Innovative Uses of Technology to Enhance Access to Services within the Crisis Continuum

NATIONAL ASSOCIATION OF STATE MENTAL HEALTH PROGRAM DIRECTORS

ANNUAL MEETING
JULY 29, 2023
GAYLORD NATIONAL HARBOR
Disclaimer

This from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). The views, policies and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS.
Agenda

- Welcome and Introductions
- Overview of the Technical Assistance Coalition Paper, *Innovative Uses of Technology to Enhance Access to Services within the Crisis Continuum*
- Use of Innovation and Technology in the Provision of Tennessee’s Crisis Services
  - Marie Williams, L.C.S.W.; Commissioner, Tennessee Department of Mental Health and Substance Abuse Services
  - Jennifer Armstrong, L.P.C.-M.H.S.P.; Director of Crisis Services and Suicide Prevention
- Innovative Uses of Technology in Crisis Response in Oklahoma: Services within Reach
  - Carrie Slatton-Hodges; Commissioner, Oklahoma Department of Mental Health and Substance Abuse Services
- Time for Questions
Review of Technical Assistance Coalition Paper: *Innovative Uses of Technology to Enhance Access to Services within the Crisis Continuum*
2023 TAC Report: *Innovative Uses of Technology to Enhance Access to Services within the Crisis Continuum*

- Paper focuses on the potential technological innovations have in making behavioral health crisis services more accessible and equitable across the U.S.

- Includes the following sections:
  - Case studies on the innovative uses of technology in Colorado, Connecticut, Tennessee, and Oklahoma.
  - Uses of technology to connect individuals to crisis care and improve outcomes (through social media, service registries, data analytics/visualizations, and the use and implications of telehealth).
  - Improving services through data connections and information sharing.
  - The use of artificial intelligence in crisis services (including early detection, service delivery, and considerations for its use).
  - Characteristics of an organization primed to succeed using technology to support crisis services (including workforce and human characteristics and privacy considerations)

- Paper currently being reviewed by SAMHSA; will be posted to [www.nasmhpd.org](http://www.nasmhpd.org) on approval.
Report Highlights & Recommendations

**Highlights:**

- Technology can facilitate interactions between the crisis system, law enforcement, emergency medical services, emergency departments, and other social service agencies to improve outcomes for individuals experiencing a crisis.
- SMHAs and local providers are leveraging technology to facilitate access to crisis services, increase engagement, strengthen stakeholder relationships, and save valuable resources.
- Artificial intelligence is rapidly expanding, and there are possible roles for AI in improving the crisis continuum.

**Recommendations for Policymakers and Service Providers:**

- Ensure organizations are informed and intentional in adopting new technology.
- Identify and empower champions in the organization to see through the uptake process and engage stakeholders.
- Policymakers and providers need to understand how to evaluate a technology before adopting it.
2023 TAC Report - Methodology

- Online literature review to identify technological innovations and opportunities for their application in crisis service delivery.

- Emailed each SMHA asking about innovative uses of technology. Conducted follow-up interviews with five states (AL, CO, CT, DC, and TN), and relied on a prior evaluation of OK.
Brief Case Study Overview
A Few Words on Artificial Intelligence...

- Artificial Intelligence possibilities:
  - Triage and risk assessment
  - Chatbots for 24/7 crisis support
  - Increase workforce productivity and satisfaction
  - Create context-relevant care available everywhere
A Few Words on Artificial Intelligence, Cont’d...

- Artificial Intelligence hard realities:
  - Client data security
  - Improper suggestions for care
  - Subtle preservation of human biases and prejudice
  - Further technogenic alienation
State Behavioral Health Commissioners
(According to AI)

Generated by Stable Diffusion with the prompt: "a behavioral health commissioner"
Use of Innovation and Technology in the Provision of Tennessee’s Crisis Services
TN Crisis Services History

Crisis response teams were established in 1991

Contract with 12 providers across the state to deliver mobile crisis services 24/7/365.

Statewide hotline number routes caller to nearest provider based on area code and defaults to one provider if does not route due to unknown area code.

TDMHSAS is also proud to support the TN 988 Infrastructure in managing calls, chats and texts presenting in TN.

Respite services were established in 1992 to allow a community-based option that offers a temporary reprieve from an environmental stressor.

Crisis Stabilization Units and Walk-in Centers were added in 2008.

Contract with 7 providers to provide 8 CSUs and Walk-in Centers to operate 24/7/365; 3 additional contracts executed and 4th in progress allowing for a 4 site expansion.
CRISIS SERVICES IN TENNESSEE
Call or Text 988 Suicide and Crisis Lifeline

MADISON COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Medically-Monitored Detox

HENRY COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit

MONTGOMERY COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit

DAVIDSON COUNTY:
- Middle Tennessee Mental Health Institute
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Crisis Respite
- Medically-Monitored Detox (Buffalo Valley)

PUTNAM COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Crisis Respite
- Medically-Monitored Detox

HAMBLEN COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit

DYER COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit

WASHINGTON COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Crisis Respite
- Medically-Monitored Detox

SHELBY COUNTY:
- Memphis Mental Health Institute
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Crisis Respite
- Medically-Monitored Detox

HARDEMAN COUNTY:
- Western Mental Health Institute

RUTHERFORD COUNTY:
- Crisis Walk-In Center
- Crisis Stabilization Unit
- Crisis Respite
- Medically-Monitored Detox (CADAS)

HAMILTON COUNTY:
- Morracan Bend Mental Health Institute
- Crisis Walk-In Center
- Crisis Stabilization Unit

Mobile Crisis Teams
- Alliance Healthcare Services
- Quinco Mental Health
- Mental Health Cooperative
- Professional Care Services
- Corey Counseling Center
- Volunteer Behavioral Health
- Pathways Behavioral Health Services
- Centerstone
- McNabb Center
- Ridgeview Behavioral Health Services
- Frontier Health
8 Crisis Stabilization Units, Adding 4 More

Current CSU Locations

Proposed CSU Locations
Tennessee’s Mental Health Crisis Services Continuum
Connecting people to the right treatment, in the right place, at the right time.

126,645 Calls for Help
55% Resolved on the phone
44% Referred to mobile crisis
1% Directed to ED for medical concerns
70,452 crisis assessments completed
65% Diverted from hospitalization

Person in Crisis → Statewide Crisis Line → Face to Face Assessments → Community-Based Resources

On top of the above crisis call volume, 19,443 additional crisis calls were handled through the National Suicide Prevention Lifeline which became 988 on 7/16/22.

For individuals not meeting commitment criteria
Less Restrictive Environment:
Better Option for Patient and Lower Cost Intervention
Decreased Usage:
Inpatient Hospitalization, Jail, and Emergency Room

Data from state fiscal year 2022

Less Restrictive Alternatives:
- Crisis Respite Services
- Crisis Walk-In Services
- Crisis Stabilization Units
- Outpatient Community-Based Programs and Services
Why are Crisis Data Important?

- Make informed decisions about programmatic changes
- Find solutions to problems
- Identify barriers to accessing needed patient care
- Determine return on investment
- Develop efficiencies for care providers

Improving Patient Care Starts with Data
Why Track Crisis Data?

- What problem(s) did the crisis management system solve:
  - Eliminated manual entry in multiple spreadsheets
  - Provided access to client-level information to allow tracking across systems
  - Provided information related to what is working vs. what is not working
  - Provided metrics for monitoring program effectiveness
What Are We Able to Track Now?

The collection of client-level data allows for enhanced data analysis that didn’t previously exist. The data can now be cross-walked against the Behavioral Health Safety Net, state hospital admissions, and suicide death data.

Examples of current metrics captured:

- Volume of Crisis Calls, Mobile Crisis Assessments, 23-Hour Observation Admissions, Respite Admissions, and CSU Admissions
- Crisis Response Times
- Length-of-Stay Data
- Primary Presenting Problem
- Hospitalization Rates
- Alternatives Attempted Before Inpatient Referral
- Follow-Up Efforts
Multiple reports (samples above) can be displayed by month or provider for trends analysis. Detailed reports allow providers QA assistance in detecting outliers and data entry errors.
Collecting Meaningful Data
Provider Interface – Phone Assessments
Collecting Meaningful Data
Provider Interface – Face to Face Assessments
How Easy is it to Use the Crisis Management System?

Providers can manually enter or upload assessment or services data into the system. Technical support is provided by TDMHSAS to ensure data accuracy.

Providers add all crisis call and assessment data weekly, while services data are added monthly.

Creates a Centralized Data Collection Process

Although the data validation and training process could feel cumbersome, providers are able to access their reported data real-time for internal QA and analytics.
All About Accountability and Outcomes

Have to show return on investment

Governor, State Legislature, Citizens

Working with Community Providers
Utilization of Telehealth

- Focused effort to ensure all ER’s and jails had equipment at onset of pandemic
- Currently, defer to the referral source as to mode of assessment: in-person or via telehealth
Patient Bed Matching System - Go live Sept. 2022

**Streamline Referrals**
Quickly match available beds to patients in need

**Save Time**
Reduce staff time on the phone and managing faxes

**Improve Connection**
Exchange messages and complete referrals within the system

**Real-Time Tracking**
Determine where a referral is in the process when delays occur

**Asset Management**
Monitor and identify efficiencies to maximize limited staff and resources

**Free Free Free**
Did we mention this is completely free?
Patient Bed Matching System
# Patient Bed Matching System

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Patient Bed Matching System
Questions?

**Never doubt** that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

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- Margaret Mead
Innovative uses of technology in crisis response to better serve individuals experiencing mental health crisis

Presenter
Commissioner Carrie Slatton-Hodges
Services Within Reach

• Oklahoma has long been considered a national leader in “telepsychiatry.”

• Barriers due to geographic, economic or workforce limitations enabled a quicker uptake with the use of technology to deliver services, allowing physicians and behavioral health professionals to consult with each other more rapidly.

• Technology incorporated to help strengthen partnerships and establish connections to a variety of locations including hospital emergency rooms and criminal justice settings.

• As a result of this existing network, Oklahoma was well-prepared to implement additional telehealth measures during the pandemic and expand for long-term use.
CARES Act

• Funding to create pilot programming around use of iPads with law enforcement agencies providing direct access to Community Mental Health Center/Certified Community Behavioral Health Clinic to help with de-escalation of crisis and expedited initial assessment.

• Technology integration included direct care services for law enforcement officers

• Partnered with more than 80 city/county Health Departments statewide to helping rural residents immediately access behavioral healthcare through the integration of iPads in these settings
Technology Expansion

• Strengthened relationships with additional like partners such as
  • Firefighters,
  • Emergency Departments,
  • Schools,
  • Courtrooms,
  • and Jails
• Integrated iPads directly into client homes that have more intense
  needs to help with immediate access and crisis de-escalation.
CCBHC Innovations

- Use of technology to reach more clients
- Expansion of creative approaches to crisis services such as various models of Urgent Recovery Clinics
More than 2,500 crisis calls answered each month

Approximately 600,000 minutes of services provided each month

Increased number of individuals served by 95%

Decreased number of adults hospitalized by 80%
Locals Championed Further Innovation

- Rural law enforcement *most* excited about integrated technology
- Outcomes impressed key legislative members on both House and Senate sides
- Legislative appropriations to provide funding for integrated iPads for all law enforcement officers *(2M)*
- Integrated technology by providing over 24,000 enabled devices across the state and include client, practitioner, and first responder devices
- Total Call Volume – **506,519**
  - Approximately **95,000** inbound crisis calls
- Average Call Duration is **27 mins**
Financing of Technology

1. Educate provider system on business case for the use of technology

2. CARES funds

3. Legislative ask

4. CCBHC
Questions?
Questions?
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Thank You!