

A stylized illustration of a sheriff in profile, facing left. He is wearing a dark uniform with a gold badge on his chest that reads "SHERIFF" and "VINCENNES INDIANA". He is holding a black mobile device in his right hand. The background is a light, textured surface with some dark shapes. A blue rectangular box is overlaid on the bottom left of the image, containing white text.

# Telehealth Implementation Guide

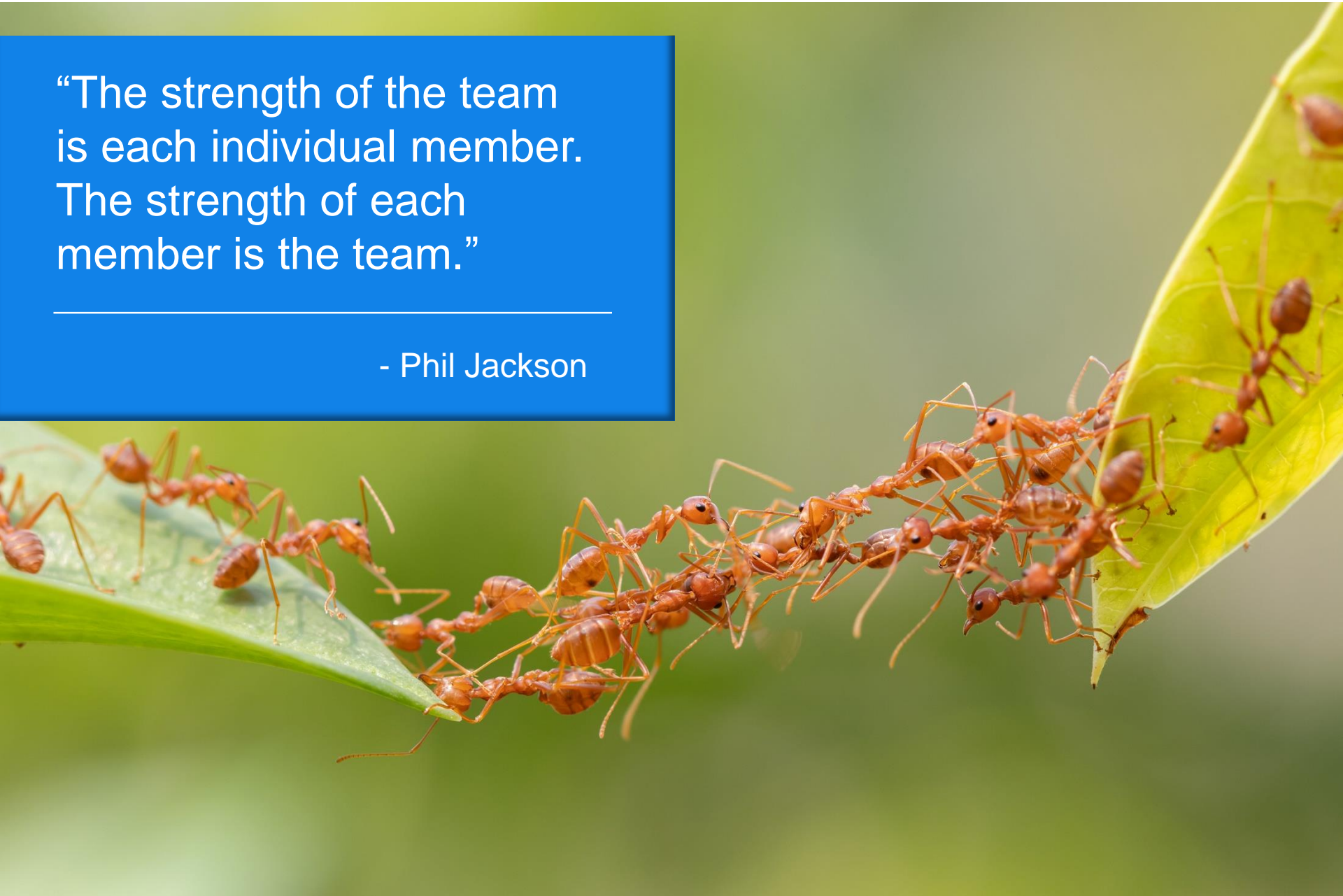
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Version 2.0 - February 2020

“The strength of the team  
is each individual member.  
The strength of each  
member is the team.”

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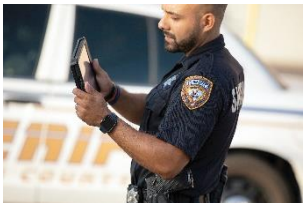
- Phil Jackson



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**ON THE COVER:** Deputy Jose Gomez was one of the CORE telehealth deputies in phases 1 & 2. He coordinated phase 3 with Deputy Megan Herrin. Jose has been instrumental to the success of the program. (Photo by Sharon Steinmann, Harris County Sheriff's Office)



# Our Story

The Harris County (TX) Sheriff's Office implemented a telepsychiatry pilot program with patrol deputies in December 2017. That program evolved into a pilot telehealth program called the Clinician and Officer Remote Evaluation (CORE) program. Arnold Ventures funded a year-long evaluation of the pilot from December 2018 through December 2019. The evaluation was conducted by the University of Houston Downtown. Part of Arnold Venture's funding included a request to develop an implementation guide to assist agencies interested in starting a program. This guide is the result. We hope you find it helpful. We believe telehealth is the future regarding law enforcement's response to individuals with mental illness and other psychosocial issues.



# The Stakeholders

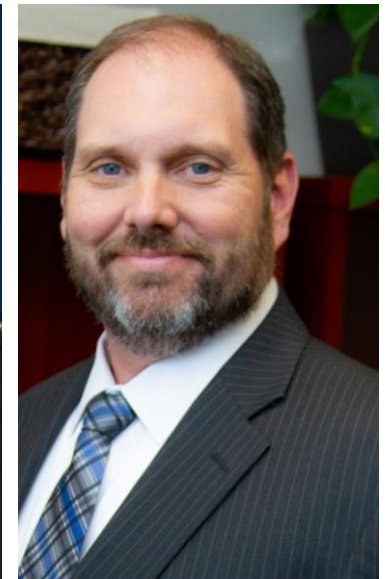
The Harris County Sheriff's Office (HCSO) has a long history of collaborating with community partners. The relationship between the HCSO and The Harris Center for Mental Health and IDD (The Harris Center) dates back to the early 1970s when The Harris Center started providing mental health services in the jail. That partnership expanded to programs for patrol deputies with the implementation of the Crisis Intervention Response Team in 2011.



Lina Hidalgo  
Harris County Judge



Ed Gonzalez  
Harris County Sheriff



Wayne Young  
CEO Harris Center

# Implementation Guide Developed By

## Harris County Sheriff's Office

Harris County, Texas has a population of 4.7 million, covers 1,788 square miles, and encompasses 41 municipalities. The HCSO is the largest sheriff's office in Texas and the third largest in the nation with 4,600 employees.



## University of Houston Downtown

The University of Houston Downtown (UHD) is the second largest university in the Houston area with more than 14,000 students. UHD evaluated Harris County's Telehealth Program.



## Harris Center for Mental Health

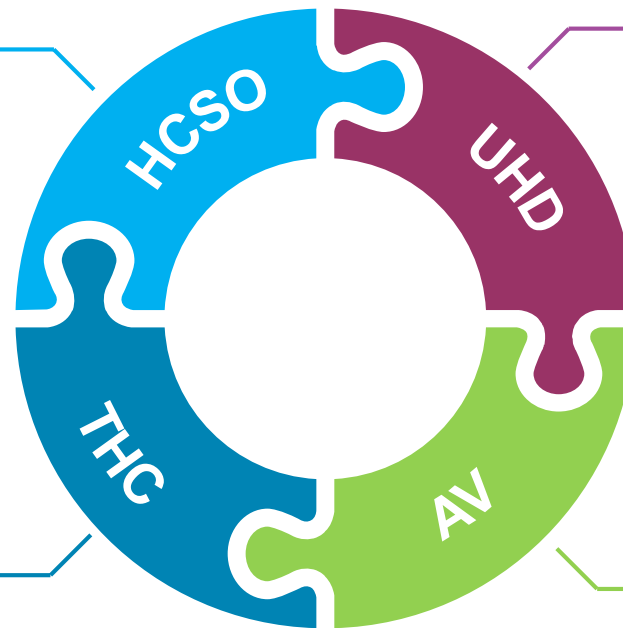
The Harris Center for Mental Health (THC) has 2,400 team members providing care in 86 locations throughout Harris County. 80% of the people served have household incomes at or below the Federal Poverty Level.



## Arnold Ventures



Arnold Ventures is a philanthropy dedicated to tackling some of the most pressing problems in the United States. Arnold Ventures provided a grant to evaluate Harris County's Telehealth Program. Part of that grant was a request to develop this guide.



# Disclaimer

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The information provided in this Guide is intended for informational purposes only. Nothing herein should be taken as legal advice. While we endeavor to provide up-to-date and correct information, we make no representations or warranties of the completeness or accuracy of the Guide.

The views expressed in this Guide are the authors' and do not necessarily reflect the views of Arnold Ventures.

# Acknowledgement

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Dr. Avrim Fishkind

The idea to utilize tele-psychiatry with patrol deputies in Harris County was that of Dr. Avrim Fishkind. Dr. Fishkind is a past president of the American Association for Emergency Psychiatry. He has designed multiple comprehensive psychiatric emergency programs including Psychiatric Emergency Rooms, 23-Hour Observation Units, Mobile Crisis Outreach Teams, Crisis Residential and Stabilization Units, Crisis Hotlines, and short-term Crisis Counseling Units. Dr. Fishkind has been employed in the delivery and development of comprehensive psychiatric emergency services in many locations, including New York City; Austin, Texas; Houston, Texas; Washington, D.C.; and Toronto, Canada.

Dr. Fishkind implemented the psychiatric emergency services at the Houston Astrodome when 25,000 evacuees left New Orleans after Hurricane Katrina, mobilizing the largest ever psychiatric emergency response to a disaster.

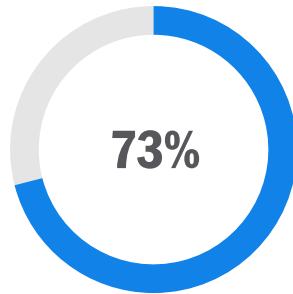
In 2005, Dr. Fishkind led the clinical workgroup for crisis services redesign for the State of Texas, a more than \$200 million dollar infusion to build a new psychiatric emergency system across the state. In 2007, he formed JSA Health Telepsychiatry to help fill gaps in psychiatric services via telemedicine. In 2018, JSA was acquired by SOC Telemed. *(From SOC Telemed website)*



1

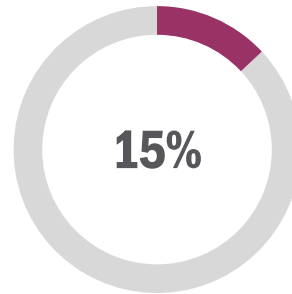
# Telehealth for Patrol

## Texas mental health resources are decreasing



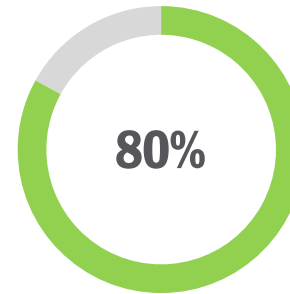
### Psychiatrists

185 of the 254 counties in Texas (73%) have no general psychiatrist. <sup>1</sup>



### Clinicians

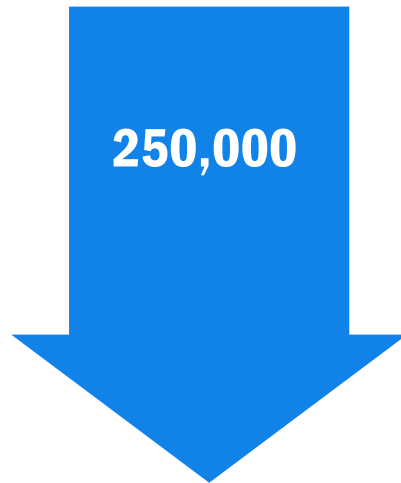
40 of the 254 counties in Texas (15%) have no licensed clinical social worker. <sup>2</sup>



### Hospital Beds

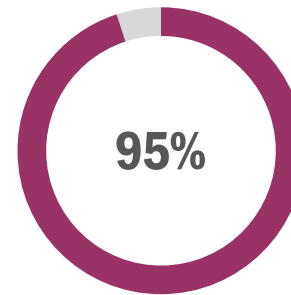
There were 14,921 state psychiatric hospital beds in Texas in 1964 with a population of 10.3 million. That number dropped to 3,013 beds in 2016 with a population of 28 million. A staggering 80% decrease. <sup>3</sup>

## National mental health resources are decreasing



### Worker Shortage

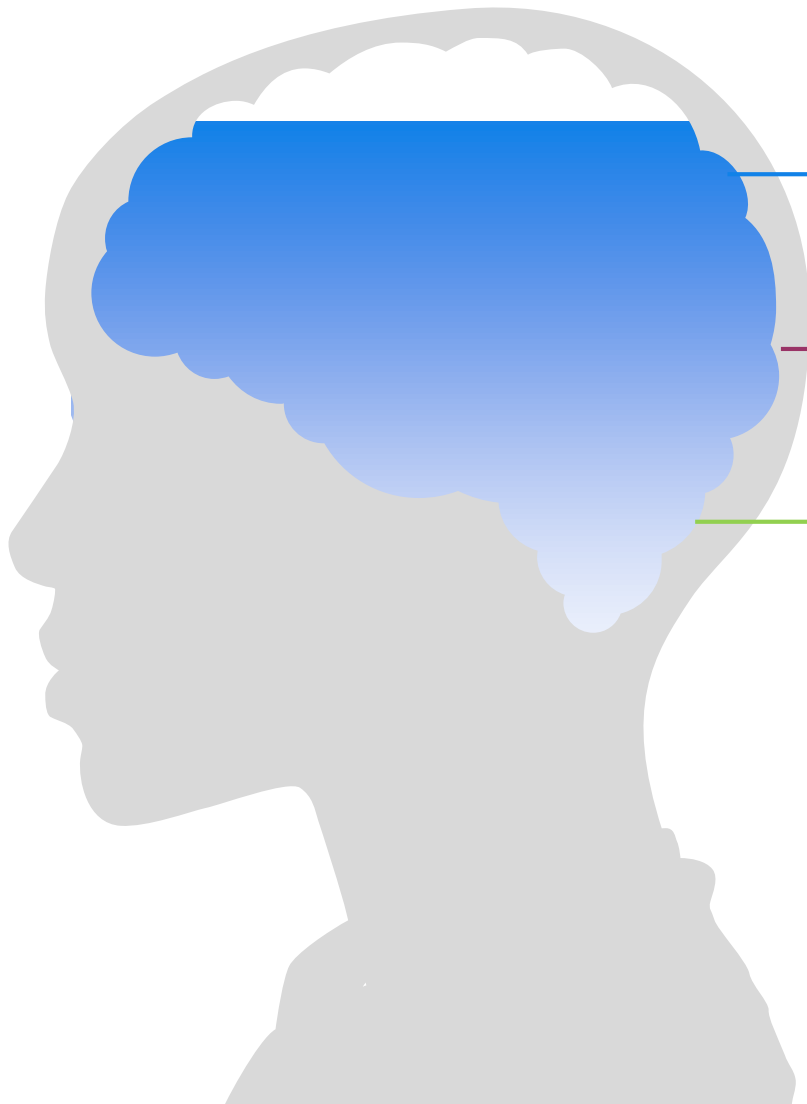
Projected shortage of workers in selected behavioral health professions in 2025. <sup>4</sup>



### Hospital Beds

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. <sup>5</sup>

# National shortage of psychiatrists



59%

## Retirement

Percentage of active psychiatrists close to retirement <sup>6</sup>

96%

## Unmet Need

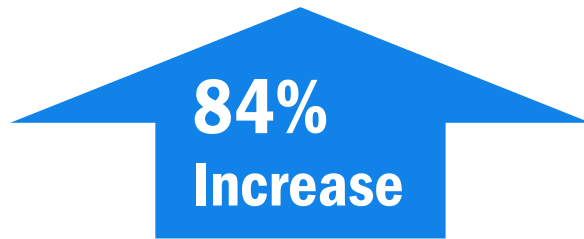
Percentage of counties in the United States that had an unmet need for psychiatrists <sup>7</sup>

8.9

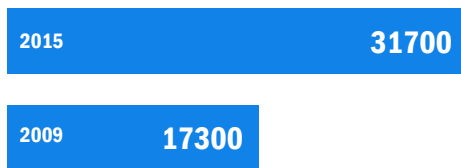
## National Average

National average of psychiatrists per 100,000 people <sup>8</sup>

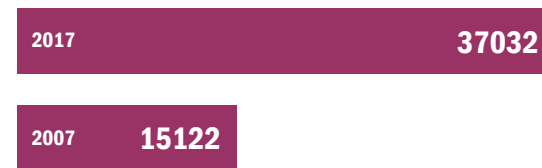
## Law Enforcement Mental health calls are increasing



Mental Health Calls in San Diego County (CA) <sup>9</sup>



Mental Health Calls in Houston Police Department (TX) <sup>10</sup>



## Hospital emergency departments are overwhelmed

**\$1533**

Average cost of a hospital  
emergency department visit <sup>11</sup>

Hospital emergency departments are being inundated with people brought in by law enforcement for mental health evaluations. These evaluations take time, are expensive, and are often not needed. Half of the people taken to Harris County's NeuroPsychiatric Center by law enforcement are not admitted. One police department in New York stated 88% of the people they take to the local hospital ED are not admitted.

Transports to hospital EDs, especially when done involuntarily, can increase the level of stress in the consumer. This is especially true if the consumer is placed in handcuffs, a practice followed by many law enforcement agencies for officer and consumer safety. Involuntary treatment has been shown to be less effective than voluntary treatment.

## Jails and prisons are the new asylums: The need for jail diversion



Serious mental illness has become so prevalent in the US corrections system that jails and prisons are now commonly called “the new asylums.” In point of fact, the Los Angeles County Jail, Chicago’s Cook County Jail, or New York’s Riker’s Island Jail each hold more mentally ill inmates than any remaining psychiatric hospital in the United States. Overall, approximately 20% of inmates in jails and 15% of inmates in state prisons are now estimated to have a serious mental illness. Based on the total inmate population, this means approximately 383,000 individuals with severe psychiatric disease were behind bars in the United States in 2014 or nearly 10 times the number of patients remaining in the nation’s state hospitals.

- Treatment Advocacy Center  
- Background Paper – September 2016



# Benefits of Telehealth for Patrol

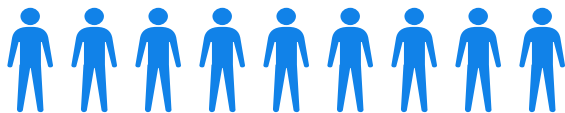
# 2



# Benefits/Goals



# Telehealth is a force multiplier



The cost for **9** full time masters-level clinicians from The Harris Center for the Crisis Intervention Response Team (CIRT) co-responder program is **\$900,000** annually.



The cost to equip **100** patrol deputies with an iPad with which they can connect to a masters-level clinician from The Harris Center is **\$905,000** annually.

Having a clinician physically on a scene is valuable. However, the average number of CIRT co-responder units on duty at any one time is two. This is not adequate to cover the county, with over 1,700 square miles. We do not have the funds to add additional CIRT clinicians. Telehealth provides quick and affordable access to clinicians via technology and allows CIRT to respond to the most serious mental health calls utilizing the clinician on scenes where they are most needed.

## Elaboration of Benefits

### Affordable Assistance

Co-responder programs, where behavioral health professionals ride with officers or meet them at the scene, are very expensive. The Harris Center for Mental Health provides masters-level clinicians to the Houston Police Department (12 clinicians) and the Harris County Sheriff's Office (9 clinicians). The clinicians ride with officers and deputies as partners. The cost of each clinician is \$100,000 (salary and fringe benefits). Remote evaluation provides access to the same level of clinician at a much lower cost per consumer call/interaction.

### Hospital Transports

If there is any question a person meets the criteria for emergency detention (poses a substantial risk of serious harm to self or others) the officer will err on the side of caution and take the person to a mental health facility or hospital emergency department for evaluation. Many of these individuals do not need to be taken. Behavioral health professionals, via remote evaluation, are able to assess the individual and make the decision if the person needs to be evaluated. The result is the diversion of many individuals from mental health facilities and hospital emergency departments.

### Jail Diversion

Diverting individuals with mental illness who have committed low-level, non-violent crimes, where the mental illness was a factor in the commission of the crime, is one of the most important criminal justice issues today. An example is a person with mental illness who is homeless and has trespassed because he needs a place to sleep. Diverting this person into mental health services is preferable to incarceration. Behavioral health professionals, via remote evaluation, can help officers make appropriate decisions regarding jail diversion.

## Elaboration of Benefits

### Officer & Citizen Safety

Calls involving individuals in mental health crisis are among the most difficult, potentially dangerous, and complex in law enforcement. Behavioral health professionals, via remote evaluation, can help officers better understand what is happening with the individual in crisis. This knowledge helps the officer respond appropriately and safely.

### Better Triage of Calls

Deciding the appropriate disposition for individuals in mental health crisis can be a very daunting task for officers. Does the person meet the criteria for emergency detention? Are local resources available to address this person's needs? Can the person be safely left with a family member or friend? Should a referral to the Mobile Crisis Outreach Team be made? Behavioral health professionals, via remote evaluation, can help officers make these decisions.

### Force Multiplier

The clinicians and deputies riding together in Harris County's co-responder program average two calls a day. Not all of these calls result in an assessment. Reasons for the low number of calls include the distances the units have to travel to a call, distance traveled to a hospital ER or mental health facility, time spent waiting in the ER or mental health facility, and time spent on paperwork. A clinician in a virtual chat room can conduct significantly more assessments as they do not have to contend with these issues of travel and waiting in facilities.

Many agencies would like to start a co-responder unit or increase an existing unit but cannot afford the cost of the clinician(s). Remote evaluation provides the expertise of the clinician at a fraction of the cost per consumer call/interaction.

# 3

## Frequently Asked Questions

# FAQs

## What is telehealth?

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.

*Source: Texas Senate Bill 1107, 85<sup>th</sup> Legislative Session*

## What is telemedicine?

A health care service delivered by a physician licensed in this state, or a health professional acting under the delegation and supervision of a physician licensed in this state, and acting within the scope of the physician's or health professional's license to a patient at a different physical location than the physician or health professional using telecommunications or information technology.

*Source: Texas Senate Bill 1107, 85<sup>th</sup> Legislative Session*

## How do telehealth and telemedicine differ from telepsychiatry?

Telepsychiatry refers to the exclusive use of psychiatrists providing behavioral health care remotely.

# FAQs

## What equipment is required?

Video conferencing software that is HIPAA-compliant. The software used in the programs profiled in this Guide include Lifesize, Microsoft Teams, Vidyo, and Zoom. A telecommunications provider such as Verizon and AT&T. A device such as an iPad or similar tablet or smart phone.

## Is there a difference in the technologies used for telemedicine as opposed to telehealth?

We believe there is a difference. Telemedicine technologies access health care services remotely and manage health care. For example, they can produce clinical documentation for consultations, analyze telemedicine consultation data, access lab and test results, and schedule physicians.

What is used most frequently for telehealth is video conferencing technology that conducts a conference between two or more participants at different sites by using computer networks to transmit audio and video data.

*Source: Sunila Levi, Chief Technology Officer, Integral Care, Austin, TX.*

# FAQs

## What is a Business Associates Agreement and what is its importance to telehealth?

The HIPAA Privacy Rule requires all Covered Entities to have a signed Business Associate Agreement (BAA) with any Business Associate (BA) they hire that may come in contact with Protected Health Information (PHI). The BAA is a written arrangement that specifies each party's responsibilities when it comes to PHI.

HIPAA requires Covered Entities to only work with Business Associates who assure complete protection of PHI. These assurances must be in writing in the form of a contract or other agreement between the Covered Entity and the BA.

A BA is an organization that creates, receives, maintains, or transmits PHI on behalf of a Covered Entity. The video conferencing technology you use is a BA and thus you must sign a BAA with them.

Source: TOTALHIPAA COMPLIANCE. Found at: <https://www.totalhipaa.com/business-associate-agreement-101/>

## What information should be included in the BAA?

- A description of the permitted and required PHI uses by the Business Associate (BA)
- Provision the BA will not use or further disclose PHI other than as permitted or required by the contract or as required by law
- Requirement that the BA use appropriate safeguards to prevent the inappropriate PHI use or disclosure

Source: TOTALHIPAA COMPLIANCE. Found at: <https://www.totalhipaa.com/business-associate-agreement-101/>



# FAQs

## Do you recommend mental health training for the officers participating in telehealth programs?

Yes. We highly recommend mental health or crisis intervention and de-escalation training. The tactics and techniques used to respond to a person in mental health crisis are diametrically different than the traditional tactics and techniques used by law enforcement officers. Crisis intervention training, started in the Memphis (TN) Police Department in 1988, helps officers safely respond to individuals in mental health crisis.

Many states have mandated crisis intervention training. Texas mandated 16 hours of crisis intervention training for Texas peace officers in 2005 (The Bob Meadours Act, Senate Bill 1473).

Texas expanded its crisis intervention training mandate to 40 hours with the passage of the Sandra Bland Act, Senate Bill 1849, in 2017.

For more information on crisis intervention training visit the Crisis Intervention Team (CIT) International website.

## Who conducts the evaluation in most programs?

Masters-level behavioral health practitioners. The local mental health authority in Harris County, The Harris Center for Mental Health and IDD, supplies the masters-level licensed professional counselors for the telehealth program for the Harris County Sheriff's Office.

# FAQs

## Do many programs utilize psychiatrists?

We are not aware of a program for law enforcement that utilizes psychiatrists to talk directly with the consumer. Reasons for using clinicians rather than psychiatrists include the shortage and higher costs of psychiatrists. In some programs the clinicians are able to connect to a psychiatrist.

## Where are the clinicians located?

Most programs place their clinicians in a room, usually referred to as a “Virtual Chat Room,” “Telehealth Room,” or “Studio.” In Harris County, clinicians are located in a virtual chat room at the headquarters of the Harris Center for Mental Health and IDD. We tried using clinicians who were mobile, driving in a car. The clinicians experienced connectivity problems, road noise and other distractions. We found it best to locate the clinicians in their building. They have privacy, can better concentrate on the call, and have more control over their hardware, software and connectivity.

# FAQs

## What is the cost of telehealth programs?

The most expensive component is the behavioral health professional. Psychiatrists are significantly more expensive than clinicians. Many local mental health authorities (LMHAs) do not charge a fee for their service. The six other localities featured in this Guide provide their remote evaluation service free of charge to the law enforcement agencies, EMS service, jails, and hospital emergency departments receiving them.

The price of the HIPAA compliant video conferencing software varies depending on how many licenses you purchase. The licenses have to do with the number of people involved in your remote evaluation program. For example, Northern Lakes Community Mental Health in Michigan purchased licenses with Lifesize. The annual fee is \$4,990 for 1-100 licenses. Their monthly charge for Verizon is \$26.95 per iPad.

Typically, the provider of your behavioral health personnel will also provide the video conferencing software, telecommunications provider, and devices providing a complete service.

## Is patient consent required?

The requirement for consent differs by state. In Nebraska, according to Mr. Arnold Remington, Director of the TASC Program, there is no state law or other requirement for consent for services via an iPad. However, officers obtain verbal consent from the person to talk with the clinician. The clinician also receives verbal consent. They have a crisis form that notes verbal consent was given.

Shalaine Periman with Burrell Behavioral Health in Springfield, Missouri said they are not conducting an assessment. Rather, they are conducting a crisis intervention and written consent is not required. The law enforcement officer(s) on the scene obtain verbal consent.

Stacey Kaminski with Northern Lakes Community Mental Health in Michigan stated these are crisis interventions and consent is not required.

# FAQs

## How is consent addressed in Texas and Harris County?

The 85th Texas Legislature passed Senate Bill 1107 in May 2017 relating to telemedicine and telehealth services. Remote evaluation between behavioral health and law enforcement first responders is a new use of this technology. The bill does not address the issue of consent in this application. We expect the Texas Health and Human Services Commission to make a ruling on this issue in the near future.

In Harris County, deputies verbally explain the program and ask the consumer if he/she wants to talk to the clinician via the iPad. All deputies wear a body camera so the verbal consent is captured via the camera.

Additionally, clinicians obtain written consent via a form that appears on the iPad. The consumer signs the form with his/her finger. As mentioned, there is no clear legislative mandate or state rule to obtain written consent. This is a decision that was made by The Harris Center legal staff.

## What, in your opinion, are the keys to a successful program?

- Collaboration between law enforcement and behavioral health.
- A person to coordinate the program from both the behavioral health and law enforcement agencies.
- Behavioral health and law enforcement personnel who believe in the program.
- Quick access to a clinician when called.
- Facilities to take consumers to who are being diverted from jail or a hospital emergency department.

# FAQs

## Could you summarize the steps to developing a program?

1. Identify the need and interest: talk with law enforcement and behavioral health.
2. Identify a qualified behavioral health agency willing to provide the service. You may want to start with mobile crisis teams already providing emergency evaluations.
3. Secure funding to purchase equipment.
4. Decide on the video conferencing software to use.
5. Decide on the wireless carrier to use. Assess area for “dead zones.”
6. Start with a small pilot.
7. Select officers who are enthusiastic about the program.
8. Decide on data capture/tracking to assess the program’s effectiveness.
9. Train personnel - law enforcement and behavioral health - on hardware and software.

*Source: Dr. Don Kamin, Director, Institute for Police, Mental Health & Community Collaboration, New York State*

# FAQs

## Could you summarize the important lessons learned in your program?

- We found it best to locate the clinicians in a virtual chat room at their headquarters rather than being mobile.
- We utilize Otter Boxes to protect the iPad. The cover can be removed and placed on the back of the iPad when in use.
- We purchased portable two-way speakers to assist in some instances, e.g., road noise, crowd noise, etc.
- We purchased clip-on lights to help illuminate the deputy/consumer, especially at night. The light can be attached to the iPad, cage of the patrol car, shirt, etc.
- We recommend the deputy holding the iPad for the consumer ONLY if the deputy has BACKUP. It is an officer safety issue if the deputy does not have use of his/her hands if needed.
- Make sure the consumer is safe to handle the iPad. You don't want an irate consumer throwing the iPad at the deputy or another person.
- Identify officers and behavioral health personnel who are interested in the program. Telehealth is a cultural change for many and some officers and clinicians do not readily or easily embrace it.

# FAQs

## Are you aware of telehealth organizations?

Yes. The following are three examples:

1. South Carolina Telehealth Alliance (SCTA). This is a statewide collaboration of many organizations to expand telehealth services across the state. The SCTA provides guidance, assists with strategic development, and advises on technology and standards to develop an open-access network.
2. The National Consortium of Telehealth Resource Centers. Established to provide assistance, education, and information to organizations and individuals who are actively providing or interested in providing health care at a distance. You can find a Telehealth Resource Center for each state on their website.
3. Medical University of South Carolina (MUSC). The MUSC Center for Telehealth is one of only two National Telehealth Centers of Excellence in the country. The Center is the headquarters of the South Carolina Telehealth Alliance (SCTA).

**NOTE:** *These organizations deal mostly in medical telehealth. They are just starting to become involved with telehealth for law enforcement officers and emergency medical services.*

# FAQs

## **Have agencies with co-responder programs, where a clinician and officer ride together, contacted you about telehealth possibly replacing their program? If yes, why are they considering this change?**

Yes. We have received these calls. The agencies contacting us are concerned with the high cost of the clinicians and the low productivity of these teams. In some agencies the teams average two calls per shift. The low productivity is usually a result of the following:

- The time driving to a call;
- The time to transport individuals to a hospital emergency department or mental health facility;
- The time waiting at these facilities;
- The time spent on completing paperwork.

A clinician in a “virtual chat room” or “studio” can conduct significantly more assessments than a clinician in the field.

Other concerns of the co-responder program include:

- Clinician safety;
- Personality conflicts between the clinician and officer;
- Clinicians called to scenes not requiring their expertise.





# Harris County's Pilot Program

# 4

# The Team

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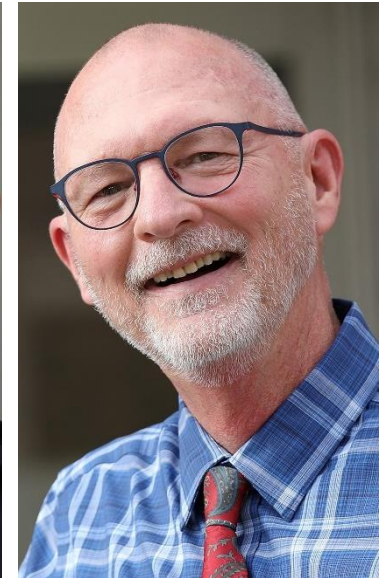
Deputies Megan Herrin and Jose Gomez coordinated the day-to-day activities of the CORE pilot for the Harris County Sheriff's Office. They provided training to the deputies regarding the iPads and connecting to clinicians via our video conferencing software, developed the form used to collect data, compiled statistics, responded to deputy inquiries 24/7, liaised with the computer/technical people from The Harris Center, liaised with the supervisors of the clinicians with The Harris Center, maintained in constant contact with the 20 deputies on the program, and worked with the University of Houston Downtown to evaluate the program. They worked under the supervision of Frank Webb, project manager of the pilot.



Megan Herrin



Jose Gomez



Frank Webb

# The Team

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The team coordinating the pilot for The Harris Center included Ann MacLeod, LPC-S, NCC; Kisha Lorio, LPC, NCC; and Fausto Bernal. Ann was the project manager, Kisha handled the day-to-day coordination, and Bernal was in charge of technical issues.



Ann MacLeod



Kisha Lorio



Fausto Bernal

# Team Emails

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Megan.Herrin@sheriff.hctx.net



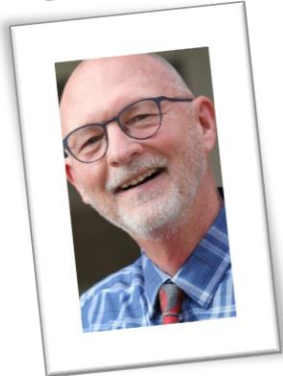
Ann.MacLeod@TheHarrisCenter.org



Jose.Gomez@sheriff.hctx.net



Kisha.Lorio@TheHarrisCenter.org



Frank.Webb@sheriff.hctx.net



Fausto.Bernal@TheHarrisCenter.org



Deputy Jose Gomez talks with a man who recently moved to Houston from Louisiana. He was having mental health problems. After talking with a clinician via the iPad it was determined he did not need to be transported to a hospital emergency department or other facility. Resource information was provided to him.

# Clinician & Officer Remote Evaluation (CORE)

## Program Information



iPads, Lifesize, Verizon Wireless



Masters-Level clinicians



Administered by The Harris Center for Mental Health and IDD



Used with law enforcement and in the county jail



Free service to law enforcement

## Also ...



Psychiatrists are available to clinicians; they do not talk directly to patients.



Do not receive Medicaid reimbursement.



Average length of an assessment is 15 to 30 minutes.



Evaluation conducted by University of Houston Downtown.



Written consent obtained via iPad.

# Phase One

## Partners

- JSA Telehealth
- Cloud 9
- Verizon Wireless
- University of Texas Health Science Center Houston

## Goals

- Test concept of accessing psychiatrists via an iPad for patrol deputies
- Test software and hardware
- Improve triage of calls
- Divert individuals from hospital emergency departments and jail when appropriate

## Outcomes

- Three deputies
- 31 calls
- Three weeks (December 2017 - January 2018)
- Concept proven successful
- 45% of calls diverted
- Cost savings of \$26,244
- Psychiatrists used exclusively

# Phase Two

## Partners

- The Harris Center for Mental Health and IDD
- Verizon Wireless
- Apple Computers

## Goals

- Test change of accessing clinicians rather than psychiatrists
- Test different video conferencing software (Lifesize vs. Cloud 9)
- Improve triage of calls
- Divert individuals from hospital emergency departments and jail when appropriate

## Outcomes

- Same three deputies
- 49 calls
- 11 weeks (July – September 2018)
- Software proven successful
- 59% of calls resolved on scene
- No official evaluation conducted
- Clinicians used exclusively and successfully

NOTE: The change from JSA Telehealth to The Harris Center had nothing to do with performance or satisfaction. The program worked exceptionally well with JSA Telehealth. We were completely satisfied with them. Starting with phase two, each entity was going to charge for their services. One problem was a budget. It was not possible to develop a budget because the HCSO could not predict how many times a psychiatrist would be utilized during phase two. There would be a charge for each time a deputy connected with a psychiatrist. A second problem was justifying the payment of psychiatrists through a private company when Harris County has psychiatrists through its mental health authority, The Harris Center. A third problem was a lack of funds to pay for the services of JSA Telehealth, Cloud 9 and The University of Texas. For these reasons, the HCSO collaborated with The Harris Center starting in phase two. The Harris Center is not charging for their services or equipment during phases two and three of the pilot. They are providing masters-level clinicians, videoconferencing software, telecommunications, and devices.



# Phase Three

## Partners

- The Harris Center for Mental Health and IDD
- Verizon Wireless
- Apple Computers
- University of Houston Downtown
- Arnold Ventures

## Goals

- Increase deputy and consumer safety
- Improve triage of calls
- Prevent unnecessary transports to hospital emergency departments and jail
- Fill the gap of limited mental health services
- Conduct a formal evaluation of the program

## Outcomes

- One year (December 2018 – December 2019)
- 20 patrol deputies
- Mid-term evaluation included in this Guide
- Clinicians used for assessments
- Clinicians have access to a psychiatrist if needed

# Telehealth Road Map

## Evaluation

The University of Houston Downtown conducts a mid-term evaluation as part of a grant from Arnold Ventures. Final evaluation to be completed May 2020. Implementation Guide developed and distributed across the nation.



Nov 2019

04

## Phase Three Launched

20 patrol deputies provided with iPads. The HCSO continues to collaborate with The Harris Center for Mental Health on this final year-long phase.



Dec 2018

03

## Phase Two Launched

HCSO collaborates with its local mental health authority, The Harris Center for Mental Health (THC), on an 11-week phase connecting three deputies with masters level clinicians. The program is referred to as telehealth. Although completely satisfied with JSA, the change to THC was due to cost.



July 2018

02

## Telepsychiatry is Launched

The HCSO collaborated with JSA Telehealth, Cloud 9, Verizon Wireless, and the University of Texas on a three-week pilot program connecting three patrol deputies with psychiatrists via iPads. The idea was that of Dr. Avrim Fishkind, CEO of JSA Telehealth.



Dec 2017

01

# Calls for Service



## Call Taker

Call received via 9-1-1 or non-emergency number. Person calling is asked if the call involves a person who is mentally ill. If yes, the call is “stamped” or coded as a mental health call.

## Dispatch

The call is sent to the dispatcher who attempts to identify a deputy with the iPad. Call is dispatched.

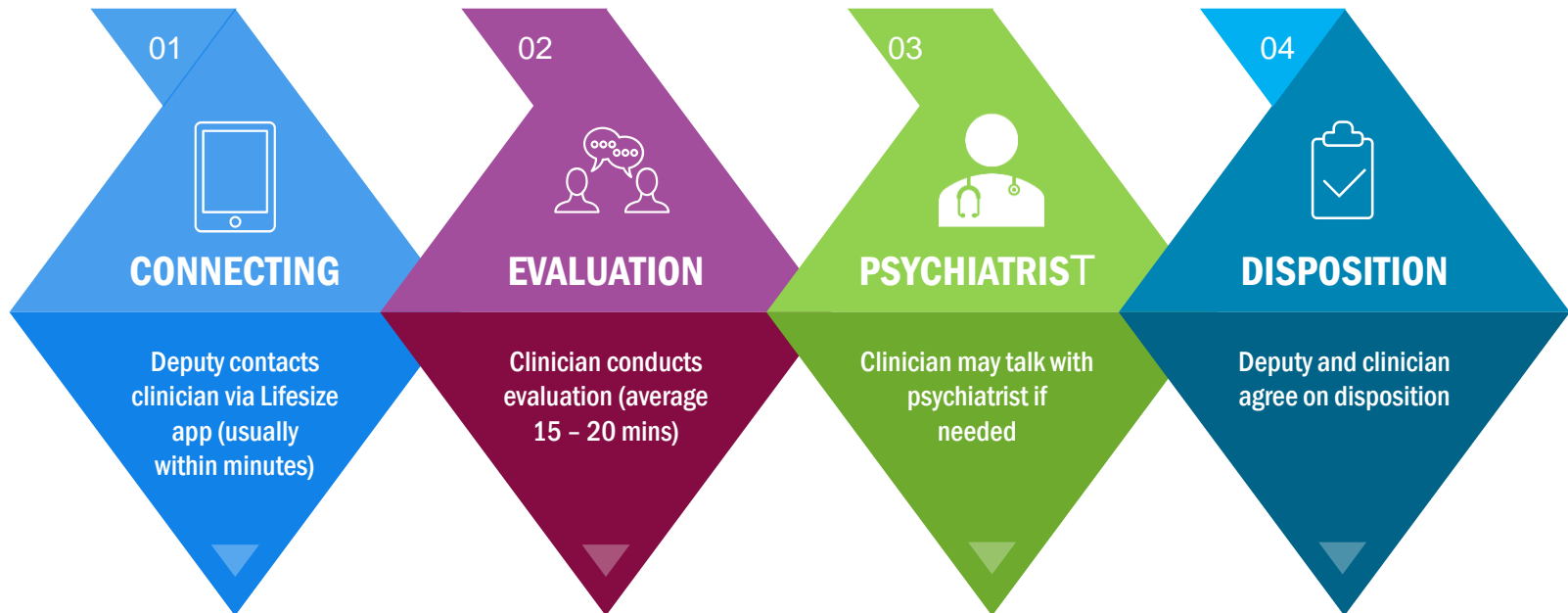
## Deputy

If a deputy with the iPad is available he/she responds and assesses the scene. If the call involves a person in mental health crisis the deputy can access a clinician via the iPad to conduct an evaluation and provide guidance.

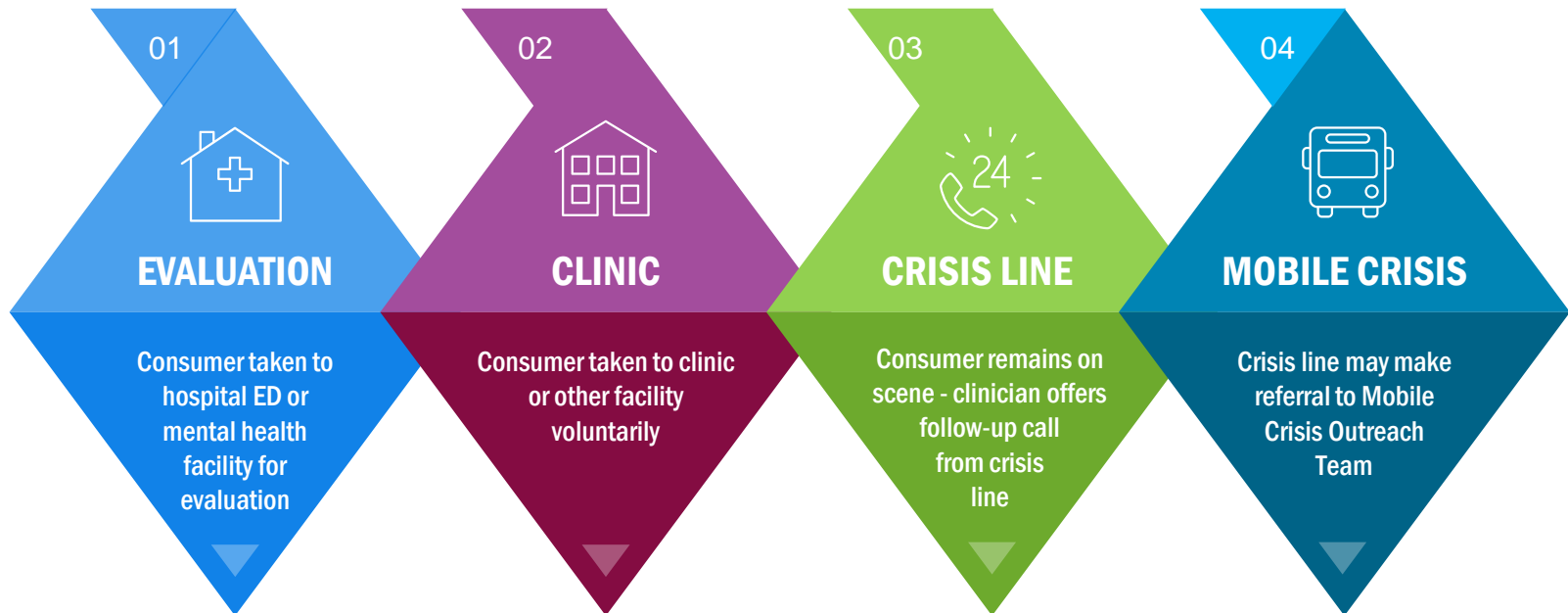
## The Harris Center

Masters level clinician evaluates the person via the iPad.

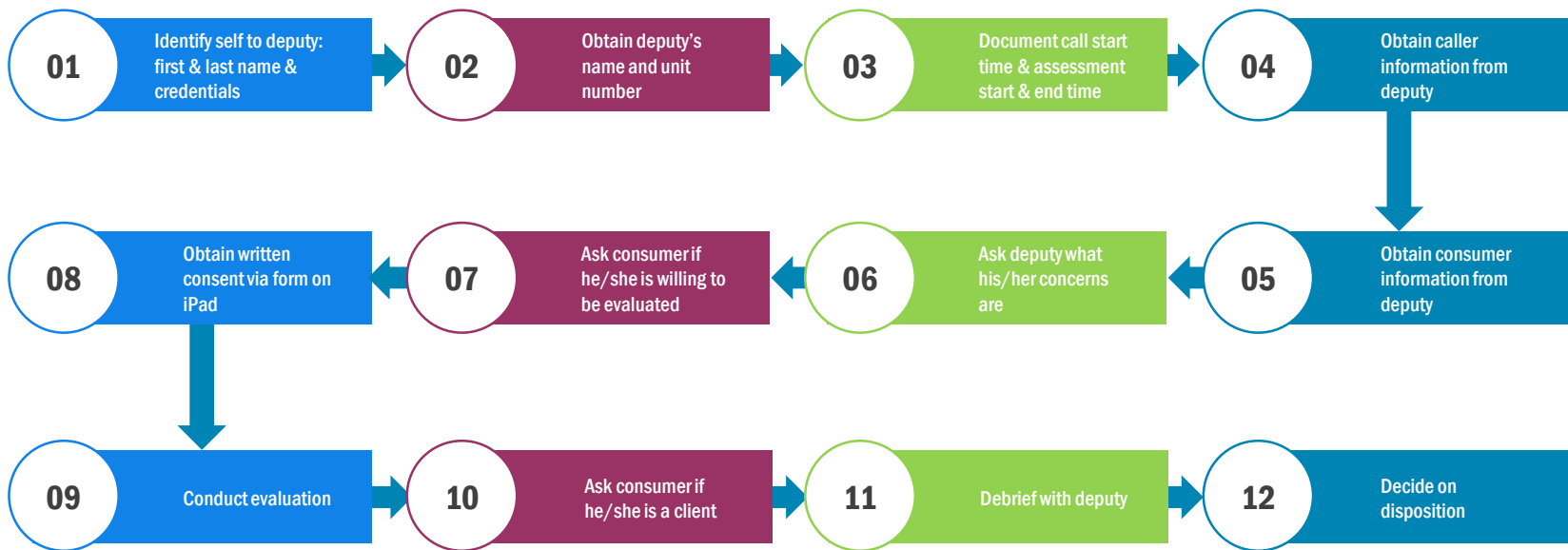
# Telehealth Evaluation Process



## Telehealth – Possible Dispositions



# Clinician Process Chart





# Evaluation

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The University of Houston Downtown (UHD) was selected to evaluate our CORE pilot program through the Arnold Ventures grant. A mid-term evaluation was conducted in November 2019. The results are on the following pages. The final evaluation is scheduled to be completed in May 2020.

Pictured is Dr. Lori Brusman-Lovins of the UHD evaluation team. Dr. Lovins is interviewing CIRT Deputy Fred Lerma and observing other deputies utilizing the iPad.

# Study Design

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UHD researchers used a process evaluation framework to assess key elements of the intervention in terms of (a) how the innovative tele-health program and related technology are implemented; (b) fidelity of the implementation; (c) acceptability to stakeholders; and (d) effectiveness as measured by proximal outcomes.

The research team used a mixed-methods approach to concurrently collect qualitative and quantitative data evaluating implementation of the intervention and fidelity to the model. Data was collected from multiple levels of stakeholders and sources: patrol deputies, dispatch, and persons in key administrative roles in HCSO and The Harris Center (THC). Focus groups were conducted with select THC Masters-level mental health clinicians who participated in the intervention. Information was also obtained from telehealth patrol deputies who submitted case reports on all calls, including an additional form with questions related to the effectiveness of the use of telehealth when responding to calls involving individuals in mental health crisis.



# The Team

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Ashley Blackburn



Dana Smith



Lori Brusman-Lovins



Heather Goltz

Dr. Ashley Blackburn is a Professor of Criminal Justice and currently serves as the Chair of the Department of Criminal Justice and Social Work. Her areas of expertise include conducting research among vulnerable populations, victimization, and incarcerated women.

Dr. Dana Smith, Assistant Professor of Social Work, serves as Director of Field Education and instructor. She enjoys teaching policy, ethics, field seminar, and community practice courses.

Dr. Brusman-Lovins, an Assistant Professor of Criminal Justice, is an expert in evidence-based correctional programming, program implementation, and how the criminal justice system treats specialized populations, including offenders with mental illness.

Dr. Heather Goltz, Associate Professor of Social Work, is a highly experienced health services and mixed-methods researcher. She is a licensed mental health professional with nearly a decade of experience in treating individuals with a range of mental and behavioral health conditions commonly resulting in arrest or hospitalization.

# Team Emails

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blackburna@uhd.edu



brusmanlovinsl@uhd.edu




smithda@uhd.edu



goltzh@uhd.edu

# Activity Form



Deputies complete this form after a call using the iPad. It is a paper form sent to Deputies Megan Herrin and Jose Gomez, who developed it. The information is sent to the University of Houston Downtown evaluation team. A form of this type could be developed into an electronic format and placed on the iPad.



**HARRIS COUNTY  
HC SO  
SHERIFF'S OFFICE**

**TELE-HEALTH PILOT PROGRAM  
Phase 3**

DEPUTY	DISTRICT	UNIT #	DUTY HOURS	DATE	RDO'S
					S/M

WEEKLY CALLS FOR SERVICE ACTIVITY					
Date/Time of Call:		Report # / Event #		Address:	
Consumer Name:			Race/Sex		D.O.B.
EDO <input type="checkbox"/> YES <input type="checkbox"/> NO	Name of Hospital/Facility	Jail Diversion <input type="checkbox"/> YES <input type="checkbox"/> NO	Charges Diverted:		
Was the iPad signal good? <input type="checkbox"/> YES <input type="checkbox"/> NO			Was the call resolved on scene? <input type="checkbox"/> YES <input type="checkbox"/> NO		
Using iPad, Consumer consulted with: <input type="checkbox"/> CLINICIAN <input type="checkbox"/> PSYCHIATRIST <input type="checkbox"/> BOTH					
Would you have called CIRT if you did not have the iPad? <input type="checkbox"/> YES <input type="checkbox"/> NO					
If you did not have the assistance of the clinician/psychiatrist, would you have transported the consumer to the NPC/hospital ER? <input type="checkbox"/> YES <input type="checkbox"/> NO					
Did the clinician/psychiatrist help you safely deescalate the consumer? <input type="checkbox"/> YES <input type="checkbox"/> NO					
Did the clinician/psychiatrist help you identify/access resources you would not otherwise have identified/accessed? <input type="checkbox"/> YES <input type="checkbox"/> NO					
Did the clinician/psychiatrist help you decide what course of action to take with the consumer? <input type="checkbox"/> YES <input type="checkbox"/> NO					
Do you believe the clinician/psychiatrist helped you handle this call in a shorter period of time than if you responded without the clinician? <input type="checkbox"/> YES <input type="checkbox"/> NO					
Did you connect with a psychiatrist who was able to help the consumer fill/re-fill his prescription medication? <input type="checkbox"/> YES <input type="checkbox"/> NO					

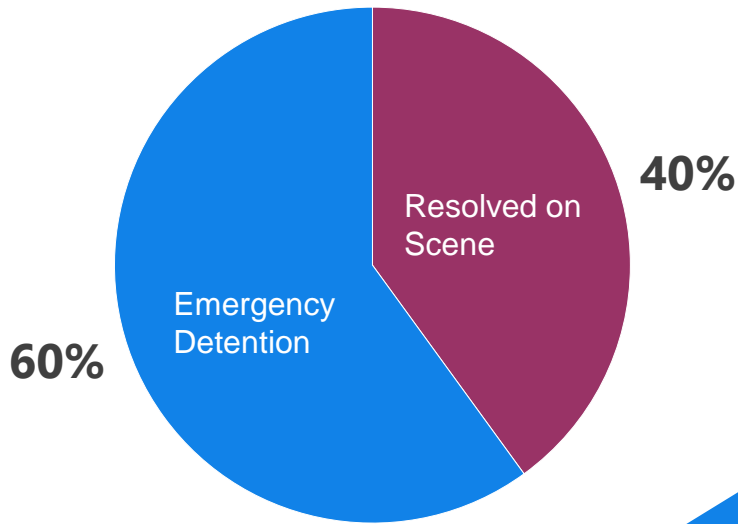
# Mid-Term Evaluation

Number of records/calls = 126

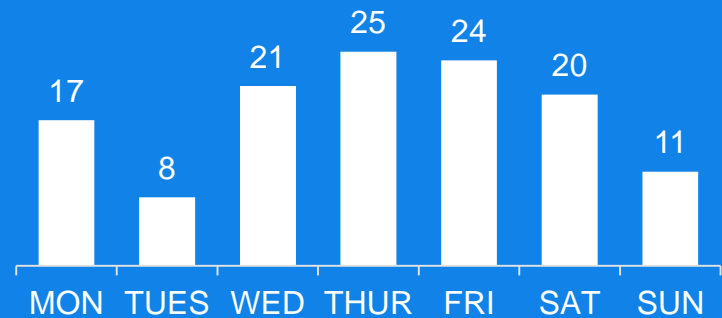
Time period: December 2018 – Mid May 2019

Number of deputies on pilot = 20

## Call Disposition



## Calls by Day of the Week





81%

Percentage of deputies who said they would have called a CIRT unit if they did not have the iPad



63%

Percentage of deputies who would have transported the consumer to the ER or MH facility if not for the iPad



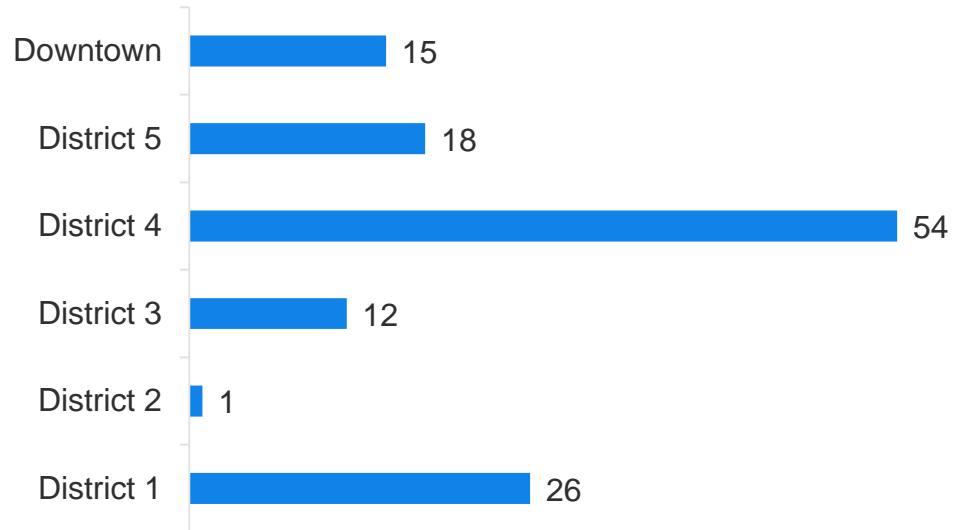
77%

Percentage of deputies who stated the clinician helped them Identify resources



A goal of the program is to eliminate unnecessary transports of consumers to hospital emergency departments and other mental health facilities

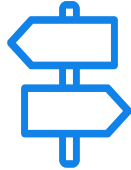
### Calls by District





**73%**

Percentage who stated the clinician helped de-escalate the consumer



**83%**

Percentage who stated the clinician helped them decide on the course of action to take



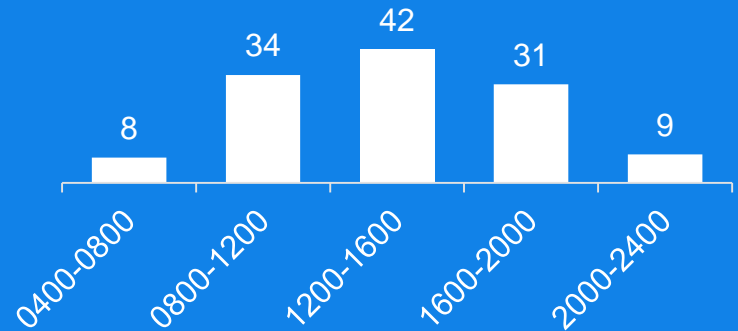
**71%**

Percentage who stated the clinician helped them handle the call in a shorter period of time



The number one goal of the program is to help keep deputies and consumers safe

### Calls by Time of Day





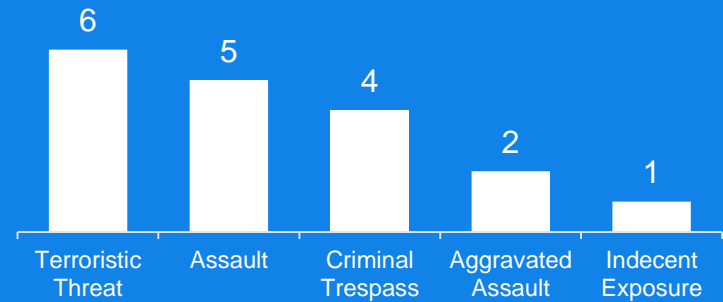
**It is our opinion that the best option for individuals with mental illness is to divert them from jail if possible.**



Jail diversion is a third goal of the program

Major County Sheriffs of America. 2019.  
*Sheriffs Addressing the Mental Health Crisis in  
The Community and in the Jails.*

### Charges Diverted

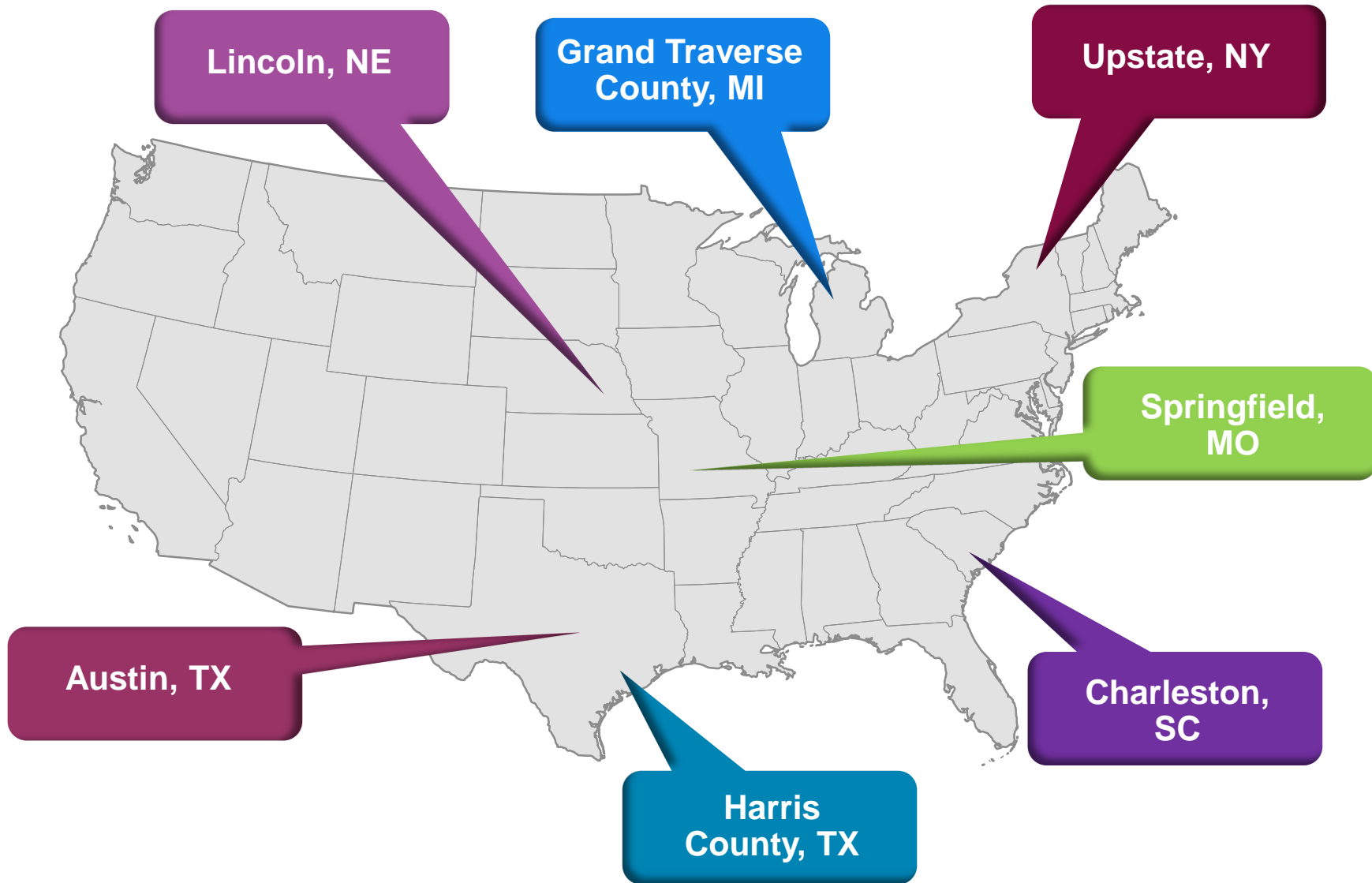


# 5

## U.S. Telehealth Programs for First Responders



## Localities with telehealth programs for first responders





# Austin, TX

## Telehealth Program

*(Photo courtesy of the Austin Police Department)*

# Telehealth Program

## Program Information



iPads, Microsoft Teams



Masters-level clinicians (QMHPs, LPHAs)



Administered by Integral Care



Used with Austin Police Department & Austin Travis County EMS



Free service to police and EMS

## Also ...



Psychiatrists not utilized.



Do not receive Medicaid reimbursement.



Verbal consent. Looking into integrating written consent.



In the process of hiring a medical provider to provide telemedicine.



Evaluation underway; data not available.



# Charleston, SC

## Mobile Crisis Telehealth Program

*(Photo courtesy of Charleston County Government)*

# Mobile Crisis Telehealth Program

## Program Information



iPads, Smart Phones, Vidyo



Masters-level clinicians



Collaboration of four agencies



Used with emergency medical services (EMS)



Free service to EMS

## Also ...



Psychiatrists are not utilized.



Do not receive Medicaid reimbursement.



Program awarded one national and two state awards.

56%

Percentage of calls diverted from hospital emergency departments.

\$1.1M

Savings first year of program.



# Grand Traverse County, MI **Crisis iPad Program**

*(Photo courtesy of Northern Lakes Community Mental Health)*

# Crisis iPad Program

## Program Information



iPads, Lifesize, Verizon Wireless



Masters and bachelors level clinicians



Administered by Northern Lakes Community Mental Health



Used with law enforcement , county jails, and hospital ER



Free service

## Also ...



Psychiatrists are available to clinicians; they do not talk directly to patients.



Do receive Medicaid reimbursement.



Average length of an assessment is 15 minutes.

6

Number of counties served.

1%

Percentage of cases billed to private insurance.



# Lincoln, NE **TASC Program**

*(Photo courtesy of TASC Program)*



# Targeted Adult Service Coordination (TASC)

Program Information



iPads, Windows Laptop, Zoom



Masters-level clinicians



Collaboration of three agencies



Used with law enforcement and jails



Free service

Also ...



Psychiatrists are not utilized.



Do not receive Medicaid reimbursement.



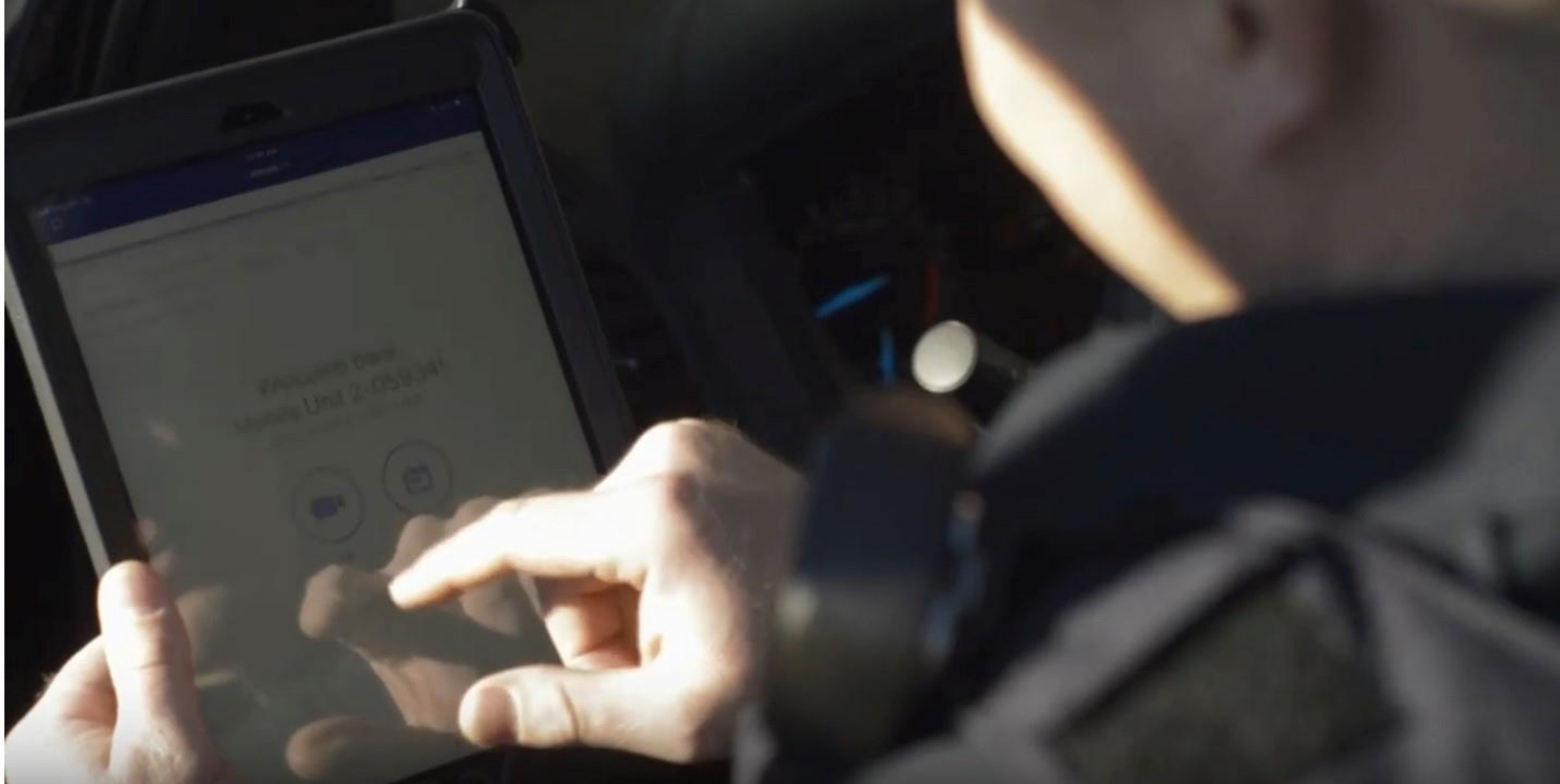
Average length of an assessment is 30 minutes.

16

Number of counties using program.

82%

Percentage of patients left at home rather than placed in protective custody.



# Springfield, MO

## **Virtual Mobile Crisis Intervention**

*(Photo courtesy of Northern Lakes Community Mental Health)*

# Virtual Mobile Crisis Intervention

## Program Information



iPads, Zoom



Masters-level clinicians



Administered through Burrell Behavioral Health



Used with law enforcement



Free service

## Also ...



Psychiatrists are not utilized.



Do not receive Medicaid reimbursement.



Average time to wait for an assessment is 10 minutes.



In talks with area EMS to expand program to them.

75%

Percentage of individuals diverted from hospital EDs.



Photo: Ontario County Sheriff's  
Deputy Jim Baker

*(Courtesy of Ontario County Sheriff's  
Office)*

## Upstate New York Mobile Access Program (MAP)

# Mobile Access Program (MAP)

## Program Information



iPads, Zoom



Masters-level clinicians



Administered by Institute for Police, Mental Health & Community Collaboration



Used with law enforcement



Free service to law enforcement

## Also ...



Psychiatrists are not utilized.



Do not receive Medicaid reimbursement.



Average length of an assessment is 15 minutes.

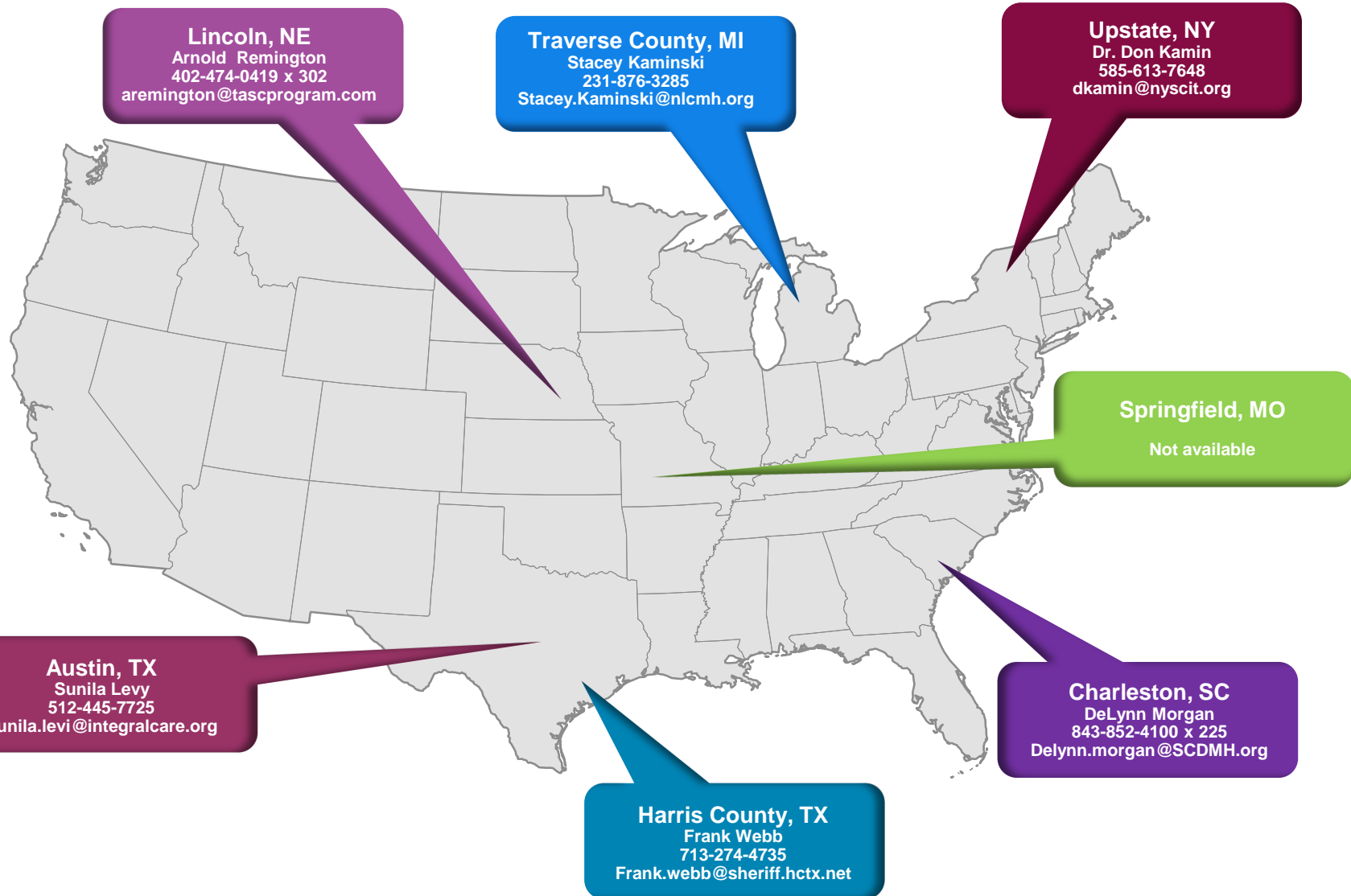
3

Number of counties program started with in July 2019.



Evaluation being conducted; data not available.

# Program Contacts



# Comparison Tables

6

# Comparison Table

Programs	Law Enforcement	EMS	Jail	Hospital ER
Austin, TX	✓	✓	✗	✗
Charleston, SC	✗	✓	✗	✓
Grand Travis County, MI	✓	✗	✓	✓
Harris County, TX	✓	✗	✓	✗
Lincoln, NE	✓	✗	✗	✗
Springfield, MO	✓	✗	✗	✗
Upstate, NY	✓	✗	✗	✗



# Comparison Table

Programs	Vidyo	Lifesize	Zoom	Microsoft Teams
Austin, TX	✗	✗	✗	✓
Charleston, SC	✓	✗	✗	✗
Grand Travis County, MI	✗	✓	✗	✗
Harris County, TX	✓	✓	✗	✗
Lincoln, NE	✗	✗	✓	✗
Springfield, MO	✗	✗	✓	✗
Upstate, NY	✗	✗	✓	✗

# 7

## Telehealth for Military Veterans





## Possible Pilot Program

The Michael E. DeBakey VA Medical Center in Houston is the largest VA hospital in the nation. Houston has the second largest veteran population, fast approaching Los Angeles. The Harris County Sheriff's Office is in discussions with the DeBakey Medical Center regarding the possibility of a telehealth pilot program for veterans. The plan, if approved, is to place a VA app on the iPads the deputies are carrying for Harris County's CORE telehealth program. When a deputy encounters a veteran with mental health issues, the deputy would use the app to connect with a clinician at the VA. Goals of the program would be the same as the goals for CORE: quick and affordable access to VA clinicians, better triage of calls, eliminate unnecessary transports to the VA emergency room, attempt to keep the veteran in the community by utilizing community resources, and jail diversion. The primary benefit of working with VA clinicians is that they have access to the veteran's records and they know the resources available through the VA.

8



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- 2 Horton, Coleen. Texas Lawmakers Must Address Mental Health Workforce Shortage. *UT News, Texas Perspectives*. July 7, 2016. Available at: <https://news.utexas.edu/2016/07/07/there-is-a-mental-health-workforce-shortage-in-texas/>
- 3 Texas Council of Community Centers, The Growing Crisis in Inpatient Psychiatric Care: Forensic Crowd-out and Other Barriers. December 2016. Available at: <https://txcouncil.com/wp-content/uploads/2016/12/Inpatient-Psychiatric-Care-Issue-Brief-121616-Updated-12417.pdf>
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- 8 Hawkins, Merritt. The Silent Shortage. A White Paper Examining Supply, Demand and Recruitment Trends in Psychiatry. 2018. Available at: [https://www.merritthawkins.com/uploadedFiles/MerrittHawkins/Content/News\\_and\\_Insights/Thought\\_Leadership/mhwhitepaperpsychiatry2018.pdf](https://www.merritthawkins.com/uploadedFiles/MerrittHawkins/Content/News_and_Insights/Thought_Leadership/mhwhitepaperpsychiatry2018.pdf)
- 9 Steele, Jeanette. Study: Greater demand may be related to drug use increase, jail time changes. *The San Diego Union-Tribune*. June 6, 2016. Available at: <https://www.sandiegouniontribune.com/sdut-rise-police-calls-mental-health-2016jun06-story.html>
- 10 Houston Police Department Annual Report, 2007, 2017.
- 11 Consumer Health Ratings. Emergency Room – Typical Average Cost of Hospital ED Visit. Available at: [https://consumerhealthratings.com/healthcare\\_category/emergency-room-typical-average-cost-of-hospital-ed-visit/](https://consumerhealthratings.com/healthcare_category/emergency-room-typical-average-cost-of-hospital-ed-visit/)

***Additional research to test the efficacy and costs of telehealth programs is needed. If your community is considering implementing a telehealth program and is interested in evaluation support please contact Catie Bialick at Arnold Ventures.***

***[cbialick@arnoldventures.org](mailto:cbialick@arnoldventures.org)***