction of informed consent and follow-up by The Harris Center as future aspects of the Program to be examined.

Methodology

The research team employed a mixed-methods model to conduct the process evaluation of Phase III of the CORE Pilot Program. The process evaluation framework assessed key elements of the Program in terms of (a) how the CORE Pilot Program and related technology were implemented; (b) fidelity of the CORE Pilot Program; (c) acceptability of the CORE Pilot Program to stakeholders; and (d) effectiveness of the CORE Pilot Program as measured by proximal outcomes.

This process evaluation occurred in two stages. Stage 1 involved the collection of data and occurred during the Phase III one-year implementation of the CORE Pilot Program which took place between December 2018 and December 2019. During this time, HCSO deputies who volunteered to take part in the Program received training on the CORE Pilot Program and implemented the intervention. Quantitative and qualitative data were collected during Stage 1 of the process evaluation. Stage 2 involved the analyses of data once collected. Analyses occurred during the ten months following the implementation. While Stage 2 was originally projected to last six months, Arnold Ventures granted a four-month extension for completion of the evaluation due to COVID-19.

The research team contracted with Datatude Inc. for purposes of data security and assistance with quantitative analysis of administrative HCSO data. Prior to implementing the CORE Pilot Program, HCSO developed a form to collect data from the participating CORE deputies. This form was electronic and located on the deputies' HCSO laptops. The form was to be completed after each call for which the iPad was utilized to connect with a clinician. The research team was able to consult with HCSO on the data collected on this form. Sergeant Gomez and Sergeant Herrin were responsible for collecting and organizing the HCSO administrative data, de-identifying it, and securely sharing it with Datatude Inc. researchers for purposes of analysis.

Quantitative analyses of secondary administrative HCSO data allowed for evaluation of fidelity and preliminary measures of effectiveness of the CORE Pilot Program. Measures included diversion from jail, diversion from emergency hospital rooms, as well as documentation of associated costs. In addition, the impact of the intervention on officer time was measured. Specifically, analyses of administrative data determined whether the intervention helped the

deputy deescalate the community member in crisis and handle the call in an overall shorter period of time. Quantitative analyses were completed using standard statistical techniques. The scope of this study did not allow for the identification of a control or comparison sample. Hence, these analyses were primarily descriptive in nature and used to explore the fidelity of implementation and better understand the population being served by the CORE Pilot Program in Phase III.

Qualitative data were also collected during Stage 1 of the process evaluation. These data collection activities included a focus group with the HCSO CORE volunteer deputies at the outset of implementation, a focus group with clinicians working on CORE at The Harris Center, a focus group with HCSO call takers, and a focus group with HCSO dispatchers. Multiple interviews, 18 total, were also conducted. These included five interviews with HCSO CORE administrators, supervisors, and stakeholders, five interviews of HCSO CORE deputies, and eight interviews of administrators and stakeholders from The Harris Center working on the CORE Pilot Program. Interviews and focus groups examined (a) expectations of the intervention and its outcomes; (b) attitudes towards the intervention; and (c) barriers and facilitators to implementation. Audio recordings from these focus groups and interviews were de-identified and transcribed by Lighthouse For the Blind of Houston for analysis.

While interviews with community members served by the CORE Pilot Program (hereafter, consumers) were planned as part of this process evaluation, it became clear early on that these interviews would not be possible. The research team had planned to conduct these short satisfaction interviews during field observations; however, given the mental state of the consumer at the scene and the infrequency of telehealth observations, it was deemed too difficult to obtain informed consent and to conduct the interviews onsite. The research team discussed

having HCSO or The Harris Center staff conduct these surveys, but it was determined that surveys should be conducted by a third party and may be biased if conducted by a deputy, clinician, or other staff member from HCSO or The Harris Center. The issue of consumer satisfaction data will be further addressed in the Limitations section of this report.

In addition to focus groups and interviews, qualitative data were obtained from five researcher ride-alongs (approximating 21 hours) for the purpose of field observation across districts where the CORE Pilot Program was implemented. Qualitative data from the focus groups, interviews, and field observations underwent holistic-content and thematic analyses using Atlas.ti Version 8 qualitative analysis software. Transcripts were uploaded into the software and coded by two research team members, where a code encapsulated a single idea or concept and related quotations varied in length from a single word to multiple paragraphs. Coders met routinely, compared coding strategies and reconciled any discrepancies in assigned codes. Transcripts were read repeatedly until patterns or clusters of codes emerged that were then collapsed into broad thematic categories. Three research team members then reviewed themes for coherence based on transcripts, field notes, and observations.

Descriptive analyses were used to assess frequencies of responses to questions. Because codes could cluster in unique combinations and be represented in multiple themes, the number of duplicated codes actually total 415 (100%). Findings from qualitative analyses will complement the quantitative evaluation of fidelity and are discussed below.

Finally, Stage 2 resulted in development of the HCSO CORE Implementation Guide. This instructional guide on the implementation of the CORE Pilot Program was informed by the study but created by HCSO CORE Project Manager, Mr. Frank Webb. The CORE

Implementation Guide is currently publicly available on the HCSO website and is described in more detail in the following section.

Implementation Guide

The CORE Implementation Guide meets the project goal of manualizing the Program so that other agencies and organizations interested in implementing a telehealth program have a readily available resource to which they can refer. HCSO CORE Project Manager Mr. Frank Webb authored and developed the CORE Implementation Guide in consultation with the research team and other field experts. It was decided that the CORE Implementation Guide should be an online, electronic “living document” that can be updated as needed in real time. This increases access to the CORE Implementation Guide and also makes updates easier to disseminate. The presentation of information is engaging and provides photographs of the Program in action. Various topics important to the understanding of telehealth technology and its use in response to mental health crisis are covered. These include reasons for and benefits of using telehealth on patrol. HCSO describes keys to a successful program, steps to implementing such a program, and important lessons learned in the implementation of the HCSO CORE Program. In addition, a description of other U.S. telehealth programs for first responders (e.g. Austin, TX, Charleston, SC, Grand Travis County, MI, Lincoln, NE, Springfield, MO, and Upstate, NY) is provided, including comparison tables of these programs regarding who is involved in the programs and what software is utilized. This provides interested agencies additional resources and examples of telehealth partnerships. Also addressed is the use of telehealth among the military veteran population.

Finally, the CORE Implementation Guide provides a detailed description of the HCSO’s CORE Program and frequently asked questions that HCSO has received about their

implementation of telehealth. While HCSO has made the CORE Implementation Guide readily accessible on their website, they have also been contacted directly about obtaining a copy of the Guide. These requests have been made by Robert Batty, the Executive Chairman of Forensic Logic/COPLINK, Laura Cohen, Senior Director of Diversion Services at Cascadia Behavioral Health in Oregon, and Lieutenant Robert Pisarecik with the El Paso, TX Police Department, among others across the nation. The CORE Implementation Guide can be downloaded from the HCSO Crisis Intervention Team website at:

<http://www.harriscountycit.org/wp-content/uploads/Implementation-Guide-June-9-2020-1.pdf>

Process Evaluation Findings

Quantitative Findings

For the evaluation of Phase III of the CORE Pilot Program, 361 records were examined. These records document calls involving CORE assessment occurring between December 2018 and December 2019. These data are very complete, with few missing data elements. All errors have been corrected with input from HCSO's Sergeant Gomez and Sergeant Herrin who oversaw the CORE Pilot Program.

Consumers

There were 356 different consumers involved in the 361 CORE calls analyzed. Three consumers were involved in two calls each and one consumer was involved in three calls. All others were involved in only one call each. Nearly all consumers spoke English (n=352); two consumers spoke Spanish, one spoke Arabic, and one used Sign Language. The consumers were fairly evenly split between males (53%) and females (47%). The race of the consumers was dominantly White (52%), followed by Black (27%), Hispanic (17%) and Asian (4%) consumers. Their ages ranged from nine years of age to 80 years of age. Figure 1 shows the number of

consumers in each age category. Roughly half of the consumers served fell between the ages of 20 and 39 (51%).

Figure 1: Consumer Age at Time of Incident (N=361)

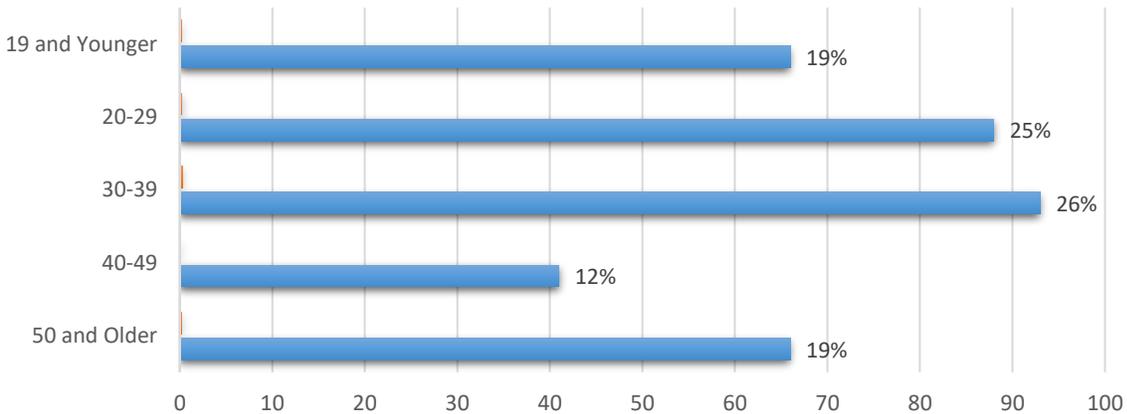
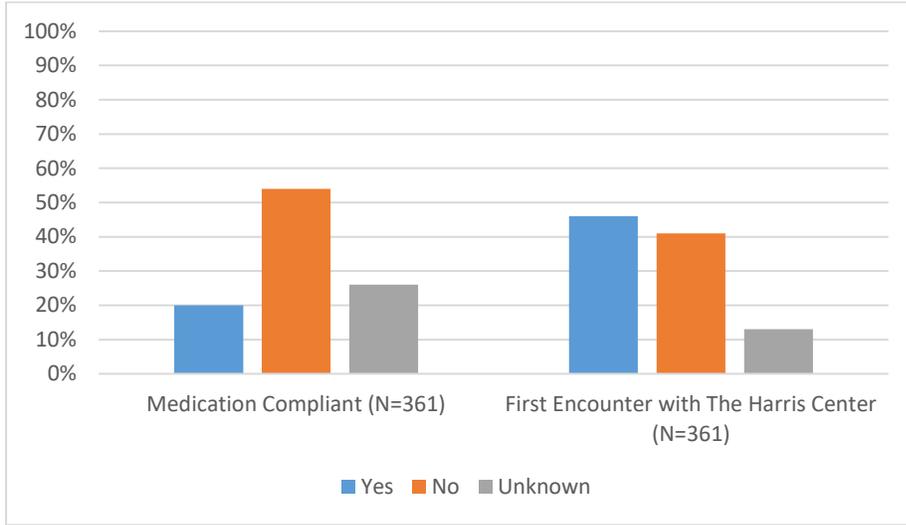


Figure 2 shows mental health information gathered by officers from consumers. With regard to medication compliance, of the 265 consumers asked by CORE deputies about medications, only 27% of consumers (n=71) reported being medication compliant at the time of the call. The majority (73%; n=194) of consumers reported they were not medication compliant at the time of the call. For the remaining consumers (n=96), medication status was unknown. Consumers were also asked about whether they had been in contact with The Harris Center’s mental health services prior to the CORE call. As shown in Figure 2, for 46% of consumers (n=167), the CORE call was their first known encounter with The Harris Center’s mental health services. About 41% of consumers (n=148) indicated it was not their first encounter with Harris County community mental health services.¹ For the remaining consumers (n=46), information on their first known encounter was unknown.

¹ It is unknown how many consumers served by CORE were linked to private mental health providers.

Figure 2: Consumer Mental Health Measures



Call Description

Table 1 provides data on the average length of the CORE calls with clinicians. There were 186 records that included the amount of time spent on the iPad with a clinician. For these calls, the time ranged from eight minutes to 60 minutes, with an average of call time of 21 minutes. In the vast majority of records (98%), the iPad signal was reported as being good. On only four calls did consumers refuse to use the iPad.

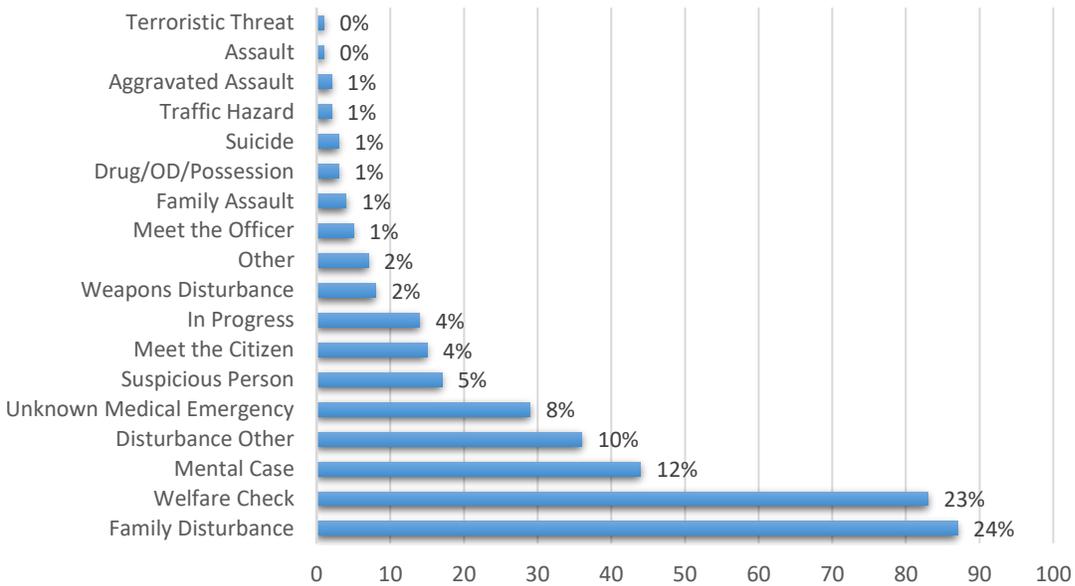
Table 1: Descriptive Data on CORE iPad Usage (N=186)

Time on call with Clinician in Minutes	Range	8 to 60
	Mean	21
	Median	20
	N	%
Deputy reported signal good	183	98
Consumer refused use of iPad	4	.02

When a person calls 911 or the HCSO, the call taker assigns the nature of the call based on the information given at that time. Figure 3 outlines the nature of the 361 calls. Most common were lower-level or non-criminal complaints, including Family Disturbance (24%), Welfare

Check (23%), Mental Case (12%), and Disturbance/Other (10%). The percentage of each type of call is shown in Figure 3.

Figure 3: Nature of CORE Call (N=361)



Deputy Perception

Deputies were asked to respond to a number of follow-up questions regarding use of the CORE Program for each CORE call. Table 2 presents the percentage of affirmative responses by item for each of the 361 calls. The responses to these questions suggest that the CORE deputies felt the iPad usage resulted in avoiding the need to rely on CIRT co-responder units (88%), avoiding hospital transport (78%), deescalating the consumer (86%), connecting the consumer with mental health resources (89%), deciding the best course of action (93%), and minimizing the time spent on the call (88%). Few calls were used to connect the consumer with a psychiatrist to help refill medication (1%).

Table 2: Deputy Use of CORE (N=361)

Question	% YES Response
Would you have called CIRT if you did not have an iPad?	88%
If you did not have the assistance of the clinician/psychiatrist, would you have transported the consumer to NPC/Hospital ER?	78%
Did the clinician/psychiatrist help you safely deescalate the consumer?	86%
Did the clinician/psychiatrist help you identify/access resources you would not otherwise have identified/accessed?	89%
Did the clinician/psychiatrist help you decide what course of action take with the consumer?	93%
Do you believe that the clinician/psychiatrist helped you handle the call in a shorter period-of-time than if you responded without the clinician?	88%
Did you connect with a psychiatrist who was able to help the consumer fill/re-fill his prescription medication?	1%

Disposition of CORE Call

There are two possible outcomes for CORE calls: (a) resolved on scene or (b) transportation of the consumer from the scene. In many cases, Emergency Detention Orders (EDO) are signed by HCSO deputies when they believe a consumer cannot be safely left at the scene, allowing the deputy to transport the consumer to a hospital or elsewhere. Figure 4 demonstrates how each of the 361 CORE calls were resolved. A little under half of the calls (n=151; 42%) were resolved on scene, with the other 58% (n=210) resulting in transporting the consumer from the scene. In only one case was the consumer transported to the Harris County Jail and in one other case, the consumer was transported to the Harris County Juvenile Detention Center. In those calls resulting in transporting the consumer from the scene to a hospital/center, consumers were transported to the Neuro-Psychiatric Center (NPC) on 95 of the 213 calls (45%).

Figure 4: CORE Call Disposition

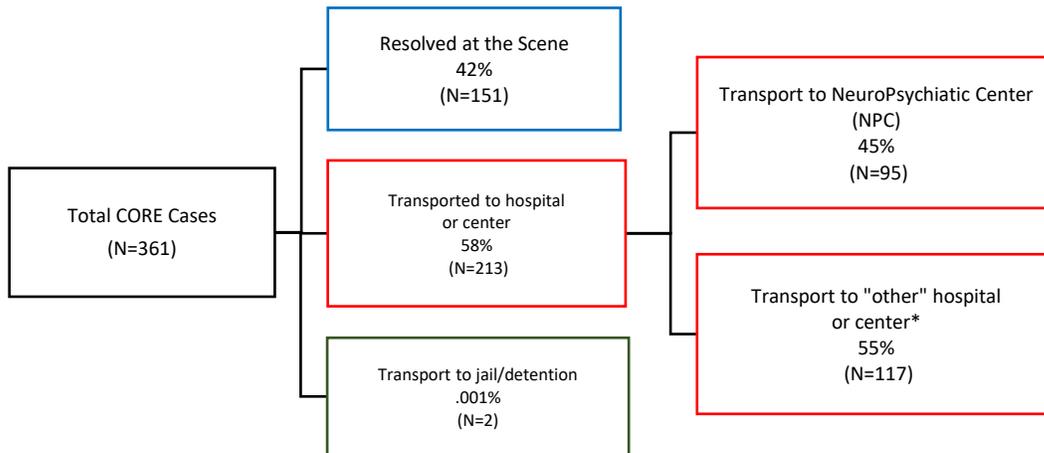


Figure 5 provides more detail as to the hospital or facility to which consumers were transported when transportation was provided. Other than the NPC, Ben Taub Hospital, Memorial Hermann Katy, and the Veterans Health Administration (VA) Hospital made up a little over 15% of the transports. The other locations, as shown in Figure 5, include various hospitals and behavioral or mental health facilities across the Houston area and were likely determined by the available treatment facilities located in or near the district in which the CORE deputy was assigned when responding to the call.

Figure 5: Hospital or Facility to Which CORE Consumers were Transported (N=213)

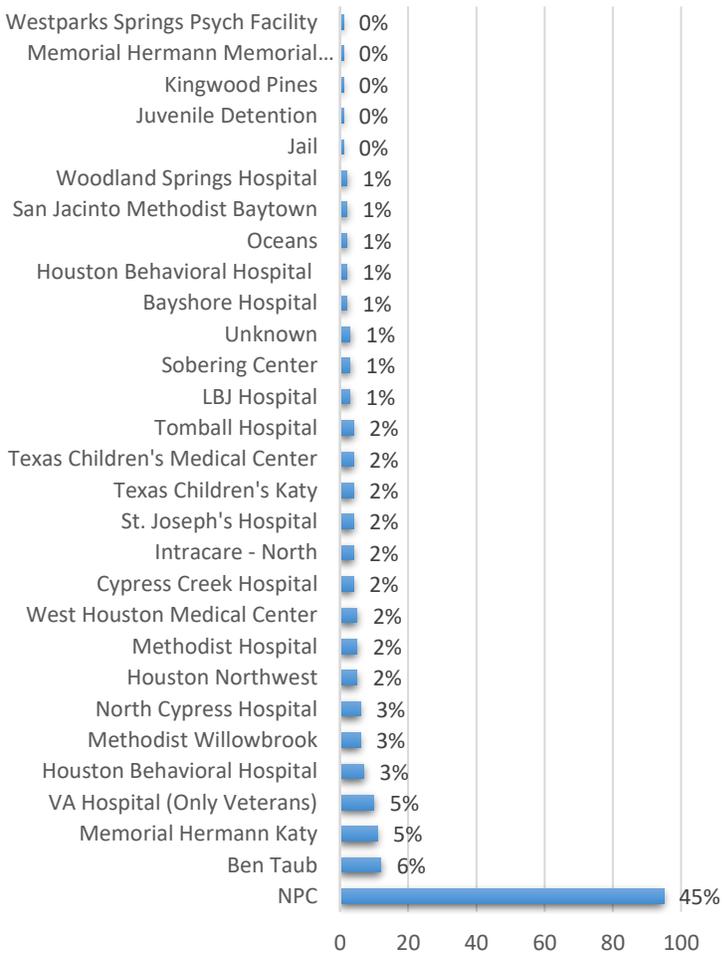


Figure 6 presents the proportion of consumers who were transported under an EDO and further, the proportion where the action diverted transportation to jail. In a number of the calls, once the deputy is on scene and makes a more thorough assessment of the complaint, the nature of the call is changed by that deputy. In certain cases, the deputy on scene will call the Harris County District Attorney’s (HCDA) Office and explain what charges they believe could be filed and whether they think there is a mental health nexus; the HCDA can at that time determine whether they will charge or divert the charge(s). In 32% (n=64) of the cases which resulted in an

EDO, criminal charges were also diverted, as illustrated in Figure 6. To further extrapolate, Figure 7 shows the type and number of charges that were diverted during the evaluation period.

Figure 6: Relation of Transported Consumers to EDO and Jail Diversion²

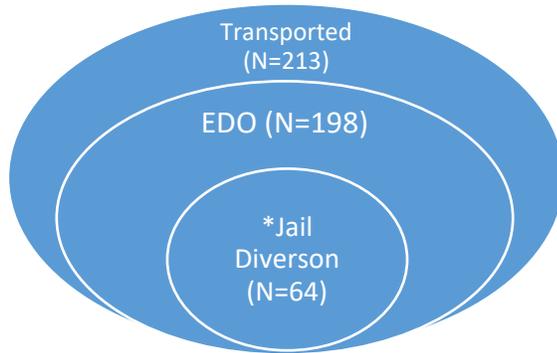
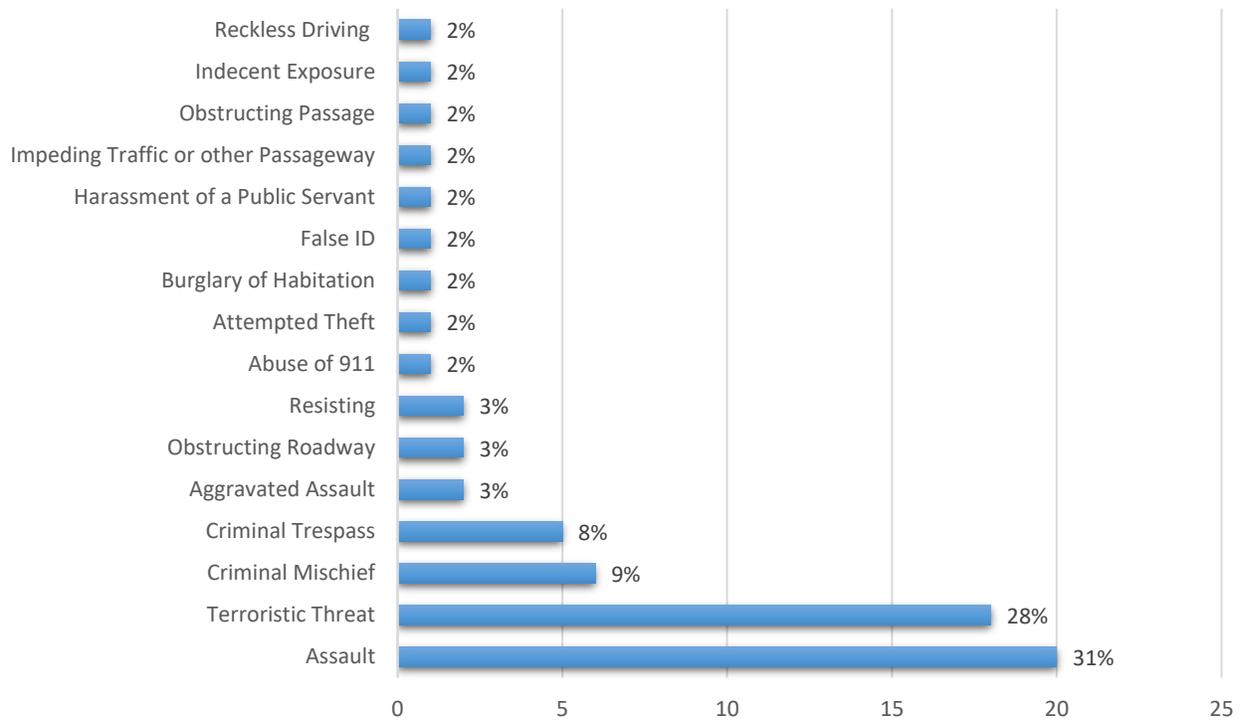


Figure 7: Diverted Charge Type (N=64)



² Five diversions did not have EDO but were transported to a medical facility.

Where and When

Phase III of the CORE Pilot Project included 20 deputies assigned to the six HCSO districts across Harris County. All deputies volunteered for participation in the CORE Pilot Program, which accounts for the variation in the number of deputy participants per district. The number of deputies participating in CORE by district is listed below:

- District 1 had 3 volunteer CORE deputies;
- District 2 had 2 volunteer CORE deputies;
- District 3 had 3 volunteer CORE deputies;
- District 4 had 8 volunteer CORE deputies;
- District 5 had 3 volunteer CORE deputies; and
- District 6 had 1 volunteer CORE deputy.

In order to track CORE utilization, information was collected on the districts where the calls were most likely to take place, the date of the calls, and the time of day that the calls came in. Figure 8 presents the number of calls by each district in Harris County. These data revealed that deputies in District 4 were the primary CORE Pilot Program utilizers, responding to 39% (n=141) of the calls during the evaluation period. Of note, District 4 also had far more CORE deputies (n=8) than the other districts (each with 1-3 CORE deputies).

Figure 8: CORE Calls by District

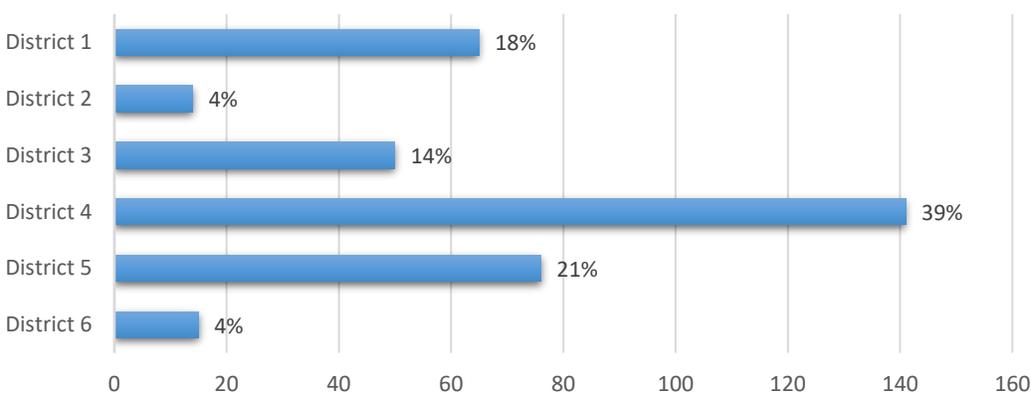


Figure 9 presents which month of the year the CORE Pilot Program was utilized for 2019.³ Most calls occurred in December (18%), September (15%), and January (12%).

Figure 9: CORE Calls by Month

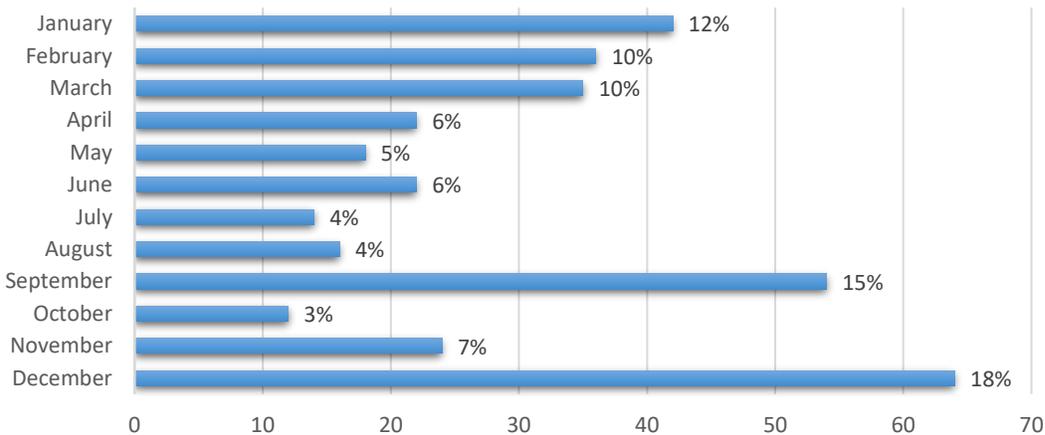
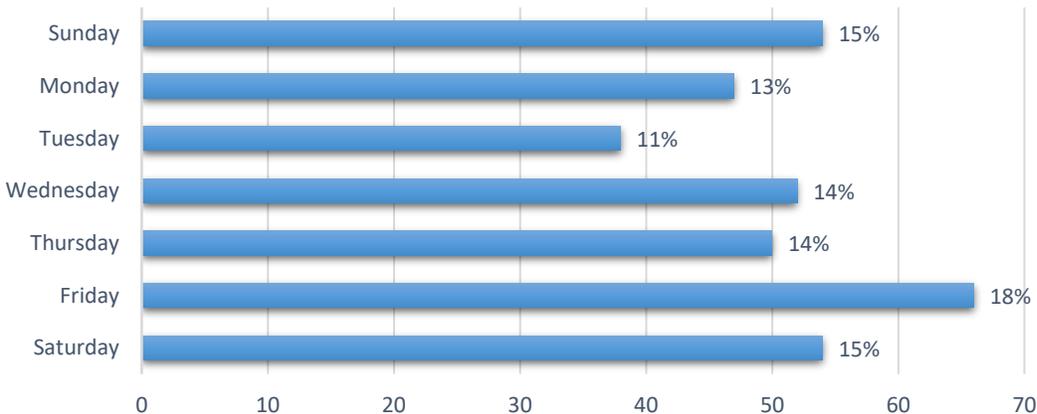


Figure 10 shows which days of the week CORE was most often utilized. While distribution of the calls was relatively even, most calls occurred on weekends – Friday (18%), Saturday (15%) and Sunday (15%), with Tuesday as the least active day of the week for CORE deputies (11%).

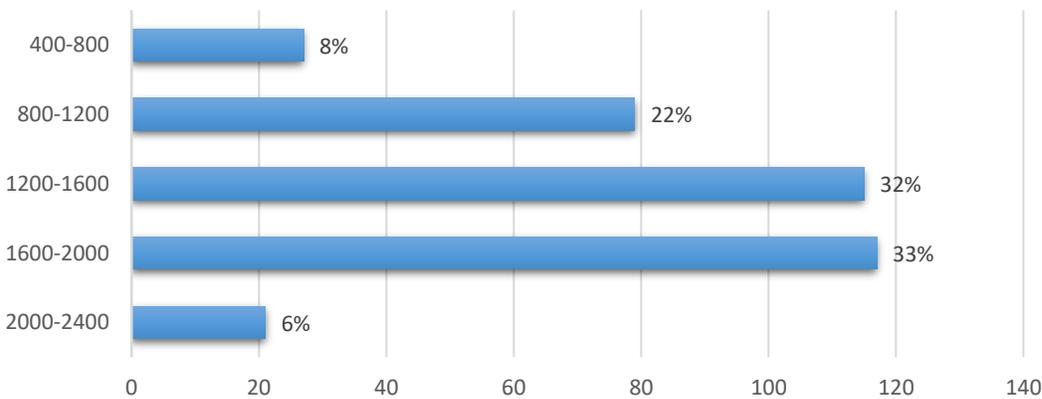
Figure 10: CORE Calls by Day of the Week



³ Although two calls occurred in December 2018, these two calls were excluded below.

Figure 11 presents the time of day when CORE calls were most active. Times are broken down into 4-hour increments, listed in military time. Most CORE calls were received between 4:00 pm and 8:00 pm (33%), followed closely by noon to 4:00 pm (32%). Only 14% of CORE calls occurred during hours spanning the evening shift. While the table indicates time beyond evening shift, Phase III of the CORE Pilot Program was only available during day and evening shifts – not during overnight shifts.

Figure 11: Calls by Time of Day



“Super User” Mini-Pilot

Toward the end of Phase III of the CORE Pilot Program, HSCO elected to test the impact of identifying a handful of deputies determined to be “super users” as the primary mental health call responders within a district. In all, two “super user” mini-pilots were conducted towards the end of the year-long evaluation period. Both “super user” pilots utilized three of the previously trained and active CORE deputies who volunteered for this mini-pilot.

“Super User” Phase I was the first mini-pilot, and occurred from September 1 to September 30, 2019 (30 calendar days). In “Super User” Phase I, the three deputies were assigned to their districts and were dispatched *only* to mental health calls in those districts. These

deputies worked a combined total of 55 days and responded to 110 mental health calls. The iPad was utilized on 39 of the calls.

“Super User” Phase II was the second mini-pilot, and occurred from November 9 to December 20, 2019 (41 calendar days). In “Super User” Phase II, deputies were assigned to their districts as the designated CORE deputy, but were also able to respond to calls for service in neighboring districts (which included Districts 1, 2 and 5). They were advised to only go to scenes for calls with a presumed mental health component. The three deputies worked a combined total of 37 days.⁴ The iPad was utilized on 18 of the 65 calls that the three deputies answered during that time period.

The purpose of the mini-pilots was to determine the utility of applying the CORE Pilot Program to deputies who would be exclusively (or near-exclusively) dispatched to mental health calls for service. This more closely resembles the in-person CIRT co-responder program, but capitalizes on the efficiency of telehealth by replacing in-person clinicians with clinicians available via the iPad. Data from the mini-pilot suggest that, based on current usage of CORE, deputy time may be underutilized if exclusively designated to mental health calls in the fashion piloted. It is important to note, however, that these were very short mini-pilots unplanned by the research team, so data collection over a longer period of time may yield different results.

Cost Savings

Although prevention of an event, and associated cost savings are a difficult study topic, understanding some of the potential costs that could have been incurred by the 361 consumers who were the focus of Phase III of the CORE Pilot Program is important. The participating CORE deputies were asked about what action they would have likely taken if the CORE Pilot

⁴ Despite the longer time-frame for Phase II of the mini-pilot, the deputies worked fewer days due to holidays and vacation days.

Program did not allow them clinical consultation from The Harris Center via the iPad. These actions include: (a) calling a CIRT co-responder unit for assistance; (b) taking the consumer to the Harris County Jail; or (c) taking the consumer to a hospital emergency room.

In 64 of the cases, the CORE deputies indicated that they were able to divert charges, thereby avoiding transportation of the consumer to jail or detention. According to the Texas Criminal Justice Coalition (2020), in Harris County, the cost to hold an inmate in jail in 2016 was \$59 per day. On July 2, 2020, Harris County reported the average stay for current inmates to be 207 days. Based on these data, for the 64 consumers diverted from jail, the estimated cost savings is \$781,632⁵.

In terms of hospital emergency room utilization, the deputies indicated that for 151 of the cases, it would have been likely that the consumer would have been taken to an emergency room or to the NPC. The estimated cost for an emergency room visit per consumer in Houston is \$1447 (Texas Healthcare Costs, 2020). In 151 cases, the CORE deputies were able to resolve the case on scene thereby by diverting the consumers from emergency rooms. Had these consumers been transported to an emergency room, this would have resulted in an average cost of \$218,497.

The UCLA Health System (2020) reports that for psychological issues requiring inpatient treatment, the cost averages \$8,150 for a 1-2 day stay. While data are not available on the number of admissions for individuals transported by law enforcement to the hospital, the potential cost savings for resolving a mental health call on scene for 151 consumers, avoiding an inpatient psychiatric admission, would be \$1,230,650.

Finally, the CORE deputies reported that for 317 of the calls, they would have called a CIRT co-responder unit if they did not have the resources of CORE to assist with assessment of

⁵ This is a conservative cost estimate of jail cost, as the cost increases if the inmate is on medication or placed on a mental health unit.

the consumer. In the 2018 annual report, CIRT co-responder calls were quoted as costing \$240.76 per call (Houston Police Department, 2020). While it is not possible to estimate when a CIRT co-responder unit would have been available to respond to these mental health crisis calls, the use of CORE as opposed to CIRT co-responder units, for response to 317 mental health calls would have resulted in a cost savings up to \$76,321⁶.

Qualitative Findings

Qualitative analysis produced 191 codes. Because of the unique ways codes could manifest in interviews and focus groups, each code was represented in at least one theme and a number were present across most themes related to the CORE Pilot Program. Codes were then collapsed into six themes (n=415 duplicate codes) including: (a) barriers to CORE implementation and sustainability; (b) facilitators to CORE implementation and sustainability; (c) implementation process and fidelity; (d) program acceptability; (e) program effectiveness; and (f) the broader mental and behavioral health services context. The facilitator theme represented the highest clustering of codes (n=102, 24.6%), followed closely by the barriers theme (n=99, 23.9%). Implementation/fidelity (n=83, 20%), program effectiveness (n=76, 18.3%), and treatment as usual (n=38, 9.2%) contained fewer clusters of codes. Acceptability contained the lowest numbers of codes (n=17, 4%). The following sections represent a detailed summary of the qualitative findings related to these themes.

Theme 1: Treatment as Usual: Broader Mental and Behavioral Health Services Context

As part of interviews and focus groups, most stakeholders commented on and shared personal and professional narratives of their experiences with being a first responder in the

⁶ Note that this figure does not include the cost of operating CORE, since this is a pilot program and the cost has not yet been established.

Houston metropolitan area in the period pre-CORE Pilot Program (n=38 codes). Narratives included situations in which consumers with mental/behavioral health problems struggled to access programs and obtain diagnoses, medication, non-pharmacological treatments (e.g. therapy), and follow-up for acute or routine issues. Reports of repeat calls from family members, neighbors, or other consumers were common in these narratives, as well expressions of frustration and fear for the safety and well-being of those experiencing acute and chronic mental/behavioral health challenges.

Commonly-cited reasons included the individual or family lacking insurance and other resources; response times and geographic limitations for crisis interventions teams; and limited availability and access to existing acute/crisis care (e.g. hospitals diverting admissions, few mental health beds). Concerns were also frequently raised for the consumers' relatives and neighbors, deputies, and clinicians. Interestingly, in the absence of coordinated and accessible, comprehensive mental and behavioral healthcare, stakeholders cited jail as a setting where consumers and community members could access treatment.

This finding supports numerous peer-reviewed studies noting that jails and prisons have become a de facto mental/behavioral health service system and a major public health concern for many Americans. Paradoxically, according to a number of clinicians, deputies, and other stakeholders, an assumption underlying CORE Pilot Program development was that treating justice-involved populations is prohibitively expensive and less desirable than community-based care. In essence, treatment as usual leaves many of the Houston community's most vulnerable, those impacted by mental illness, substance use disorders, and other psychosocial and economic issues, with few resources and options for recovery.

Theme 2: Barriers to CORE Implementation and Sustainability

Stakeholders at all levels identified internal and external threats to CORE Pilot Program logistics, operations, human and financial resources, outcomes, and sustainability. Perceived barriers varied widely and were often shaped by stakeholders' vantage points within the Program. These barriers could be further subdivided into direct and indirect individual-, organizational-, and community-level factors and are discussed in detail below.

Technology plays an essential role in the CORE Pilot Program, as it links consumers, deputies, and clinicians at critical juncture in the consumer's life. At the individual-level, stakeholders were particularly concerned about technology, including types and utility of tablets, consistency of wireless Internet connectivity, and issues with audio/visual quality. Clinicians and deputies tended to discuss these issues within the context of specific scenarios. However, call takers and dispatchers also weighed in citing concerns about traceable and untraceable calls as limiting factors to efficiently and effectively identifying the origination of emergency calls and directing deputies to these locations.

Other individual-level barriers related to perceived consumer and deputy safety during on scene interactions and potential for clinician-deputy disagreements on case dispositions. While no interview or focus group participants provided examples of these types of events during the CORE Pilot Program, all stakeholder groups touched on the potential for encounters with consumers with mental/substance use disorders and law enforcement to escalate, leading to injury or death. It is important to note that stakeholders described these situations as a hazard associated with law enforcement and their work with potentially impaired or violent and aggressively behaving suspects rather than a risk solely related to CORE. In situations where deputies and clinicians may have differed in their assessment and proposed dispositions of

aggressive or destructive behaviors among consumers with mental illness, both stakeholder groups indicated that the deputies generally opted in favor of transport to hospital emergency rooms with EDOs, rather than to jail, attempting to identify an available psychiatric facility, or leaving on scene.

At an organizational-level, administrators, clinicians, and deputies discussed the myriad ways that the Program collaborated between agencies and the wireless provider to troubleshoot and fix technological issues, with many users agreeing that these issues appeared to decrease over time or were readily amenable to tech support. Dispatchers, call takers, and deputies also provided extensive background on community-level factors such as the impact of mass cell phone use on ease of identifying the source and location of emergency calls; geographic location of these calls and placement of cell towers; and technological advances that assist, but do not, eliminate challenges with mass cellphone usage versus landlines.

The CORE Pilot Program sits at the intersection of law enforcement and mental/behavioral health services because of its aims related to facilitating access to care and resources, jail diversion, and hospital diversion. Thus, community-level barriers were represented in this theme as well as “Treatment as Usual.” Well-known social determinants of public health (e.g. access to care, lack of insurance) that are longstanding barriers to the organizational health and sustainability of existing social services and mental/behavioral health care services are also external threats to the CORE Pilot Program. For example, stakeholders identified program costs, local and state policies, community support for the Program, and even mental health stigma, as factors that directly and indirectly effect the Program, limiting opportunities for enhancements and expansion.

Theme 3: Facilitators to CORE Implementation and Sustainability

As with the previous theme, stakeholders at all levels identified internal and external strengths or opportunities for CORE Pilot Program logistics, operations, human and financial resources, outcomes, and sustainability. Perceived facilitators varied widely and were often shaped by stakeholders' vantage points within the Program. These facilitators could be further subdivided into direct and indirect individual-, organizational-, and community-level factors and are discussed in detail below.

In terms of the individual- and community-levels, all stakeholder groups strongly endorsed CORE related to its ongoing and perceived future impact on consumer safety and access to mental/behavioral health services and resources. Administrators endorsed CORE as a much-needed and innovative mental/behavioral health care services intervention that was tailored to law enforcement's expanding role in public health. Additional comments related to the Program as a means for community outreach and education about mental health issues; securing family and community "buy-in" for law enforcement and its public health intervention; and alleviating stressors on the local healthcare system.

Call takers/dispatchers expressed excitement that their work could contribute to helping community members obtain much needed care in a manner that could deescalate encounters with their law enforcement colleagues. Similarly, administrators, deputies, and clinicians endorsed the efficiency of the Program versus existing social service and mental/behavioral health alternatives. Interestingly, the Program's technology component, reported as a barrier under certain circumstances, was still viewed as a key facilitator in expanding access to mental/behavioral care and resources, particularly during crisis intervention and management; enhancing consumer and deputy safety; and extending the "reach" of both clinicians and deputies in terms

accessing consumers who might not otherwise have been screened, or who had been lost to follow-up, and linking them to services.

Based on feedback from stakeholders, the nature and quality of collaboration between deputies and clinicians appears as mission-critical as technology as an organizational-level facilitator to program implementation and fidelity. Clinicians and deputies were “mixed” in describing the impact of clinicians moving from partnering with deputies and being present on scene to being online and connected using the tablets. However, as deputies and clinicians reported perceived successes in linking consumers to services through CORE, they also described the effect of enhancing their own buy-in and acceptance of the Program model and their professional colleagues. Team cohesion and shared sense of purpose, goals, and expectations were also endorsed as necessary for program expansion beyond the initial implementation and pilot.

Theme 4: Fidelity and Implementation: CORE Process as Open, Flexible, & Early OLC

A few issues related to implementation and fidelity were covered in the earlier section titled, “Modifications to the Phase III CORE Pilot Program with Implications for Fidelity.” As a brief reminder, three major alterations were made to the Program and included: adding a written consent component to the on scene interactions among consumers, deputies, and clinicians; follow-up contacts; and the mini-pilots of dedicated “super users” to the Program. While not quantitatively evaluated in the study, the qualitative findings provide some means of contextualizing the potential impact of these changes on Program fidelity.

Verbal and/or written consent are routine practice for both deputies and clinicians in non-CORE activities. Thus, inclusion of a written consent component did not appear to be overly impactful in terms of perceived difficulty of carrying out an encounter with consumers on scene,

as this information was not highlighted in most interviews or focus groups. Rather, this change may have contributed to deputies' and clinicians' perceptions of the complexity of the CORE process in terms of their work with consumers and inter-agency and interprofessional collaboration.

Across the board, stakeholders endorsed the inclusion of follow-up contacts and "super users" as positive additions to the CORE model. Follow-up contacts appeared to provide deputies with a sense of successful closure to their cases and provided both deputies and clinicians with assurances that their collaborations were effective at meeting Program aims and prioritizing consumer safety through post-CORE involvement "welfare checks." Additionally, the increase in deputies with tablets for the Phase III Pilot and subsequent addition of "super users" was well-received as a "force multiplier," particularly by deputies and administrators. While call takers and dispatchers were involved in focus groups prior to the addition of the "super users," their stated enthusiasm for CORE's aims would likely translate to enthusiasm to changes to the Program to include these additional personnel.

Stakeholders' descriptions of the CORE Pilot Program appear typical of what one would classify as early or young in terms of organizational life cycles. In this stage, it is not uncommon for stakeholders and consumers to perceive an openness or flexibility in processes, policies, and consumer eligibility as the organization begins to operationalize its vision and mission. Clinicians consistently described these changing processes, combined with the technology, as confusing and challenging their ability to provide assessments and services in alignment with how they traditionally understood and provided care when assigned to on scene units. In essence, for them, such programmatic elements needed more clarity and formalization typical of more mature organizations/programs, while other stakeholders, chiefly administrators and

deputies, expressed sentiments supporting the more pragmatic and flexible approach. Thus, stakeholders were unanimous in reporting CORE as on mission and implemented as initially designed. However, their responses in focus groups and interviews indicated differing perceptions and comfort with the degree of flexibility integrated into program implementation, even as they affirmed fidelity.

Theme 5: Perceived Effectiveness: CORE as VINE Model

Stakeholder responses during interviews and focus groups could be further subdivided based on their perceptions of CORE Pilot Program as directly or indirectly achieving its aims. Stakeholders described both direct and indirect means by which the Program effectively addresses individual consumer's mental health needs, while also developing a pipeline that flows away from jails or emergency rooms and towards more appropriate mental/behavioral health services. Perceptions of direct evidence of effectiveness also included consumer and family buy-in; prioritization of mental health screening in law enforcement encounters; any quantitative measures of effectiveness (e.g. reduced wait times, transport to psychiatric facilities); and clinician and deputy appraisals of appropriateness of the referral. Indirect evidence related to organizational- or community-level factors including expanded provision of programmatic resources and recruitment; costs savings from using CORE versus jails or emergency room care; and broad appraisals of improving public safety. Overall, these responses provide a picture from stakeholders of CORE as visionary, innovative, novel, and effective in terms of its model and approaches to addressing the complex public challenge of mental/behavioral health.

Theme 6: Program Acceptability: Stakeholders are Generally Pro-CORE

The CORE Pilot Program was generally perceived as an acceptable community-level intervention across all stakeholder groups. Program administrators were the originators who

developed the Pilot Program and process and identified key human and financial resources, including program champions. These stakeholders were unanimous in supporting the Program and assessing it as acceptable for addressing a critical mental/behavioral health need in the community. While call takers and dispatchers had not uniformly heard of the Program or its implementation, they were also unanimous in voicing a need and support for this type of intervention. By far and large, deputies found the program acceptable, even when they may have voiced initial skepticism on Program logistics (e.g. handling technology on scene) or collaborating with clinicians online versus on scene. In contrast, clinicians' endorsements were more nuanced and persistent in voicing questions related to how remote assessment and practice differs from application of their clinical knowledge and skills on scene.

Synthesis of Mixed Data Findings Applied to Evaluation Goals

There were four major goals of this process evaluation. These include evaluating (a) how the CORE Pilot Program and related technology are implemented; (b) fidelity of the implementation; (c) acceptability to stakeholders; and (d) effectiveness as measured by proximal outcomes.

Regarding the first goal, Phase III of the CORE Pilot Program was implemented via the iPad, Verizon, and the Lifesize app, which deputies used to connect to clinicians. By Phase III of the Program, technology issues had largely been resolved. When a clinician was asked in an interview to provide a time when use of telehealth was unsuccessful, the response was *“The only time I’ve experienced a call like that, there were connection issues. They seemed to work those initial bugs out. When I’ve done those shifts in Phase III, no issues.”* When asked about barriers to the implementation of telehealth, a CORE deputy responded, *“My experience has been that it has gone pretty smoothly on all levels. A lot of cooperation between the Sheriff’s Office and*

Harris Center, any questions or issues [are] addressed immediately. Initially connectivity issues, and it got taken care of.” These sentiments are underscored by data ascertained from deputies following use of the iPad, where a good signal was reported in 98% of the 361 calls. If any technical issues did arise, technical support was provided quickly by IT staff at The Harris Center.

Phase III CORE Pilot Program deputies volunteered (self-identified) or were recruited by CORE Pilot Program supervisors. These deputies, especially those later identified as “super users,” were likely to have a commitment to resolving mental and behavioral health issues in the community given their willingness to use the iPad. Self-efficacy and motivation, perhaps related to experience and training, may have led these deputies toward involvement in the CORE Pilot Program. Regarding a question about challenges in sustaining the telehealth program, one CORE deputy responded, *“There are deputies who want nothing to do with a mental health call. They will see the call and automatically want a mental health officer. I think it should be voluntary on the deputy level or it will create wasted resources.”* With program expansion, HCSO will have to consider how CORE deputies will be identified.

Towards the second goal, fidelity of the implementation, the Program appeared to be implemented as intended. One CORE deputy was asked whether the Program was being implemented as planned, and the response was, *“Yes. I don’t know full details of all the implementation, but consistent with how it was presented and explained. Pretty smooth. Even from the beginning, we had an ideal of the process, how it was going to happen.”* CORE deputies had tablets and were trained on how to use them according to the protocol designed by HCSO and The Harris Center. Clinicians provided assessment and consulted with CORE deputies. Based on the administrative data, deputies regarded clinician assessment and

consultation as useful in deciding the course of action to take with the consumer in 93% of the calls. There was minimal concern with Masters-level mental health clinicians conducting the assessments. One stakeholder reported *“Trying to have a physician answer every call is costly. If [s/he] doesn’t get used, huge investment. Coverage in evenings—harder to find. Just seemed impractical to have a physician at the front door...[consumers] need more psychosocial support.”* Deputies reported that in 89% of the CORE calls, clinicians helped to identify/access resources for consumers that would not have otherwise been identified/assessed.

The third goal was to measure the acceptability of the CORE Pilot Program among stakeholders at HCSO and The Harris Center. This was accomplished through interviews and focus groups. While some participants were positive, yet cautious, overall, findings revealed widespread acceptance of and support for this Program. In one deputy interview, the following comment was made about non-CORE deputies, *“Fellow deputies don’t mind it. I show up, if a legit call I take it. If I don’t feel or the clinician doesn’t feel needed, can help back them up.”* Similarly, another comment from an administrative stakeholder was *“Now patrol deputies [are] calling other deputies who do have tablets to bring [the] tablet. We’ve been comfortable with it because we can provide that expertise.”* In general, among executive leadership, there was unilateral support for the Program at both HCSO and The Harris Center. There was no question as to the Program’s utility or the need for such a program in Harris County, in part due to CORE’s ability to solve issues with resource allocation and efficiency of CIRT co-responder models. *“This technology saves a significant amount of response time—[you] don’t have to wait for a CIRT unit, now only 5 to 10 minutes. Reducing unnecessary transports. Doing total diversion (hospital and jail)—Harris now does follow up on all clinician calls. Can also follow up on mental health needs (med refills, doctor follow-up, etc.).”* Deputies agreed, reporting that

calls were resolved more efficiently, with time on the iPad with the clinician averaging just 21 minutes.

Our final goal, to measure effectiveness of Phase III of the CORE Pilot Program by proximal outcomes, was met. Qualitative findings were positive, with participating CORE deputies indicating they were better able to resolve calls on scene thereby diverting consumers in mental health crisis from jail or hospital emergency rooms. In 42% of the CORE calls, consumers were left on scene. Deputies reported diverting charges for 64 calls, which is noteworthy considering that many of the calls for service were not complaints involving criminal behavior; over half of the 911 calls were classified as Welfare Check, “Mental Case”, Disturbance Other, or Unknown Medical Emergency. Deputies reported being better able to deescalate a consumer in mental health crisis with the help of the clinician in 85% of calls. Generally, calls were resolved more efficiently and effectively. Due to this, there was a cost savings to avoiding the transport of consumers to jail or hospital emergency rooms.

Student Engagement in the Process Evaluation

The University of Houston – Downtown is a proponent of providing hands-on learning experiences for students. Four student research assistants were recruited to work with the co-principal investigators on the process evaluation. The students participated in an orientation and several trainings to prepare for their work on this project. The trainings focused on research ethics protocols and qualitative data analysis procedures. Once trainings were completed, students engaged in several different supportive activities that further enhanced their academic learning as they contributed to the evaluation. The work activities included contributions to the literature review of this report, qualitative content analysis, the defining of law enforcement and behavioral health related acronyms, and the collection of data for a cost analysis. This evaluation

not only allowed students to be hands-on with a research project and to work closely with faculty members, they were valuable members of the research team.

Presentation, Publication, and Recognition of Project

Numerous activities have already been undertaken in order to educate the community at large, the practitioner community, and the academic community about the CORE Pilot Program. To directly communicate with the community at large, HCSO's Mental Health Unit's Twitter account is very active in highlighting CORE, including the evaluation of the CORE Pilot Program, via updates, videos, and other social media content.

In addition, during the grant period, the research team made three presentations on CORE and this evaluation at professional conferences with our partners. The first of these, "Using Tele-Psychiatry with Patrol Deputies in the Harris County Sheriff's Office," was presented along with CORE Project Manager Mr. Frank Webb from HCSO and Program Director Ms. Ann MacLeod from The Harris Center at the 2019 Texas Crisis Intervention Team Conference in South Padre, Texas. The second, "Evaluation of Arnold Ventures Clinician and Officer Remote Evaluation (CORE) Implementation," was presented with CORE Project Manager Mr. Frank Webb at the 2019 Correctional Management Institute of Texas Mental Health Conference in Galveston, Texas. The third, "Telehealth for Patrol: Welcome to the Future," was presented with Sergeant Jose Gomez, Sergeant Megan Herrin, and CORE Project Manager Mr. Frank Webb at the Crisis Intervention Team International Virtual Conference in August 2020.

The research team has had two additional presentations accepted for inclusion at social work and criminal justice virtual conferences. The first, "Linking Deputies, Clinicians, and Consumers: Lessons Learned from Evaluating CORE," was presented by the research team in October 2020 via the National Association of Social Workers/Texas Virtual Conference. The

second, “Evaluation of the CORE Telehealth Program to Manage Mental Health Emergency Calls,” will be presented by the research team at the Criminology Consortium (CrimCon) Virtual Conference in November 2020. Finally, HCSO CORE Project Manager Mr. Frank Webb presented on the CORE Program along with J.C. Adams and Dr. John Colburn from Cloud 9 in October 2020 at the Justice Clearinghouse Webinar.

In addition to these presentations, CORE and the evaluation have been highlighted by UHD and in print and online articles. UHD’s College of Public Service held a *Vitalvoices* virtual event/panel entitled, “CORE: Law Enforcement and Mental Health Providers Working Together in Crisis Response,” which included representatives from HCSO, The Harris Center, Arnold Ventures, and the UHD research team. In addition, UHD recognized CORE and the process evaluation in an article entitled, “iPads and Mental Health,” in the Fall 2019 edition of the *UHD Magazine*.

HCSO CORE Project Manager Mr. Frank Webb has also been active in speaking one-on-one with persons, agencies and organizations interested in CORE from across the county. He has authored an online article entitled, “Model Telehealth Program for Law Enforcement: Another First for Harris County,” for the National Alliance on Mental Health (NAMI) of Greater Houston. In August 2019, HCSO CORE Project Manager Mr. Frank Webb and The Harris Center CEO Mr. Wayne Young offered a Substance Abuse and Mental Health Services Administration (SAMHSA) sponsored webinar developed under contract by the National Association of State Mental Health Program Directors entitled, “Innovations in Telemedicine Platforms to Assist the Treatment and Recovery of People with Serious Mental Illness (SMI).” The *Police Chief* magazine highlighted CORE as a “Great Idea” by publishing an article in their July 2020 edition authored by HCSO CORE Project Manager Mr. Frank Webb. CORE was also

recognized as the recipient of the 2020 Achievement Award by the National Association of Counties and the Texas Health and Human Services Commission has included CORE as a recommended practice in several regions where they are working to implement Senate Bill 633 (i.e. “All Texas Access”). Additionally, CORE was included as a recommendation by the City of Houston Mayor’s Policing Reform Task Force appointed in June 2020.

The ultimate recognition of the CORE Pilot Program occurred in early 2020 when the Harris County Commissioners Court approved funding to support the continuation and expansion of the HCSO CORE Program. With support from the Commissioners Court, the Program grew from 20 iPads to over 100 iPads. These additional iPads were purchased and implemented specifically for CORE activities. Additionally, The Harris Center has provided for clinicians to be available 24-hours/day for remote assessment. As was mentioned above, HCSO determined that these additional iPads would be distributed to FTOs as they are the most trained and, as FTOs, trusted deputies. These FTOs are deployed throughout the County and, with their training, will be able to train those under them on the use of the CORE Program. Findings from the mid-evaluation report were used by HCSO to help support this expansion. As Mr. Webb would say, this represents confidence in the “force multiplication” of resources and the benefits of the CORE Program.

Study Limitations

The biggest challenge faced during this process evaluation was obtaining data measuring consumer satisfaction during Phase III of the CORE Pilot Program. Arnold Ventures suggested interviews be conducted on-site with consumers participating in the CORE Pilot Program. The research team attempted to conduct these interviews during ride-along observations, which were scheduled at varying days and times; however, there were two primary barriers to accessing

consumer input. First, mental health calls during the ride-along observation periods were fewer than expected. Second, in cases where the iPad was utilized during a mental health call, the consumer's condition during that time (e.g. mental health severity, intoxication) prohibited informed consent from being collected and an interview from being performed. Hence, no data were collected from consumers themselves on their experience with CORE during the evaluation period.

The research team explored alternatives to collecting data from consumers. As mentioned above, during the course of the Phase III of the CORE Pilot Program, The Harris Center began having staff members conduct follow-ups with consumers within a designated time of the CORE call. The research team explored adding one or two research questions to their follow-up to obtain input from consumers on their experience with the CORE Pilot Program. This request was not approved by The Harris Center, as they were concerned that satisfaction data should be collected by a third party. Other options for ascertaining feedback from consumers of the CORE Pilot Program were explored but no viable alternative was identified during the process evaluation timeframe.

A second limitation to the process evaluation was that field observations were more limited than expected. Observations that were conducted involved a member of the research team riding with HCSO CORE supervisors in an unmarked patrol car in one of the six HCSO districts. Riding with supervisors rather than participating CORE deputies was strategic, as it maximized potential for observation of call responses where CORE was implemented, as participating deputies were required to respond to a range of calls. There was no way to plan when a mental health call will come in, particularly one in which consultation with a clinician is deemed

appropriate. Due to this, the number of CORE observations were fewer than anticipated at the outset of the evaluation.

Third, during the Phase III evaluation period, HCSO implemented the previously described mini-pilots, which could have impacted process evaluation findings. These two mini-pilots entailed a small sample of participating CORE deputies dedicated to responding only to mental health crisis calls (i.e. taken out of rotation for other calls during their shifts). Other CORE-trained officers were permitted to continue to use the iPads; however HCSO wanted to investigate how having a single, designated officer who responds only to mental health calls when on shift impacted the Program. To help isolate these effects, the research team obtained data specific to these mini-pilots to determine whether overall findings were affected. Analyses of these data were discussed in the Quantitative Findings section of this report.

Finally, the research team made two assumptions at the outset of the process evaluation that were not accurate. First, it was assumed that the participating CORE deputies would not change. However, there were some substitutions of deputies participating in the CORE Pilot Program, due primarily to original volunteer CORE deputies being transferred to other divisions/units of HCSO or promoted to other positions. Second, the research team assumed there was an existing link between HCSO and The Harris Center for sharing client records. This was not the case and has resulted the limited detail on mental health factors of CORE participants in this report. This also raises questions as to processes and measures that could strengthen future evaluations of the HCSO CORE Program.

Recommendations

Overall, both quantitative and qualitative findings stemming from this process evaluation were positive, suggesting that this Program is meeting its goals by providing an important

resource for Harris County mental health consumers. The partnership between HCSO and The Harris Center appears strong, and support for the CORE Pilot Program is clear across and within these systems. Nonetheless, offered below are recommendations for future implementation and evaluation of the CORE Pilot Program.

The first set of recommendations relate to the development of a comprehensive, collaborative CORE Handbook, which includes the Program's mission and goals, as well as expected practices and procedures for both HCSO and The Harris Center staff related to the CORE Program. Since this Program spans two agencies, a single handbook will help inform deputies, clinicians and their respective supervisors of the expectations for all CORE collaborators. As the Program expands, fidelity to the model depends on deputies, clinicians and their managers having clear guidelines for practice. Certainly, elements from the CORE Implementation Guide can be pulled into this handbook. However, the Implementation Guide is designed to instruct other jurisdictions on how to start a telehealth program rather than inform CORE staff on how their own Program should be implemented. The comprehensive pilot of the CORE Program by HCSO provides important knowledge as to effective implementation of the CORE model; this information, as well as findings from this report can be used to inform what practices are included in the Handbook. Like the Implementation Guide, the Handbook will also be a living document, updated as changes to the program are needed. The breadth of knowledge among current CORE leadership within both agencies is notable; it is important to preserve this vision and institutional knowledge so that leadership changes do not result in program drift or demise. A commitment to regular updates of the CORE Implementation Guide is also recommended to share this knowledge and experience with interested jurisdictions.

One important area to include in the Handbook are guidelines as to when a deputy should employ the iPad and the types of mental health crisis calls the clinicians should expect to receive for assessment. CORE stakeholders described appropriate utilization of telehealth as situations that are “gray areas,” where the need for an EDO may be unclear to a deputy, and clinical consultation is desired. It is understood that, given the range of 911 emergencies, rigid guidelines for use of telehealth is impractical and likely counterproductive. However, providing flexible criteria that help define “gray areas” for which CORE should be employed will be helpful as the Program expands to additional deputies. More clearly defining this will help ensure that the Program is being utilized as designed, rather than depending on the interpretation of more than 100 separate users for when telehealth is necessary. It will also allow Program managers to make adjustments to the criteria, if they find that use of telehealth is either over- or underutilized.

Also included in the CORE Handbook should be a protocol for training new deputies and clinicians, as well as booster trainings for existing CORE staff. Qualitative feedback from deputies suggested that CIT training and/or the additional training for CORE did adequately prepare them for working on the project. Keep in mind, though, that deputies volunteered for participation in the project and initial clinicians were pulled from CIRT co-responder units, giving them ample experience in evaluating crisis calls. As CORE expands, HCSO and The Harris Center should identify minimal criteria for deputies that include mental health and CORE specific training, as well as training for clinicians on working with law enforcement and assessment of justice-involved populations. Given the size of the CORE expansion, HCSO should consider a train-the-trainer model so that training demands are met by multiple, skilled individuals. Continued training among both deputies and clinicians is imperative to ensure the CORE Program is being carried out as intended.

Once Commissioners Court funding was obtained and the CORE Program was expanded, the decision was made to provide the additional iPads to HCSO Field Training Officers (FTOs) as these are considered to be the most trained officers in the field. Additionally, the Program was expanded to be available during the night shift. Future evaluations of CORE should determine the use of FTOs as the primary iPad users and the ability of CORE deputies to reach a clinician no matter what time a mental health crisis call is received. Future researchers should further examine how consumer satisfaction can be measured and how data regarding consumer satisfaction can be collected. As a start, the research team suggests a general sample of the population being surveyed or interviewed regarding their perceptions of participating in or having a loved one participate in CORE. Additionally, while the research team explored avenues for connections between HCSO and The Harris Center databases regarding CORE consumers, agency supervisors and/or future researchers should continue this work to further evaluate the characteristics of users across multiple areas, to further examine mental health outcomes for CORE consumers, and to generate a de-identified research dataset and develop a process by which this dataset could be developed and shared for analysis.

Moving forward, now that the CORE Program is fully implemented, the research team suggests more internal monitoring for fidelity. During the Phase III CORE Pilot, participating deputies had access to supervisors for assistance as needed, and CORE supervisors had access to administrators to problem-solve issues. However, with the growth of the Program, more oversight is needed. This could be in the form of regular internal CORE meetings or other contacts, where Program updates are given, booster trainings delivered, and coaching provided. It is recommended that these meetings include both HCSO and The Harris Center staff so that a uniform message is sent and the CORE team has the opportunity to interface. Fidelity monitoring

might also include random field visits or surveys with CORE deputies/FTOs and clinicians. Additionally, data on the use of CORE should continue to be collected to monitor program usage and share such usage with the CORE staff. Such data will be important for ongoing monitoring as well as any future formal evaluations of CORE. Ultimately, keeping up with training and monitoring of CORE and those involved will be necessary for continued program fidelity.

For clinicians specifically, qualitative findings suggested overall support for CORE, but also questions about the expectations around conducting telehealth assessments, and how these might impact their scope of practice and licensure requirements. Prior CIRT co-responder unit clinicians and deputies noted that telehealth impacted the ability of a clinician to fully evaluate the scene in assessing the crisis situation. These concerns should be addressed via regular clinical consultation and supervision related to the unique requirements of a CORE position. Affording clinicians the opportunity for input into how to effectively address some of the barriers telehealth imposes via supervision meetings or coaching opportunities will help to address these important issues, while using clinician expertise to improve program delivery. Training and professional development will also be important as new clinicians are recruited who do not have CIRT experience. As the Program expands, The Harris Center should ensure clinicians are properly trained in working with law enforcement and use of technology to conduct remote assessments that meet the goals of the Program and the needs of the consumers.

Fidelity of CORE expands beyond individuals working within the CORE team. It is recommended that HCSO administrators develop a clear mechanism for HCSO call takers and dispatchers to identify mental health crisis calls so that clarity is provided to deputies as to when a CORE unit should respond. This may involve the call taker asking additional questions to determine the nature of the call and adjusting the information sent to patrol deputies so that

potential mental health cases are clearly flagged. Based on conversations had during the evaluation, this need is recognized and steps have already been taken to address this issue. Building awareness of the CORE Program among call takers and dispatchers may assist in this regard. Flagging mental health calls also provides important data to HCSO about the prevalence and location of mental health emergencies to aid in program implementation and evaluation.

The next set of recommendations relates to future evaluation of the CORE Program, whether internally by HCSO or externally by future researchers. First, HCSO should consider how to measure the proportion of mental health calls received by HCSO so that future researchers can examine when and how often CORE deputies and/or CIRT co-responder units are being utilized. This could be accomplished if call takers are able to consistently flag which calls appear mental health related. Second, during the Phase III Pilot, participation as a CORE deputy was voluntary, resulting in an uneven distribution of CORE deputies throughout HCSO districts. Therefore, CORE deputies may have been underrepresented in areas where more mental health crisis calls are received. It is recommended that HCSO ensure that the distribution of the CORE Program is meeting the needs of the community in its response to calls for service involving mental health crises calls. This issue may be resolved with the use of FTOs, who are presumably more evenly distributed across districts, but data should still be monitored to ensure that all FTOs are implementing the CORE Program, so that the needs of consumers in all districts are being met.

As a final recommendation, the present evaluation was a process evaluation of Phase III of HCSO's CORE Pilot Program. This evaluation involved approximately 20 deputies and lasted one year. To further evaluate the effectiveness of CORE as currently implemented, an outcome evaluation using randomized control trial (RCT) methodology is recommended. This will

provide information on the effectiveness of CORE at diverting consumers from jail and hospital emergency rooms relative to a control group. In addition, examining demographic factors of consumers or calls for which CORE is more likely to be employed and exploring longer-term outcomes, such as impact on inpatient hospitalization, long-term jail or prison confinement or mental health stability will be important to further inform HCSO and The Harris Center about the implementation and effectiveness of the CORE Program.

Conclusion

COVID-19 was declared a pandemic in March 2020. Protests began after the killing of George Floyd in May 2020, and continue today. The timeliness of an intervention that allows first responders to use technology to make informed decisions that aid in public safety *and* help restore public trust cannot be overstated. CORE provides a tool to law enforcement that helps these professionals manage mental health crises in a humane and effective manner. CORE allows individuals with expertise in mental health to help law enforcement make informed decisions, protected from the Coronavirus via remote consultation. In short, there has never been a more important time for a telehealth alternative for both the law enforcement and mental health fields, both from the standpoint of public health and community relations.

Nationally, mental health systems represent a fragmented amalgamation of public, private, and not-for-profit agencies with well-known challenges in accessibility and affordability. Thus, individuals living with mental illness symptoms and diagnoses, particularly those who are justice-involved, often find themselves incarcerated at great expense to themselves and families, and the wider community. Findings from this process evaluation of the HCSO CORE Pilot Program reveal widespread support for this jail and emergency room diversion program. While the absence of a control group in this process evaluation prohibits firm conclusions about the

effectiveness of CORE relative to a comparison sample, qualitative data and survey information from deputies suggest the Program is meeting the goal of providing resources to law enforcement to assist them in effectively responding to mental and behavioral health crisis calls.

This process evaluation represents the first step in examining the fidelity and acceptability of CORE as it was implemented during Phase III of the CORE Pilot Program. Since its inception, the CORE Program has received positive attention from law enforcement and mental health agencies and organizations across the nation including, most recently, the Virginia Beach Police Department and the Honolulu Police Department. Findings from this evaluation and the resulting CORE Implementation Guide will be a significant asset to these and other agencies looking to implement similar programs.

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