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Crisis System Optimization

RI International Consulting

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I. Goals of Consultation

Goals of consultation between the Utah Division of Substance Abuse and Mental Health and RI International focused around optimizing the Utah crisis system. RI International is a leader in the use of crisis system best practices from across the country. The specific outcomes desired for the consultation, focused on the creation of a capacity plan utilizing the *Crisis Now* model via voluntary provider site visits, stakeholder interviews, population review, and data point evaluation.

II. Crisis Provider Meetings

In order to get a better understanding of the needs of the community in order to meet the goals of consultation, meetings with several key crisis providers and community stakeholders were held. The Stakeholders included:

- Division of Substance Abuse and Mental Health Leadership
- University Neuropsychiatric Institute (MCOT, Crisis Line, Receiving Center)
- Salt Lake County Behavioral Health
- Salt Lake City Police Department
- Salt Lake City Fire Department
- Davis Behavioral Health
- Weber Human Services
- University of Utah Emergency Department
- Wasatch Mental Health
- Orem Police Department
- LDS Hospital Access Center
- State Representative Steve Eliason
- Governor's Suicide Prevention Task Force

Key concepts that emerged from these meetings centered around the current crisis needs throughout the State. The current model relies heavily on Emergency Rooms and Law Enforcement to provide crisis services. The current system operates crisis services through the Local Mental Health Authorities (LMHA's) who are responsible to provide their own crisis services to members of their catchment area. Each LMHA operates independently of the other LMHAs and their crisis services. Provider agencies demonstrate significantly different protocols and procedures for the delivery of crisis services.

Based on these stakeholder meetings, it is evident that there is strong support for optimizing the crisis system in Utah. There is a desire from all stakeholders to support initiatives designed to improve access to

care. From a readiness perspective, Utah demonstrates the traits needed to move into a more evolved crisis system. It has legislative support for Mobile Crisis Outreach Team optimization as well as Crisis Call Center centralization. It has some form of all three *Crisis Now* components and community stakeholders are able to verbalize both the desire and intent to work on improving the crisis system.

III. Crisis Now Capacity Model

Crisis Now: Transforming services is within our reach. Is a white paper that was sponsored by the National Action Alliance for Suicide Prevention's Crisis Services Task Force in 2016. The paper focused on learning from the best crisis practices throughout the United States. It is the current model that is endorsed by the National Association of State Mental Health Program Directors (NASMHPD). The whitepaper demonstrates the importance of an integrated crisis system that has four strong components.

The four components are:

1. Regional or statewide crisis call centers coordinating in real time;
2. Centrally deployed, 24/7 mobile crisis;
3. Short-term, facility-based crisis stabilization programs; *and*
4. Essential crisis care principles and practices. These practices include: a recovery orientation, trauma-informed care, significant use of peer staff, a commitment to Zero Suicide/Safer Suicide Care, strong commitment to safety for consumers and staff, and collaboration with law enforcement.

Based on population data, data collected in over a decade of crisis episodes in other parts of the country, and Utah stakeholder interviews, RI International was able to create a capacity model for Utah based on the *Crisis Now* recommendations. Below is the model as created by RI Internationals Capacity Modeling Algorithm. This algorithm has been vetted by member of the Crisis Services Task Force that worked on the creation of the original *Crisis Now* paper for the National Action Alliance for Suicide Prevention. The consultant worked with Division staff to obtain 16 data points. In areas where data points were not available, estimates using standards found in other comparable states were utilized.

Crisis Now Capacity Model			
	Baseline	Utah Currently	Fully Evolved
Inpatient beds	1,669	861*	469
Sub-Acute beds	0	8	122
23 hour Observation Recliners	0	26	72
Mobile Teams	0	7	16
		*Based on *State-By-State Guide To Estimating Psychiatric Bed Distribution* - 2017 Open Minds Report	

*Note: Baseline refers to anticipated Inpatient Capacity needed if no elements of the *Crisis Now* model are available

Utah currently has elements of the Crisis Now model. These elements are evident in the most urban areas within 50 miles North and South of Salt Lake City. Citizens in more rural areas of Utah do not have the same ease of access to crisis services. The current elements in play are:

- Mobile Crisis Outreach Teams (MCOT);
- Crisis Call Centers; *and*
- Facility-Based Crisis Stabilization programs

However, the elements are in numbers that are inadequate to fully support the community.

Facility Based Crisis Programs

As the model shows, Utah is currently underserved in Sub Acute beds and 23-Hour Observation recliners. The Sub-Acute level of care is an alternative to inpatient hospitalization that specializes in short term crisis resolution. A Sub-Acute unit works with both voluntary and involuntary patients to provide safety and crisis intervention with a strong focus on psychiatric and recovery services. Additional emphasis is placed on community connection and strong discharge planning. 23-hour observation units act as psychiatric emergency room specializing in rapid assessment, evaluation and stabilization. It is the first step into facility based crisis work with the majority of patients being returned to the community within 24 hours. Those that are not able to be stabilized in 24 hours are transferred into Sub-Acute beds. Sub-acute beds and 23-hour observation recliners make up the facility based crisis component of the *Crisis Now* model. These facilities act as a receiving center for police drop-offs, emergency department transfers and walk-in crisis services. A true *Crisis Now* facility would accept 100% of first responder drop offs, have a purposeful low length of stay and a focus on stabilizing the crisis and returning a person to community supports.

As a result of the lack of adequate facility based crisis capacity, emergency departments, jails and inpatient psychiatric beds have been over-utilized by those in crisis in Utah. During crisis provider site visits, it was discussed that the police and EDs often act as the primary crisis resource, especially in more rural counties. This reliance on non-specialized services causes an undue burden on local resources and increases community risk. In addition to improving access to care and improving community safety, the goal of

optimizing a crisis system is to decrease the need for inpatient acute beds that are often over-utilized as a result of lack of capacity in lower levels of care. Adding in these lower intermediary levels of care realize substantial decreases in overall behavioral healthcare spending while providing a service that better meets the clinical needs of a person in crisis by allowing them to be served in a faster and more specialized manner.

The data demonstrates that Utah has an overabundance of inpatient beds. The *Crisis Now* model would estimate that Utah has 392 more inpatient beds than capacity would require in a fully evolved system. The Division estimates the cost for an inpatient bed at $1,000 per day. Utah would be well served by shifting the costs of those additional inpatient beds into supporting the creation of 23 hour observation recliners and Sub-Acute beds.

Mobile Crisis Outreach Teams (MCOT)

True MCOT teams operate in the community with the purpose of stabilizing persons in crisis in their home. A general benchmark of successfulness of MCOT programs is a 70% - 75% diversion rate from a higher level of care. Mobile Crisis Outreach Teams relieve law enforcement from the role of caregiver of last resort in behavioral health emergencies. One MCOT team in the *Crisis Now* model consists of a licensed clinician paired with a bachelor's level crisis worker or certified peer. One MCOT team equal 40 hours of service per week. In any one area, providing 24/7 dedicated coverage would require 4.2 teams. These two-person teams rely less on law enforcement to stay on scene as security and increase likelihood of engagement, an essential component of crisis work.

In Rural areas of Utah, the above model is not demonstrated. Instead, outpatient clinicians generally will be "on-call" and if their switchboard takes a call, the clinician will be notified and call the person in crisis back. If a face to face intervention is warranted, the clinician will go to the scene. While common throughout the country, this model is ineffective in multiple ways. First, the one-person aspect ensures that for a high number of cases, law enforcement must still be involved to support the clinician around safety. Second, Emergency Departments often become the place of intervention as clinicians will often default to asking the person in crisis to go to an ED for evaluation. In more urban areas of Utah, the MCOT system is working with a higher fidelity to the *Crisis Now* model. There is however, no 24/7 coverage as the MCOT do not work on the overnights.

Current number of MCOT teams is based on Division report, we see in the above graph that Utah has about half of the MCOT teams that would be expected based on anticipated yearly crisis events through census analysis alone. Potential distributions of teams will be discussed further down in this report.

Crisis Call Center

In the *Crisis Now* model, the crisis call center acts as a centralized hub for all crisis support services. In order to accomplish this, an "air traffic control" model must be deployed. In this model, the call center has access to real-time information on every open crisis resource in the region from open beds to available MCOT teams. In order to fully act as a hub, the *Crisis Now* Model proposes Regional or Statewide call centers. This is due to economy of scale (staffing/technology), as well as the fact that persons in crisis often travel outside their county for support leading to potential continuity of care issues or lack of communication.

Currently, Utah has multiple call centers operated by the LMHAs. None of the call centers have access to real time resource data throughout the state. In an optimized system, one or two call centers would serve the entire state. Based on HB 41, it appears that Utah is moving toward this system optimization.

Visual Representation of the *Crisis Now* Model
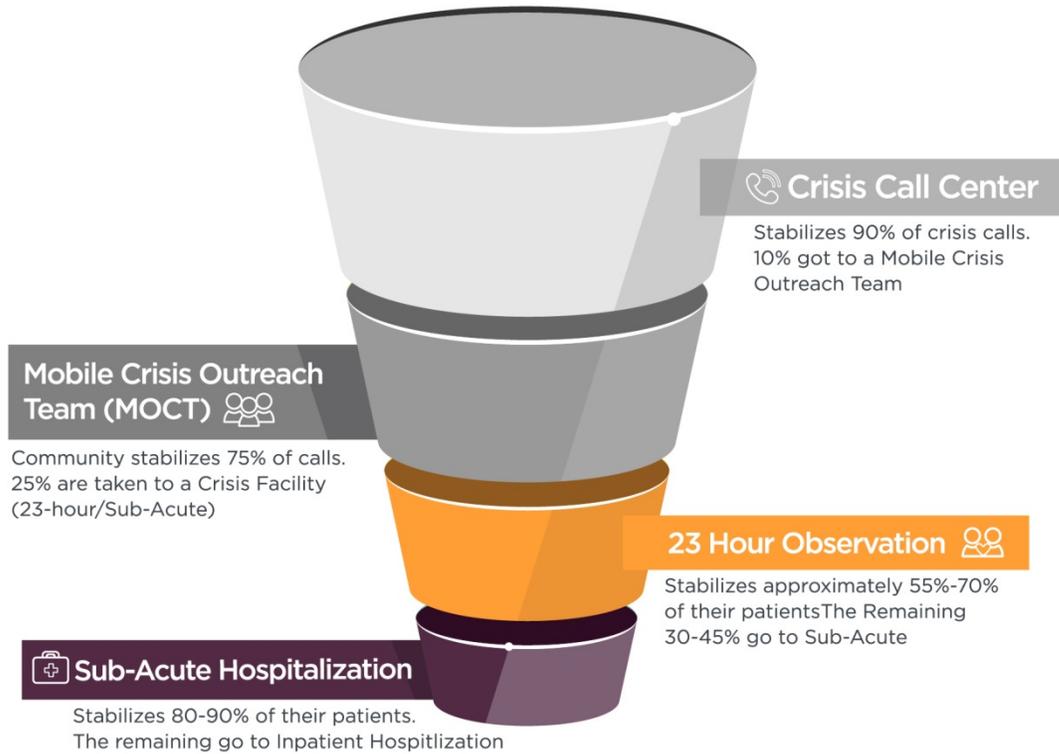
IV. Crisis Now Business Model

Business Model				
	Utah Currently	Cost	Fully Evolved	Cost
Inpatient beds	861	$298,551,750	469	$162,625,750
Sub-Acute beds	8	$1,839,600	122	$28,053,900
23 hour Observation Recliners	26	$6,049,875	72	$16,753,500
Mobile Teams	7	$1,400,000	16	$3,200,000
Totals		$307,841,225		$210,233,150

The table above corresponds to the following assumptions:

Based on the following Estimates
• 95% Inpatient Occupancy Rate (from Division) • $1,000 Hospital Inpatient Per Diem (Estimate from stakeholder feedback) • 9.8 day Average Length of Inpatient Hospital Stay (from Division) • $700 Crisis Sub-Acute Per Diem (Consultant Recommendation) • 3.0 day Average Length of Stay of Crisis Sub-Acute Stay (*See Explanation Below*) • $750 23-Hour Observation Per Diem (Consultant Recommendation) • 0.8 Day Average Length of Stay of 23-Hour Observation (*See Explanation Below*) • $200,000 per full year of a Mobile Team (From Division). A Mobile Team Consists of one 2-Person Team Working a 40 hour week. 24/7 Coverage in a Particular Location Would Require the Equivalent of 4.2 Teams at a Cost of $840,000 *Average lengths of stay for crisis facilities are based on standard benchmarks for Arizona, as Utah does not currently have **pure** *Crisis Now* facilities to benchmark against.

As is demonstrated above, increasing the number of crisis facility beds radically decreases the overall spend for inpatient acute care. This is due to lower daily rates and lower lengths of stay. It is important to note that the estimated system savings of $97,608,075 does not correspond to one funder. These savings are spread to all funders of inpatient services.

The above savings does not include anticipated savings to Emergency Departments, Police Departments, and Jails in working with those in a mental health crisis as a result of crisis system optimization.

Beyond the business case that optimization would result in overall lower healthcare spend is the fact that an optimized system would improve immediate access to care and an overall improved care experience for those in the midst of a crisis.

V. Observations

Access to both Division staff as well as agencies that volunteered to have site visit by the consultant led to multiple observations in regards to the crisis system of Utah. The following overall observations were made.

Some observations are just noted, others will have a correlating recommendation attached further in this report.

A Discrepancy in Access to Care Between Rural and Urban Areas

Utah has a diverse population spread with the overwhelming majority of the population living within 50 miles North or South of Salt Lake City. The more rural counties frequently operate crisis services as an add-on to traditional outpatient services instead of true stand-alone services. An example of this model would be for a rural area outpatient clinician to be "on-call" to call back a citizen in crisis after regular hours. The clinician would then triage the case and determine an appropriate disposition. This type of system is incredibly common in many counties across the country with low population numbers. It does however increase the likelihood of ED visits and police intervention. It is also remarkably different than some of Utah's urban areas that incorporate 24/7 call centers and 16 hours/day of MCOT teams.

Utah is Moving Towards an Optimized Crisis System

The inclusion of H.B. 41 (Mental Health Crisis Line Amendments) and S.B. 31 (Mobile Crisis Outreach Team Act) demonstrate that Utah is moving away from just discussion and thought around crisis services being an integral component of an overall public safety plan into a commitment by action. These bills and corresponding funding create structure and regulation around two of the main components of the *Crisis Now* model.

Lack of True Crisis Receiving Centers (23-Hour Obs / Sub-Acute)

Utah currently offers no true crisis receiving centers that follow the *Crisis Now* Model of 100% acceptance of Law Enforcement referrals with ability to work with both voluntary and involuntary patients. Both UNI and LDSH are operating a crisis facility with some degree of skill in this area, but there is no true fidelity to the *Crisis Now* model. Facility Based Crisis Centers are a necessary part of the crisis system as they are built to work with the highest acuity members of the community when lower levels of support prove ineffective or safety cannot be assured in a less restrictive way. As a result of this, three crisis system failures become evident:

• Emergency Departments take on a receiving center role which is suboptimal for the person in crisis as well as the ED itself.
• Private and State psychiatric beds become over utilized when a lower level of care would be the most appropriate course of treatment if it were available.
• Law Enforcement Officers spend an excessive amount of time with behavioral health cases as transfers to EDs and Jails generally take longer than drop-off at a *Crisis Now* crisis receiving center.

Lack of a Crisis Call Center "Hub"

In the Crisis Now model, the crisis call center acts as a centralized hub for all crisis support services in the region/state. In order to accomplish this, an "air traffic control" model must be deployed. In this model, the call center has access to real-time information on every open crisis resource in the region/state from open beds to available MCOT teams. Currently, Utah has multiple call centers operated by the LMHAs. None of the call centers have access to real time resource data throughout the state.

VI. Considerations from Utah Department of Human Services for serving Children, Youth, and Families

The Crisis Now model in its current format does not addressed components beyond the three elements that have been listed throughout this report. However, the Utah Department of Human Services has started an initiative to serve children, youth, and families that the Consultant feels supports the ideals/goals behind the Crisis Now model and deserves a deeper look. Although Utah's Crisis System is a lifespan approach, components are largely focused on adults. Many elements in the plan that are pertinent to children are served through Utah's SMR model. This section summarizes alignment between RI International's capacity plan for the adult system and the SMR model for children.

Stabilization and Mobile Response (SMR) Services are designed to maintain children and youth safely in their current living arrangement prevent repeated hospitalizations, unnecessary emergency room visits and law enforcement involvement, and stabilize the current behavioral health needs. Services are provided by a team comprised of a mental health professional and a care manager or family peer support and are available to all children, youth and families in in the two regions where deployed regardless of funding or custody status.

Expected outcomes include reduced reliance on law enforcement, detention facilities and crisis services; a reduction in unnecessary emergency room visits thus avoiding trauma for children, youth and families and increased cost of medical care; effective crisis de-escalation and stabilization; working with children and families early in the crisis cycle offers earlier interventions and access to needed services. All of these outcomes correspond strongly to *Crisis Now* outcomes. They also share the theme of providing the right level of care at the right time by meeting the person in crisis where they are.

This content below reviews some considerations around services specific to children, youth and families that would augment overall recommendations:

Adult System	According to RI International's capacity plan, the current model relies heavily on Emergency Rooms and Law Enforcement to provide crisis services. Optimization of the system would use short-term care facilities to provide crisis services, thus reducing impact on the health and legal systems.
Child System	*Prior to SMR, Utah's model for serving children in crisis has also relied heavily on Emergency Rooms and Law Enforcement to provide crisis services. Data from Utah's Northern Region1 show implementation of the SMR model has diverted at least 20 children away from Emergency Rooms and Law Enforcement interventions each month.*

Adult System

Optimization of the adult system includes the development of facilities that will offer assessment, evaluation and stabilization, to adults, with the intent of returning clients to the community as quickly as possible.

Child System

Utah's SMR program offers assessment, evaluation and stabilization to children and their families in their homes, with no disruption in community placement. In 2018, 80% of children who received SMR stabilization services in Utah's Northern region were able to remain in their homes. SMR has been fully implemented in Utah's Northern Region and partially implemented in Utah's Southwest region. Statewide implementation is the goal.

Adult System

The survey of current capacity highlighted the fact that citizens in rural areas of Utah do not have the same ease of access to crisis services as citizens in urban areas do. Optimization of crisis services would include more services in rural areas.

Child System

In regions in which the SMR model is implemented, children in rural and urban areas access the same services, through the same process. Services available through the SMR model, to all children, include crisis line access, mobile deployments, short-term crisis intervention and intensive stabilization services provided in-home.

Adult System

Current services from Mobile Crisis Outreach Teams, which primarily serve adults, do not all operate overnight. Optimization would provide 24/7 coverage. And include the ability to serve children, youth and families for crisis outreach but not the follow up of intensive in-home stabilization services currently provided in the SMR model
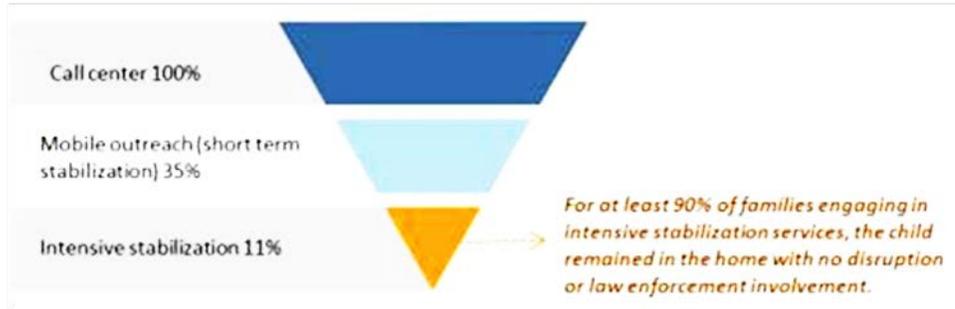
Child System

The SMR model is delivering 24/7 triage services in the two regions in which it has been implemented including in-home stabilization services.

Adult System

This report recommends that Utah fully implement the Crisis Now model in which 90% of crises are resolved through the call center and the remaining 10% receive mobile out-reach; Mobile outreach services would stabilize 75% of those cases and 25% transferred to a crisis facility.

Child System

Northern Region's data indicate that Utah's SMR service model has resulted in 65% of crises resolved through the call center and 35% recommended for mobile outreach (short-term stabilization). A total of 11% of crisis calls received intensive in-home stabilization services.

Call center 100%

Mobile outreach (short term stabilization) 35%

Intensive stabilization 11%

For at least 90% of families engaging in intensive stabilization services, the child remained in the home with no disruption or law enforcement involvement.

Adult System

Utah currently has multiple call centers operated by Local Mental Health Authorities (LMHAs), none of which share resource data in real time. The *Crisis Now* Model suggests that Regional or Statewide call centers be developed to centralize crisis calls.

Child System

SMR model includes a single state-wide number (1-833-SAFE-FAM). Calls to this number are geo- routed to regional hubs.

Adult System

The final recommendation from RI International was to standardize crisis protocols to ensure consistent adherence to best practices. Optimization of services would include standardized protocols, indicators and reporting formats

Child System

Utah's SMR model specifies standardized protocols for triage, mobile deployment, short-term and intensive stabilization practices. Additionally, the model requires data collection in each region that adheres to a statewide data specification. Data from regions are summarized each month and used to guide quality and program optimization.

VII. Recommendations

Optimize Crisis Capacity

- Create four crisis receiving centers with ten (10) 23-hour observation recliners that are each connected to a 16-bed sub-acute facility. Consultant recommends these facilities strategically located throughout the urban areas of the state. Capacity modeling indicates that the demand in the states far exceeds this number. Consultant recommends that these services are staged and phased with a new center coming online every 6-12 months with a re-verification of needed capacity every 6 months**.**

- In rural areas, create smaller (6-recliner) 23-hour observation facilities. These would be designed to support their communities with immediate access to crisis services and fast triage. Capacity modeling suggests that 6 recliners would accommodate a population of 100,000. Since most Utah counties fall under this threshold, partnership between counties would need to occur. In addition, relationships between sub-acute and acute providers would need to occur for those 30% of patients that would require a higher level of care once seen in a 23-hour facility.
- Move toward one call center serving the entirety of Utah. In the Crisis Now model, Crisis Call Centers operate at a Statewide or Regional level. With the population in Utah being centrally located within 50 miles North or South of Salt Lake City, this is a natural service area for a Crisis Call Center. Additionally, the economy of scale for a separate call center to handle rural calls is not apparent. Consultant would recommend centralizing the Crisis Call Center to one provider that would operate statewide with the technology to track every active crisis case and resource as well as deploy those resources. This call center would need to act as a hub for all crisis programs and act as sole dispatching service for MCOT. The prime example of the hub concept is the Georgia Crisis and Access Line (GCAL).
- Consultant strongly advocates for supporting rural LMHAs with the resources needed to operate two-person MCOT teams in an on-call roll. The addition of a certified peer or bachelor's level crisis worker would offer improved fidelity to the Crisis Now model and decrease use of local emergency departments and law enforcement resources.
- RI International would be supportive of Utah providers coming to view their working crisis facilities in Peoria AZ as a model for future Utah programs.
- Bring SMR Sercices to scale in the other three regions in Utah for statewide coverage.

Standardization of Crisis Protocols

- When multiple agencies are operating in ways inconsistent from each other, by definition, best practices are not followed. A statewide crisis work protocol workgroup should be created and overseen by the Division with the purpose of standardizing:
  - Crisis Protocols
  - Key Performance Indicators
  - Reporting Formats
  - Continuity of Care Agreements

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