Telling the Story: Data, Dashboards, & the Mental Health Crisis Continuum

For the National Association of State Mental Health Program Directors

May 2022

Disclaimer

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Agenda & Housekeeping

- Welcome and Introductions: Robert Shaw, MA, Senior Research Associate, NRI

- Review of the Technical Assistance Coalition Paper, *Telling the Story: Data, Dashboards, & the Mental Health Crisis Continuum*:

  - Kristin Neylon, MA, Project Manager, NRI

- Utah's Crisis System - Data and Visualization:

  - Nichole Cunha, LCSW, Crisis Administrator, Utah Department of Human Services

- Georgia's Technology Supported Crisis Response System:

  - Anna Bourque, Director, Provider Relations and ASO Coordination, Georgia Department of Behavioral Health and Developmental Disabilities

  - Dawn Peel, Director, Office of Crisis Coordination, Georgia Department of Behavioral Health and Developmental Disabilities

  - Wendy White Tiegreen, Director, Office of Medicaid Coordination and Health System Innovation, Georgia Department of Behavioral Health and Developmental Disabilities

- Tennessee's Crisis and Hospitalization Data:

  - Jennifer Armstrong, LPC-MSHP, Director of Crisis Services and Suicide Prevention, Tennessee Department of Mental Health and Substance Abuse Services

  - Melissa Sparks, MSN, RN, Deputy Chief of Hospital Operations, Tennessee Department of Mental Health and Substance Abuse Services

- Question and Answer Session: Robert Shaw, MA, Senior Research Associate, NRI

Learning Objectives

1. Recognize the need for robust data collection systems to understand the quality and efficacy of crisis service continuums.

2. Identify which data elements are most critical to understanding how well each component of a crisis service continuum works independently, as well as in tandem with other services to ensure no one "falls through the cracks."

3. Learn how state behavioral health authorities use data and data visualization tools to monitor crisis service continuums.

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Review of Technical Assistance Coalition Paper: Telling the Story: Data, Dashboards, & the Mental Health Crisis Continuum

Behavioral Health Crisis Services are an Increasing Priority Across the U.S.

- 988, the new three-digit code for the National Suicide Prevention Lifeline is set to go live on July 16, 2022; demand for Lifeline services is anticipated to double as a result.

- New and enhanced resources from the federal government for crisis services:
  - 5% Set Aside in the Mental Health Block Grant for Crisis Services
  - American Rescue Plan funds *(Caution: although these funds are available to enhance crisis services, it is possible that few funds are allocated for this purpose. The influx of funds may appear that systems are flush with resources to enhance crisis services systems, when the reality is that many SBHAs are trying to stabilize a fractured service delivery system.)*

- Societal shift to provide more equitable services and reduce reliance on law enforcement as the primary responder to behavioral health crises

2022 TAC Report: *Telling the Story – Data, Dashboards, & the Mental Health Crisis Continuum*

- Purpose: Understanding how crisis continuums operate is crucial to ensuring high-quality crisis services and that no one "falls through the cracks." The significant programmatic and funding changes implemented at the federal level make now an opportune time for state behavioral health authorities to implement or enhance their data collection processes for crisis services.

- Goals of the Report:
  1. Identify which data and outcome measures are most important to SBHAs and other stakeholders to ensure the effectiveness and continuity of behavioral health crisis services.
  2. Determine which data and outcome measures are feasible and meaningful for all SBHAs to report to SAMHSA.
  3. Understand how SBHAs analyze and present crisis data in the forms of dashboards and reports to monitor their systems and share important trends with stakeholders.

- Paper currently being reviewed by SAMHSA; will be posted to www.nasmhpd.org and emailed to all participants upon publication.

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2022 TAC Report - Methodology

- Online literature review to identify best practices in data collection and measures used by similar industries to monitor quality and effectiveness.

- Review of each SBHA's website for the presence of data dashboards and reports for crisis services. Based on this review, NRI staff identified 12 SBHAs to interview for this report.
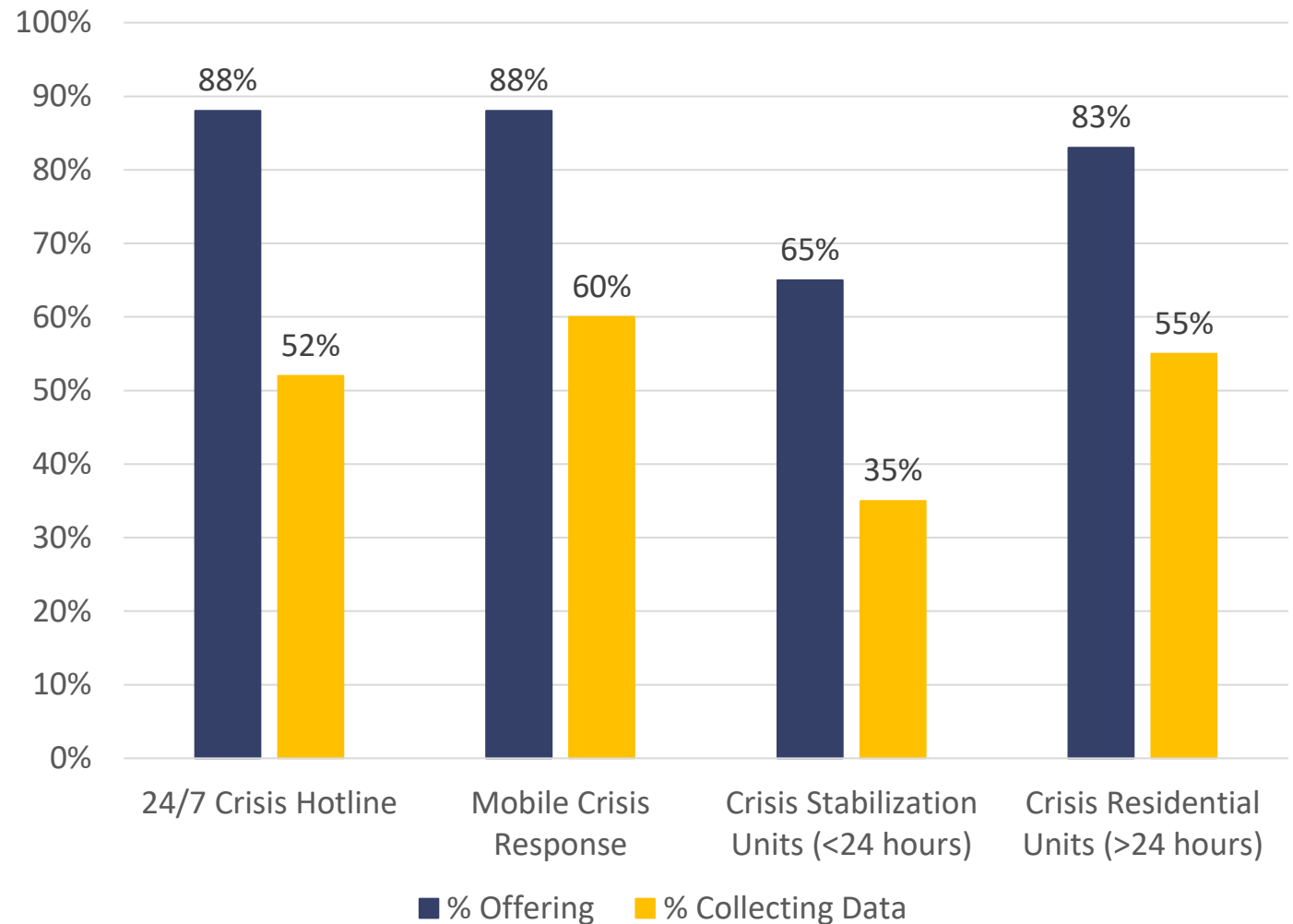
States Interviewed for the Report
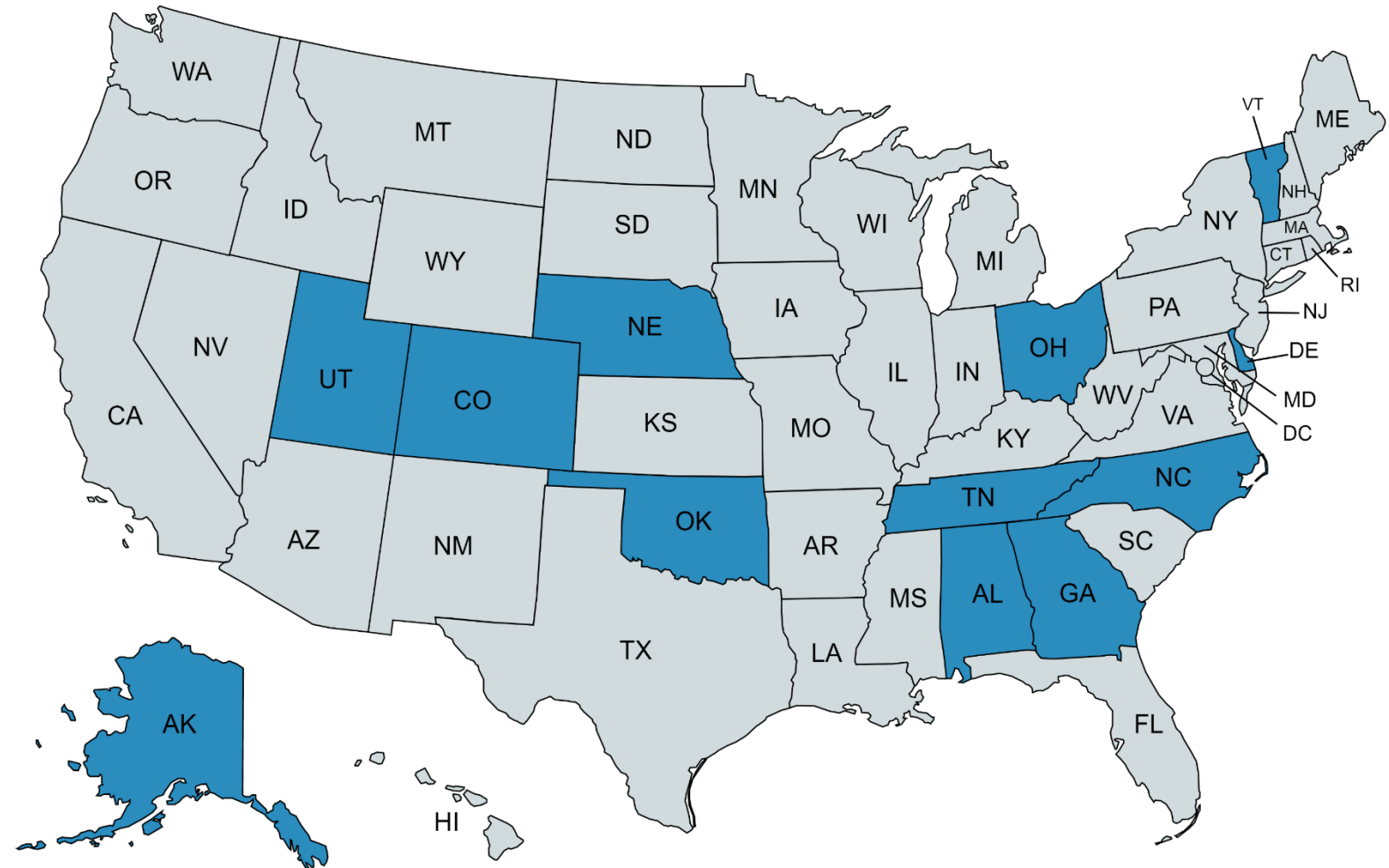
Availability of Crisis Services & Data Collection Activities Across the U.S.

- SAMHSA's National Guidelines identify three essential crisis services:
  - Someone to Call: Crisis Hotlines
  - Someone to Come: Mobile Crisis Response
  - Somewhere to Go: Crisis Stabilization Units (and Crisis Residential Facilities)

- Data monitoring is critical to understanding how individuals move through the system so that no one falls through the cracks.

% of SBHAs Offering Crisis Services and % of SBHAs Collecting Data for Each Element

Element	% Offering	% Collecting Data
24/7 Crisis Hotline	88%	52%
Mobile Crisis Response	88%	60%
Crisis Stabilization Units (<24 hours)	65%	35%
Crisis Residential Units (>24 hours)	83%	55%

Most Important Metrics for Behavioral Health Crisis Hotlines Identified by SBHAs

Top three measures identified as most important for behavioral health crisis hotlines:

1. Average Handle Time
2. Caller Disposition
3. Calls Resulting in Emergency/Mobile Dispatch and Active Rescue

Note on demographic data:

- Demographic data were identified during calls as important data in that they allow states and providers to tailor services for their communities. However, they are extremely difficult to collect, especially during crisis situations. Only successful in collecting this information about half the time.
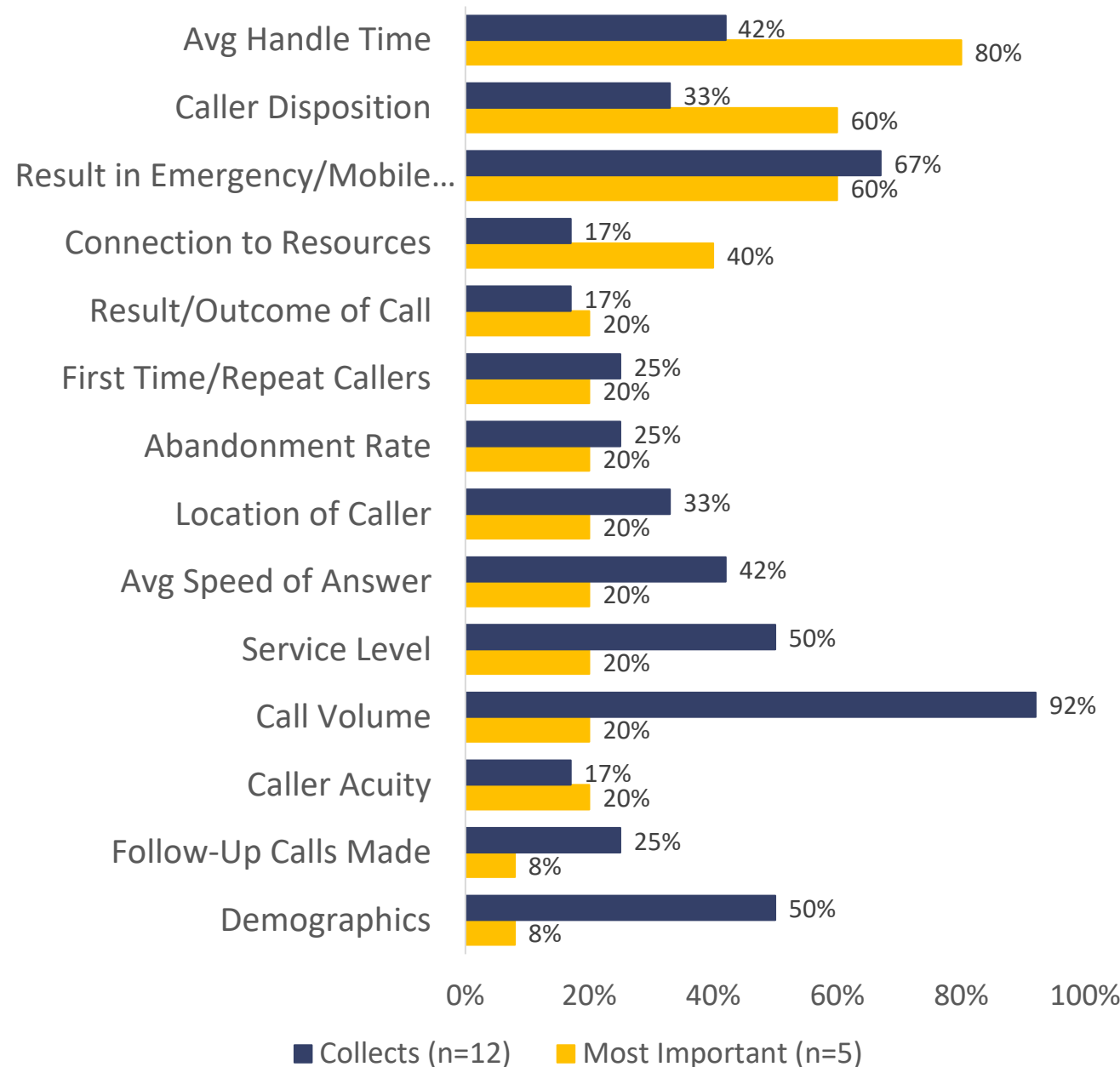
Most Important Metrics for Mobile Crisis Response Identified by SBHAs

Top measures identified as most important for mobile crisis response include:

1. Disposition of Mobile Dispatch
2. Response Time
3. Number of Assessments Completed

Metrics that Monitor Service Transitions & Diversion

- Many measures are available to help monitor the quality of individual services. To tell the story of how the crisis continuum is working as a whole, SBHAs collect measures that monitor service transitions and diversion to ensure no one "falls through the cracks."

SBHAs Collecting for at Least One Crisis Setting (n=12)
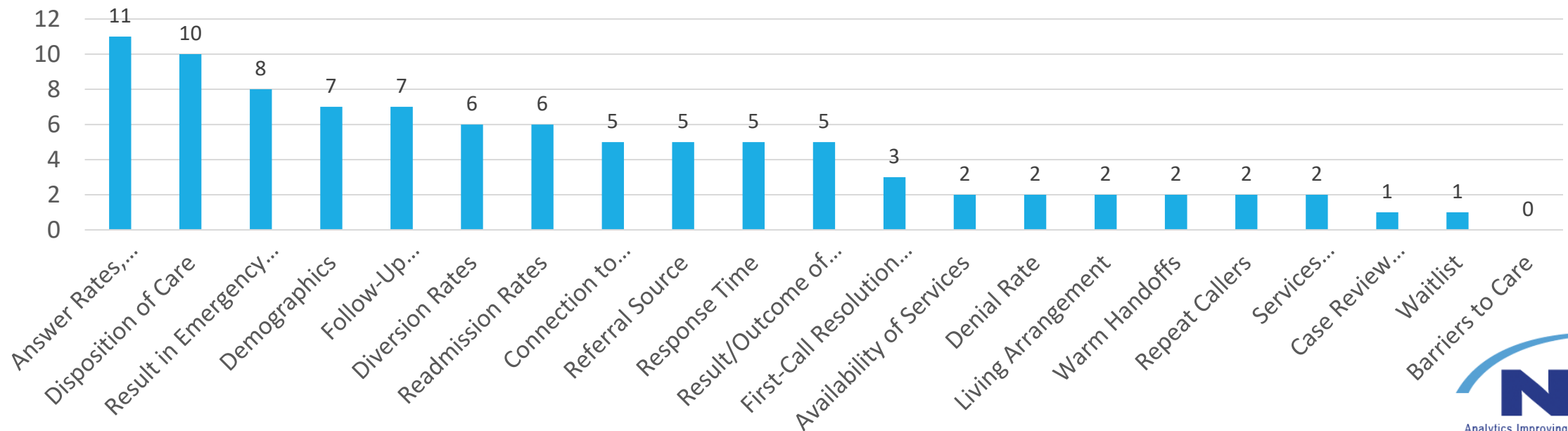
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utah department of
human services

Utah's Crisis System:
Data and Visualization

CURRENT AVAILABLE CRISIS SERVICES:

EXAMPLE
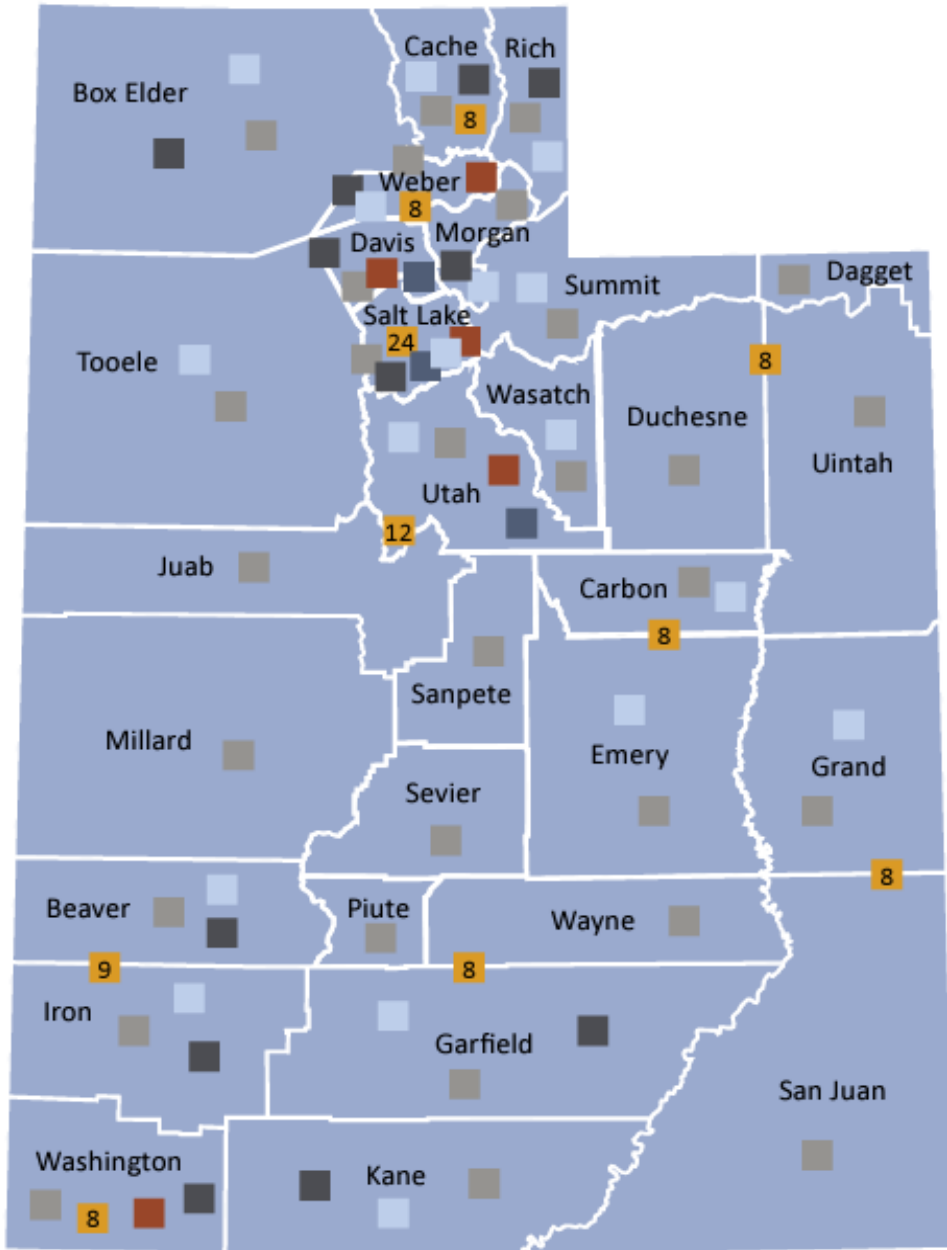
BY COUNTY

Assertive Community Treatment (ACT)/Bridge — 24/7
On-scene dispatch of treatment team for individuals already enrolled in ACT services.

Crisis Intervention Team (CIT)
Availability varies by CIT Officers
911 dispatch of certified CIT law enforcement officers to possible mental health crises; partnership and training with mental health professionals, ERs, receiving centers and advocates. *cit-utah.com*

ER Crisis Walk-In/Receiving Centers — 24/7
Triage through ERs at the following hospitals: McKay Dee (Ogden), LDS Hospital (SLC), University of Utah Hospital (SLC), Dixie Regional Hospital (St. George).

Mobile Crisis Outreach Teams (MCOT) — 24/7
Youth and Adults
Team of counselors and peer support specialists dispatched to the scene through the Utah Crisis Line triage who connect the individual to immediate care and follow-up community services.

Stabilization and Mobile Response — 24/7
1-833-SAFE FAM (723-3326)
Youth and Families
Phone triage, mobile response, and 6-8+ weeks of in-home intensive stabilization services. SMR diverts youth from emergency departments and law enforcement when experiencing mental/behavioral health and/or developmental challenges. No clinical thresholds or insurance requirements for deployment.

Youth Services Centers (with bed capacity) — 24/7
Drop-off centers for youth who are in crisis for behavioral or mental health, trauma, substance use, and suicidal ideation screening and stabilization; further assessment and services, depending on the severity of the crisis, through SMR or Local Mental Health Authority.
Locations: *jjs.utah.gov/contact/contact-map-for-parents*

STATEWIDE

Utah Crisis Line
801-587-3000, 24/7
Connects law enforcement to licensed clinicians who provide consultation and resources, which may include dispatching a mobile response team.

Suicide Prevention Lifeline
800-273-TALK (8255), 24/7
suicidepreventionlifeline.org
Connects the individual with suicidal thoughts to a crisis counselor.

Utah Warm Line
801-587-1055, 24/7
Connects individuals who are not in immediate danger to a Certified Peer Support Specialist (CPSS) for empathy, coping strategies and safety planning.

SafeUT Crisis Chat & Tip Line
healthcare.utah.edu/uni/safe-ut
833-372-3388, 24/7
App that connects youth to confidential counseling, suicide prevention, and referral services.

Utah's Current Crisis Data Collection

Mental Health Data Definitions
FY2023
Effective July 1, 2022

Division of Substance Abuse and
Mental Health

CRISIS and STABILIZATION SERVICES
File Format and Definitions
FY2023
Effective 7/1/2022

Department of Human Services

EXAMPLES

STATE OF UTAH DEPARTMENT OF HUMAN SERVICES
CONTRACT FOR SERVICES PROVIDED BY A UTAH GOVERNMENTAL ENTITY

KissFlow# 22CR13

...tween the State of Utah Department of Human Services ("DHS") and the Univ...
...nics DBA the Huntsman Mental Health Institute, a Utah governmental entity (...
...y 1, 2021 and ends on June 30, 2026. Pursuant to Utah Code Ann. 26B-1-201,...
...agree that the contracting parties, with all contractual obligations, duties, and...
...of Health and Human Services and Contractor.

Table of Articles

...al Provisions..
...Related Requirements

- Numerous for mechanisms for
  - contracting
  - reporting
  - submission
- Data sharing challenges
- Data warehousing complexities
- Heavy reliance manual data submission and analysis

Utah Crisis Line

Mobile Crisis Outreach Teams

Receiving Centers

EXAMPLE

Default Report

America/Los_Angeles PDT (GMT-0700)

Q Search Questions

- Admission data entered to date
- What is your relationship to the client?
- A Information entered when "other" was selected as relationship to client:
- Who referred the client to the Receiving Center?
- A Information entered when "other" was selected as referral source:
- **What do you think you would have done if the receiving center was not available?**
- Client's gender
- Client's race
- Client's ethnicity
- Client's county of residence

What do you think you would have done if the receiving center was not available?

Takin' on a challenge is a lot like riding a horse. If you're comfortable while you're doin' it, you're probably doin' it wrong.

TED LASSO

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- Georgia Department of Behavioral Health & Developmental Disabilities

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BE D·B·H·D·D

Georgia's Technology-Supported Crisis Response System

Background

- DBHDD identified the need to have a uniform point-of-entry for the state-funded crisis system in order to improve efficiency, maximize resources, and provide metrics which are used to inform system improvement.

- Over a period of sixteen (16) years, DBHDD and Behavioral Health Link have partnered to design an electronic system that encompasses a call center, dispatch mobile crisis teams, and provides real-time information about state-funded crisis bed access.

- The system has been designed to provide real-time data for certain parts of the crisis system. The system also allows historical information to be extracted to monitor a wide variety of metrics.
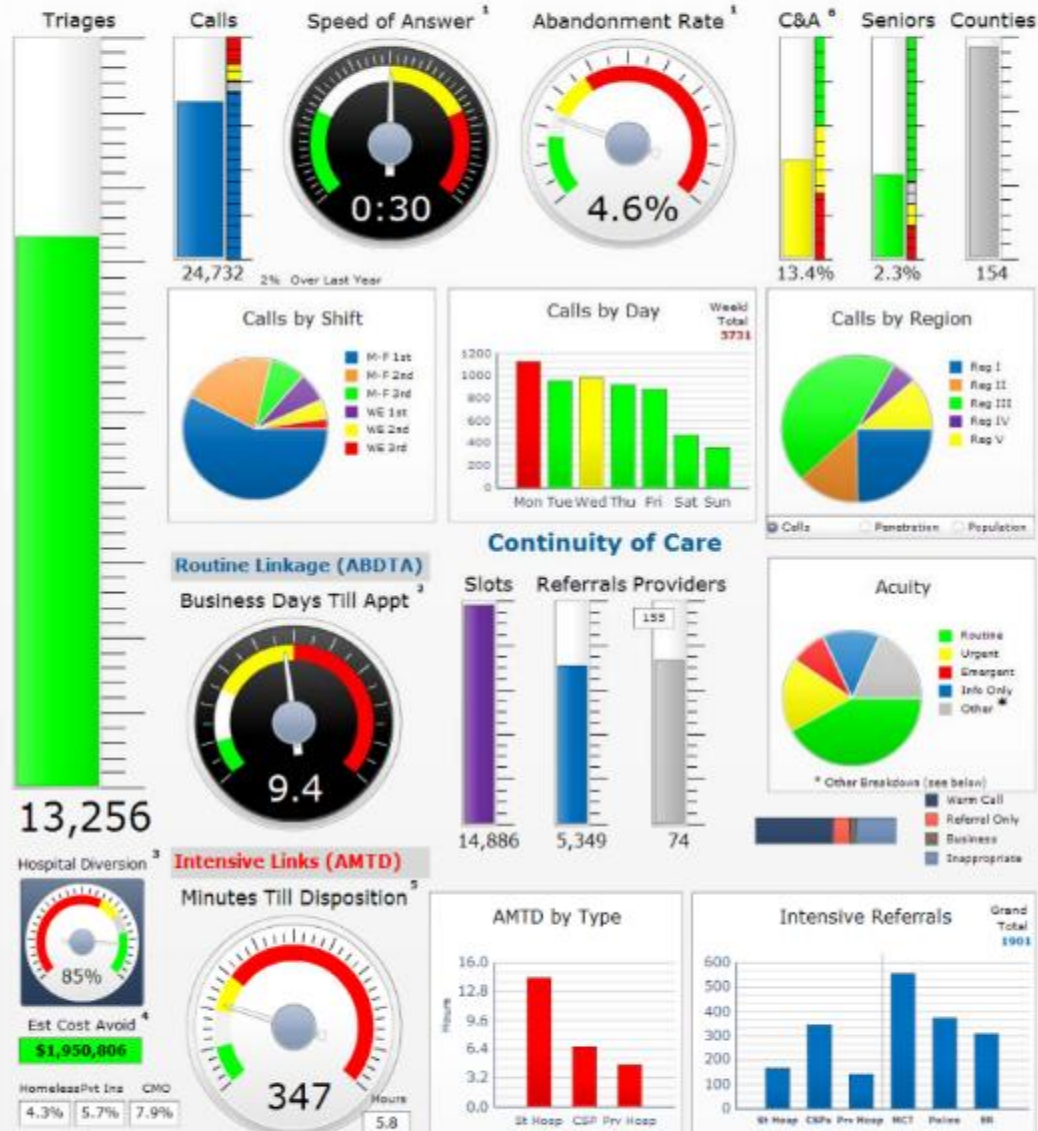
Call Center Data Collection

- Currently, Behavioral Health Link's live dashboard to provide information about call center utilization is not operational.

- Behavioral Health Link's leadership and programmers are working with DBHDD to re-design the live dashboards as a result of upgrading the system.

- The dashboard is expected to be completed in June 2022 and go live in July 2022.

- Live data are available on the bed boards and through the IT system; however, data are not currently displayed as a dashboard.

Historical Dashboard Functionality

Call Center to MCT Deployment

Level 1	Law Enforcement Leads (with Mobile Crisis Team Accompanying or Following Behind) The team must heed police instructions and respond as the scene is deemed safe for entry.	This level indicates situations that are too dangerous to deploy without the environment first being secured by law enforcement. It is also key in these situations to have a response within the shortest time possible. The Georgia Crisis & Access Line initiates Rescue Protocol and does not dispatch the Mobile Crisis Team as sole responder if the caller is in imminent danger to self and/or others (as evidenced by any of the following): • "Likely" or "Very Likely" intent for suicide attempt (more than desire/ideations and capability alone) • "Likely" or "Very Likely" intent for homicide attempt • Threat to staff • Possession of weapon
Level 2	Mobile Crisis Team Leads (with Law Enforcement in the Background or Following Behind but on the Scene)	Caller reports any of one of the following: • History of aggression • Recent acts of aggression • Self-Injury This level indicates situations where BHL staff enters into the environment first but law enforcement is immediately available if needed.
Level 3	Mobile Crisis Team Lifeline (Law Enforcement on Standby by Phone)	All "Emergent" cases and certain "Urgent" cases (where clinical judgment suggests that a call to apprise law enforcement of the situation is prudent)
Level 4	Mobile Crisis Team Alone (With no Law Enforcement)	"Urgent" cases in which the absence of clinical intervention suggests the advancement to greater risk or other cases where children or adolescents are being referred to the state hospital or LOC
Level 5	Secure Location (Hospital, Jail, Social Service Agency Etc...)	These cases are in a location where professional peers are present and available to support a safe environment. Calls to residences (apartments, homes etc.) are not "safe sites."

Mobile Dispatch Levels

- GCAL chooses the Dispatch Level

- Mobile can intensify the level, but cannot decrease

- This is also part of the documentation available to the Mobile Team

D·B·H·D·D

Dispatch Technology

Mobile Crisis Dashboards

- Behavioral Health Link has two internal-facing dashboards for mobile crisis services.
  - The Live Dashboard provides real-time, daily, and month-to-date mobile crisis data.
  - Monthly Dashboard
  - Data from both dashboards can be filtered to provide regional or statewide information.

Mobile Crisis Daily Dashboard

- Daily Data Points:

Average Dispatch Response Time	Average Mobile Crisis Response Time	Average Mobile Crisis Response Time
Active GCAL Mobile Crisis Dispatches	GCAL Mobile Crisis Dispatches (Current Day)	

- Month-to-Date Data Points:
  - All Daily Data Points
  - Percentage of referrals to medical facilities
  - Percentage of referrals to Crisis Stabilization Units
  - Percentage of referrals to State Hospital/State-Contracted Beds

Mobile Crisis Monthly Dashboard

- The second dashboard provides monthly data statewide and by region.

Average Response to Dispatch Time	Average Response Time	Average Assessment Time	Average Linkage Time
Number of Dispatches	Number of Completed Assessments	Number of Counties Served	Number of Assessments Sent to ED for Medical Clearance
State Hospital/ State Contract Bed Diversion			

- Demographic, location, disability type, legal status, zone, and disposition type for completed assessments metrics.

Electronic Management of State-Funded Crisis Beds

- GCAL manages telephonic and electronic referrals for individuals who need a state-funded crisis bed.

- Referrals can be tracked via the referral status board. Referrals have triage information that is updated daily to reflect updates and changes in referral status.

- Crisis Stabilization Unit and Temporary Observation Unit utilization can be accessed in real time to include specific individuals served or certain data metrics.

- Historical data can be extracted from the electronic bed board to compile reports.

Note: GCAL system also contains known Medicaid Psychiatric Facilities to promote referral and use of "plan" services for Medicaid beneficiaries.

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TN Department of Mental Health & Substance Abuse Services

Tennessee's Crisis and Hospitalization Data

It takes a village to build a tech solution, but we did it!

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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

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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

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DATA MINING AND VISUALISATION

DATA — DATA PROCESSING — KNOWLEDGE — DATA MINING — DATA MODELLING — DECISION MAKING — UNDERSTANDING
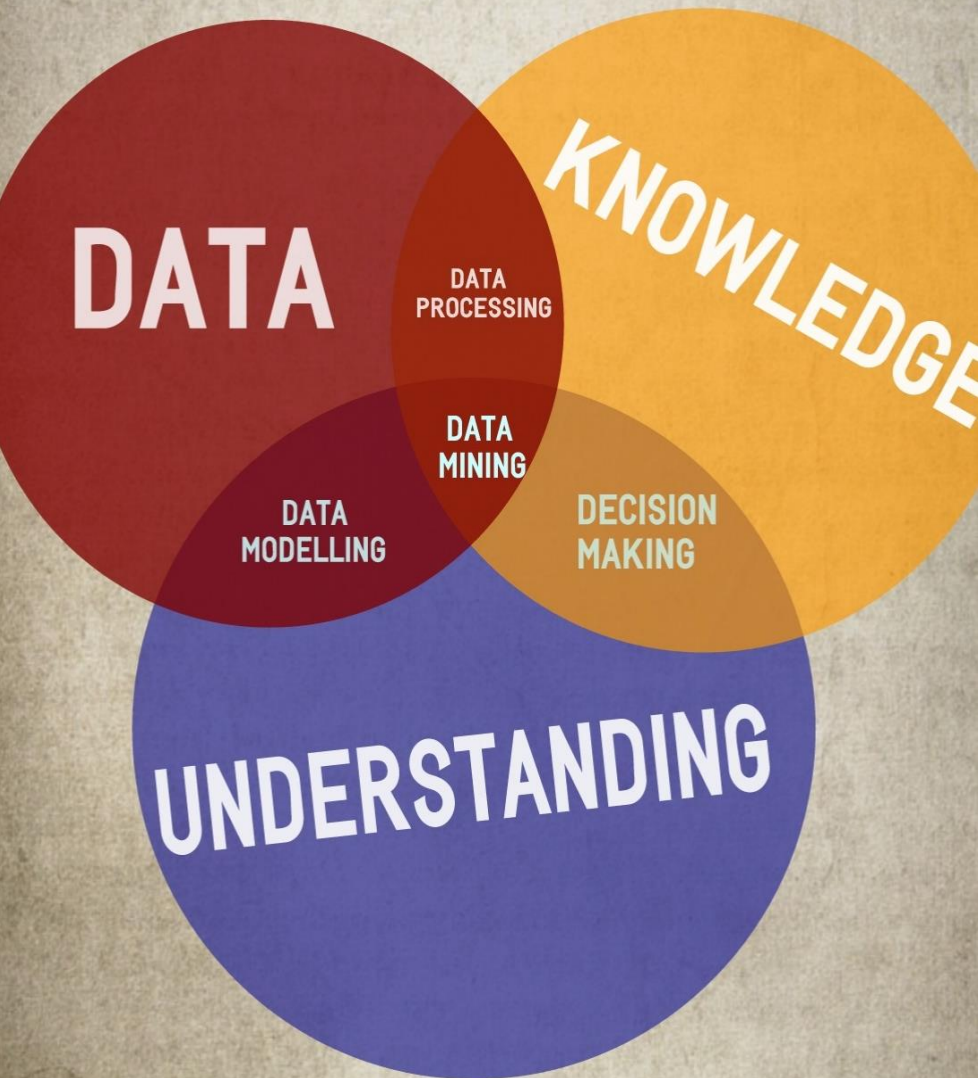
What Are We Able to Track Now?

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:

- Crisis Response Times
- Volume of Crisis Calls, Mobile Crisis Assessments, 23-Hour Observation Admissions, Respite Admissions, and CSU Admissions
- Length-of-Stay Data
- Primary Presenting Problem
- Hospitalization Rates
- Alternatives Attempted Before Inpatient Referral
- Follow-Up Efforts

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CMS Reports

Mobile Crisis Assessment Data

Data includes call and face-to-face assessment volume data, presenting problems, dispositions of assessments, and follow-up efforts.

Crisis Response Time

Mobile Crisis required response time is 2 hours or less. Reports allow providers to see details of longer response times for quality assurance.

Crisis Services Data

CSU, 23 Hour Observation, and Respite data includes admissions and length of stay (in days or hours, depending on the service).

TDMHSAS CRISIS MANAGEMENT SYSTEM
F2F ASSESSMENT STATISTICS

Assessment Date: 7/1/2021 through 12/31/2021
PROVIDER: [Crisis Provider]

	2021 - 07 Jul	2021 - 08 Aug	2021 - 09 Sep	2021 - 10 Oct	2021 - 11 Nov	2021 - 12 Dec	TOTAL Assessments
[Crisis Provider]	552	520	442	491	424	462	2,891
Total	552	520	442	491	424	462	2,891

	2021 - 07 Jul	2021 - 08 Aug	2021 - 09 Sep	2021 - 10 Oct	2021 - 11 Nov	2021 - 12 Dec	Total
Not seen w/in 2 hours	2	1	3	0	3	1	10

Average Call End to F2F Arrival (hours):   1.03

		DAYS / LOS					Totals
		Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	
[CSU]	Days	112	208	206	193	212	931
	Admissions	44	79	79	85	68	355
	Average LOS	2.55	2.63	2.61	2.27	3.12	

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.

How Did We Figure it Out?

- **Identified the Internal Needs**
  - Meet with leadership to evaluate expectations and data needs.

- **Met with Stakeholders**
  - Meet with stakeholders to share the vision and to get feedback on what will and will not work from an end-user perspective.

- **Determined Best Platform**
  - Based on identified needs, it was determined that the best solution was a custom design, so our IT department built the web-based platform for the Crisis Management System (CMS).

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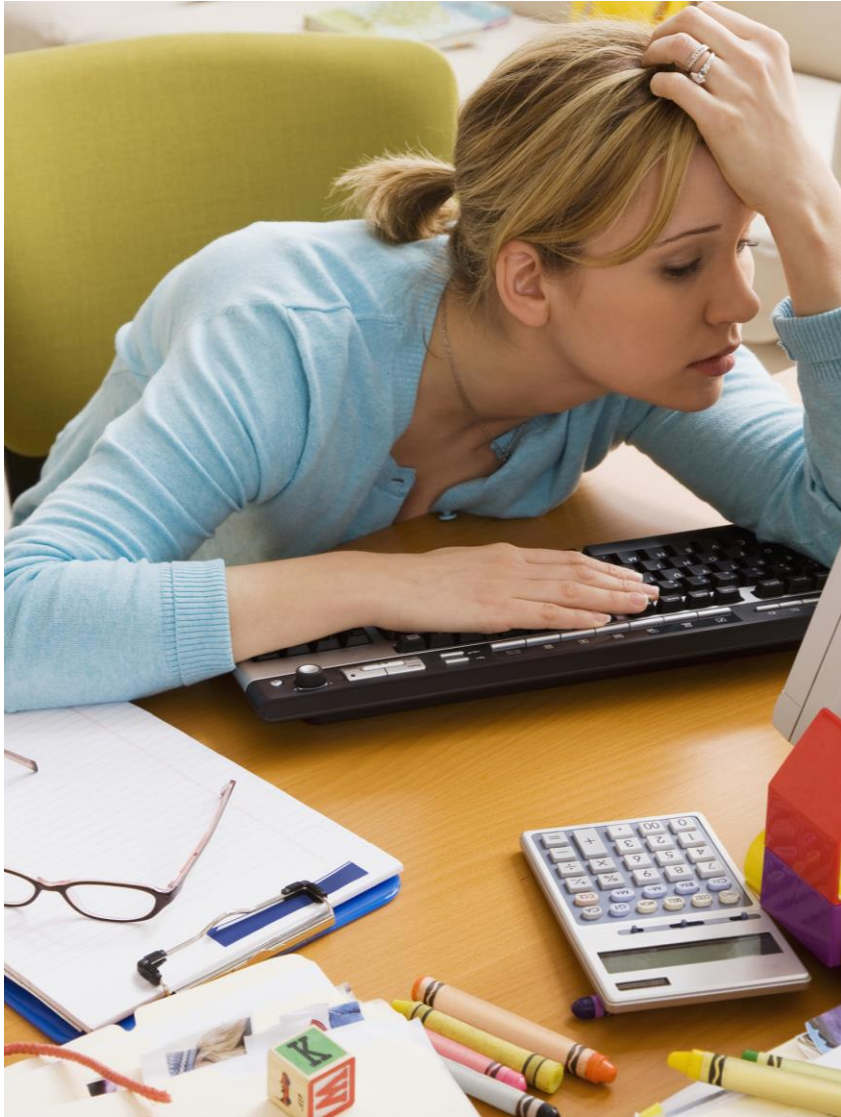
Crisis Management System – How Easy Was it to Create?

Took lots of time, collaboration, patience, and grace! Testing, testing, and more testing before official roll out!

Liaison between leadership, IT, and Crisis Providers
- Frequent demos/conversations with both leadership and crisis providers to ensure payer source and provider needs are met to the extent possible.

IT Develops a Platform
- Our internal IT team did all coding and developed all needed reports.

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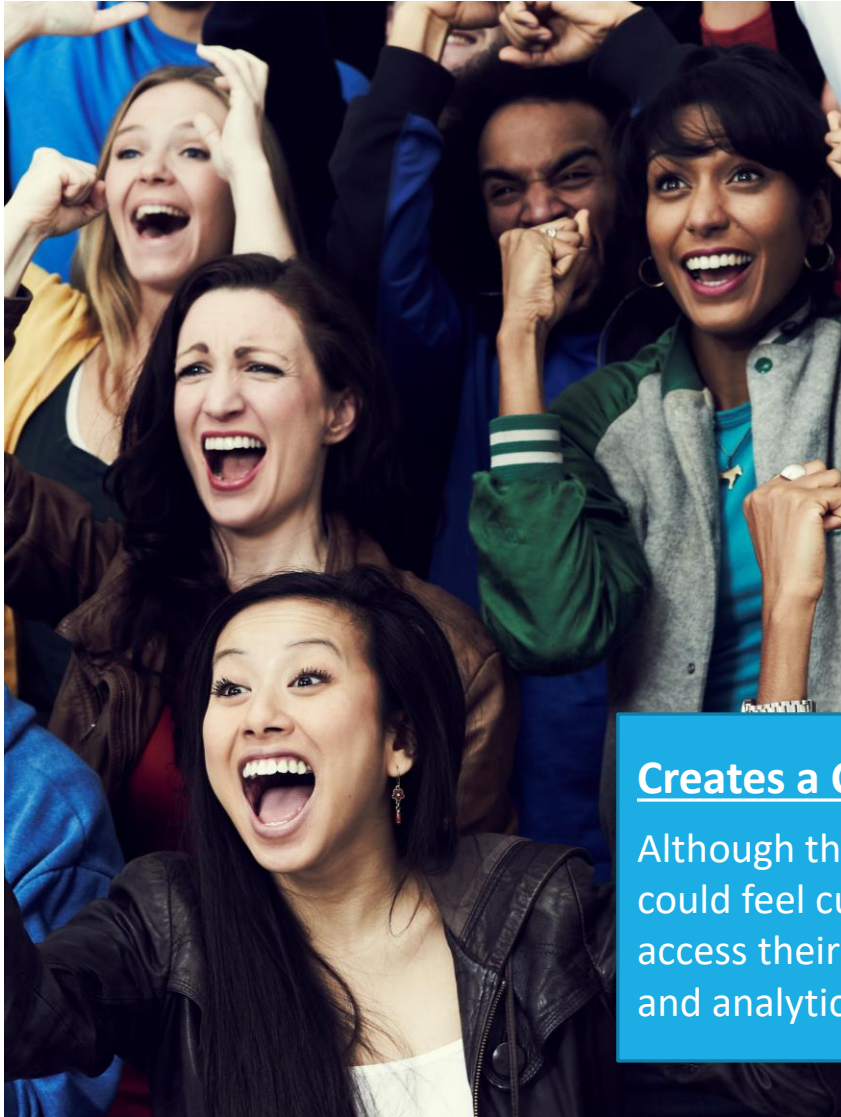
How Easy is it to Use the Crisis Management System?

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.

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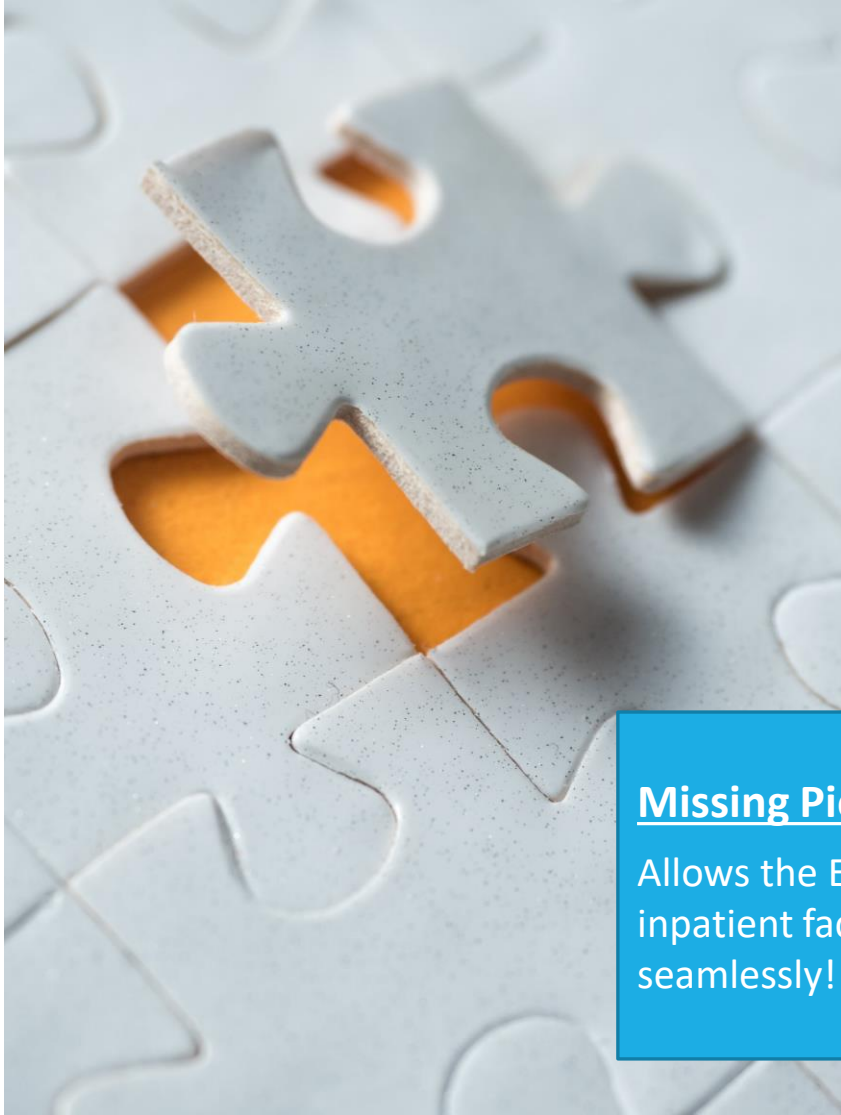
Patient Bed Matching (PBM) System

New to TN, this system provides a web-based platform for electronic referrals from the sending facility to the psychiatric inpatient facility. Designed to reduce Emergency Department (ED) bed boarding, it also provides TN's crisis providers and psychiatric inpatient admission units lots of efficiencies by reducing phone calls and lost FAXs.

Missing Piece to the Puzzle

Allows the ED, crisis provider, and psychiatric inpatient facility to communicate regarding referrals seamlessly!

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What Problem(s) Does PBM Solve?

Decrease Placement Times
- Reduce the amount of time a person is waiting in the Emergency Department (ED) for psychiatric inpatient placement.

Reduce Labor Involved in Placement
- Quickly locate an accepting inpatient provider rather than making multiple phone calls and sending multiple FAXs.

Improve Admission Unit Throughput
- Receive all information through one portal. Communicate seamlessly with both the ED and crisis provider.

Access Analytics that Drive Improvement
- Monitor placement times, reasons for denial, capacity issues, and much more.

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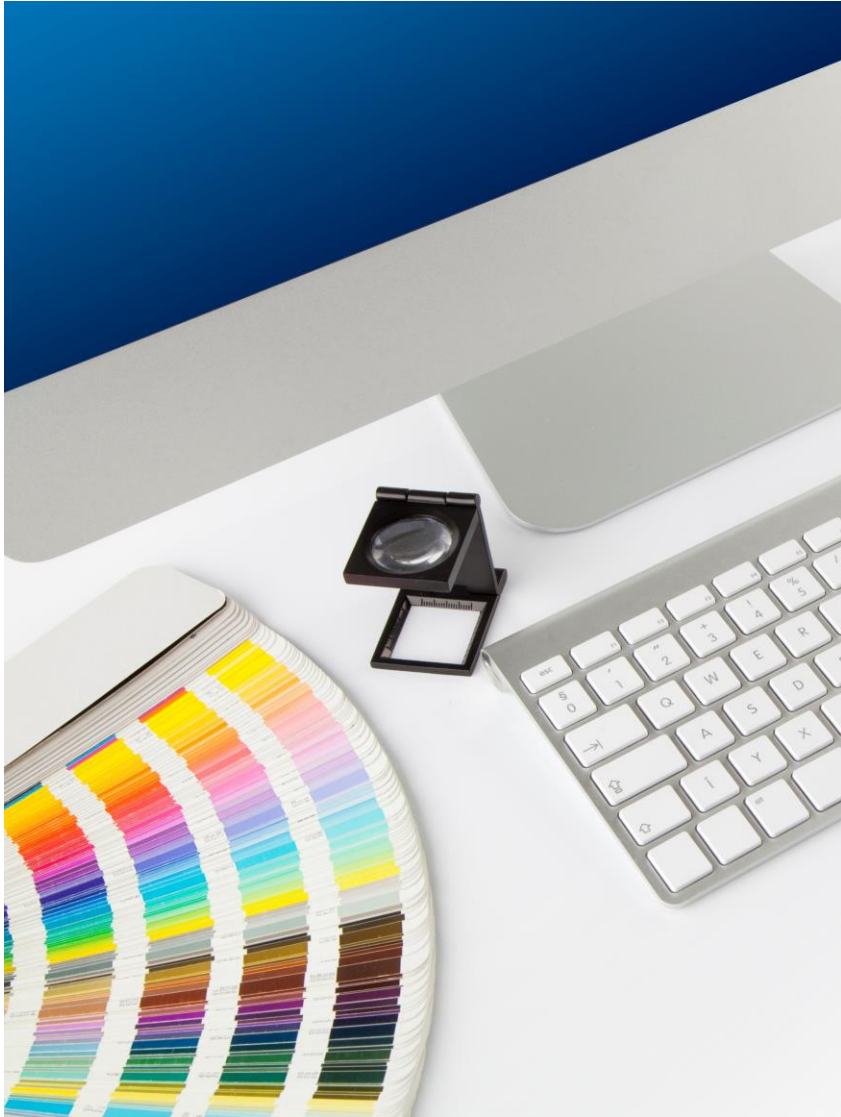
Patient Bed-Matching System: How Easy Was it to Create?

Took lots of collaboration and several years of planning and development, but keep in mind progress was delayed by COVID-19!

Research Existing Platforms
- TN landed on eTelic, which is used in Virginia as the web-based platform.

Modify Platform to Meet Tennessee's Needs
- Frequently meet with stakeholders to identify needs specific to Tennessee's system. Work with vendor to make needed changes. Test, test, test. Communicate, communicate, communicate.

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Patient Bed-Matching System: How Easy is it to Operate?

Much easier than placing a bunch of phone calls and sending a bunch of FAXs.

- Referrer places an inquiry that returns results matching the needs of the patient.
- Allows referring agency to reach out to as many hospitals as desired to inquire about interest.
- Clinical documents can be uploaded directly into the system.

Patient Bed-Matching (PBM) System

- Search one area of the state or statewide for an available bed.

- Inpatient facilities build a profile to indicate what they can and cannot accept.

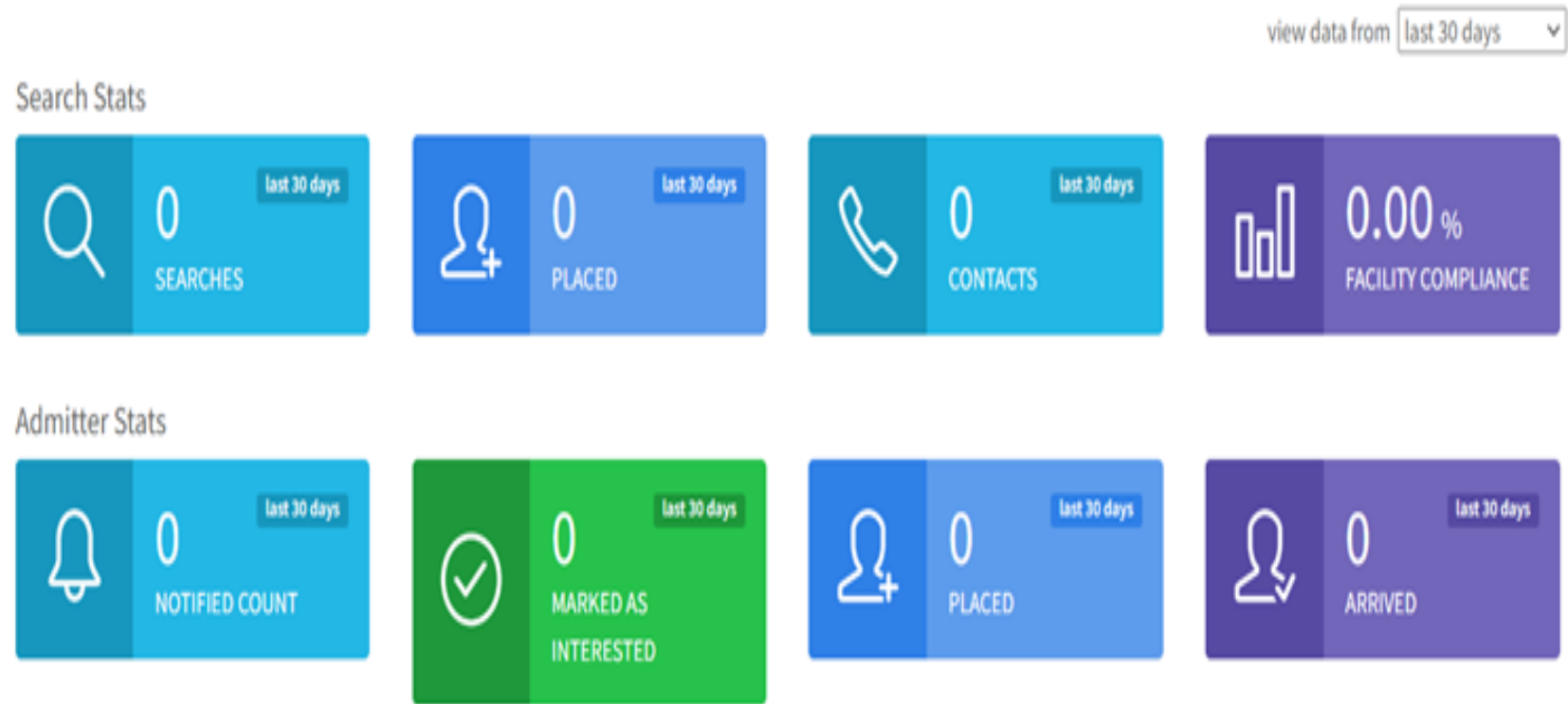- Requires manual update of bed capacity at least twice daily to be of benefit.

Real-Time Notifications to Inpatient Facility

Inpatient facility can decline or express interest for each referral within the system.

Patient Bed Matching (PBM) System – Ease of Use

- Quick and easy analytics always in view

- More detailed reports available to run on demand

Lessons Learned

- Collaboration is a must!

- Develop a game plan for buy-in!

- Communication is the key to success!

- No such thing as over testing before Go-Live!

- There will be bumps along the way, change is hard!

The End-Game is Worth It:
The hard work and heartburn are worth it in the end! Hang in there and don't give up!

TN Department of
Mental Health &
Substance Abuse Services

Let Us Know if You Have Questions!

Whatever you're trying to communicate, I'm always happy and never too busy to help. Don't hesitate to reach out!

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Questions?