THE CENTER
FOR HEALTH CARE SERVICES
Mental Health & Substance Abuse Solutions

MDRT Teams: Answering the Call to Community Crisis

Presented By

Dr. Jason Miller

Code for this Lecture

3007

Abstract

The Center for Healthcare Services has taken a collaborative approach to respond to mental health crises by creating multidisciplinary teams including mental health professionals, police officers, and paramedics. This lecture seeks to give the evidence base for the multi-disciplinary response team.

Goals and Objectives

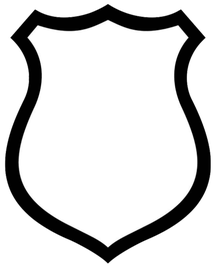
1. Discuss the collaboration used in the San Antonio Model.
2. Discuss the general way in which the medical community responds to mental health crisis.
3. Discuss the ways in which CIT officers do or not differ from untrained officers
4. Discuss the evidence base for MDRTs.

- Dr. Miller is the Crisis Response Medical Director for the Center for Healthcare Services in San Antonio, Texas.

- Dr. Miller has no financial disclosures regarding the information presented in this lecture.

MULTIDISCIPLINARY TEAMS

Multidisciplinary Team Roles



MHU Role

- Make initial contact with individual
- Secure the scene and assure scene stays safe during entire call
- Perform Emergency Detention or courtesy rides if necessary

Paramedic Role

- Provide complete medical assessment of individual
- Provide on scene safety assessment of environment if necessary

Clinician Role

- De-escalate and provide complete mental health assessment
- Connect to longer term resources as needed/appropriate

Peer Support/Follow Up Role

- Connect to wrap around services (benefits, substance use support, medication management)
- Establish long term rapport with the patient

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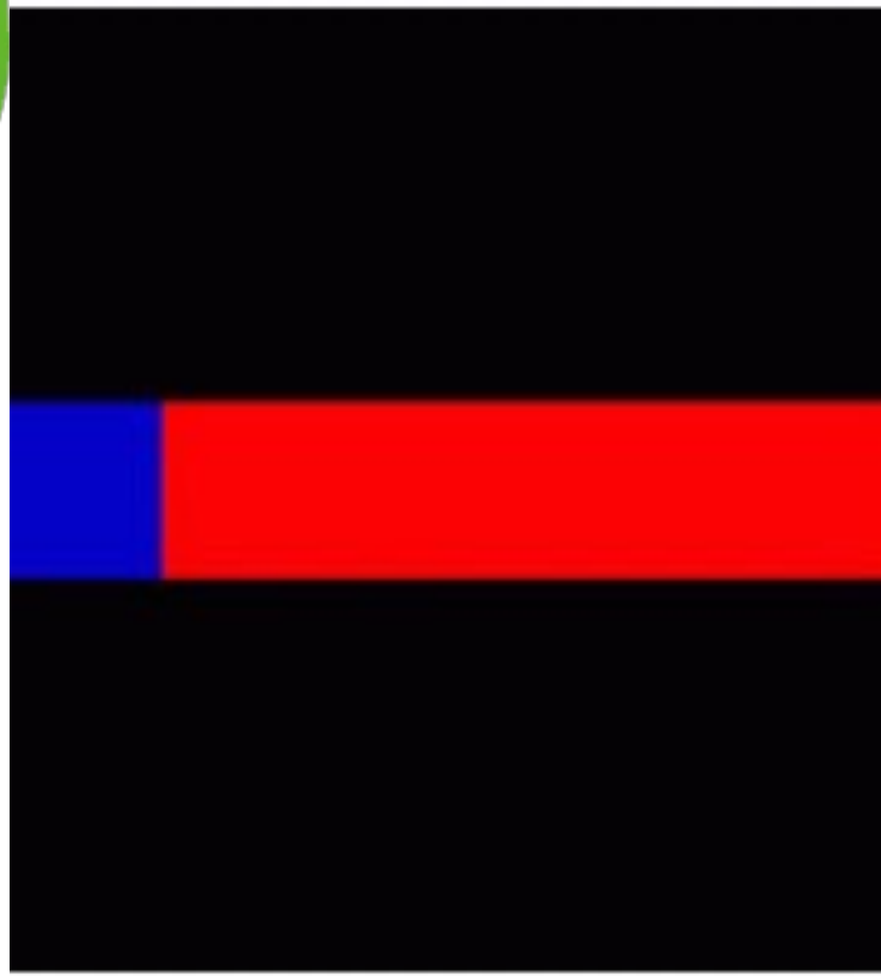
Multidisciplinary Teams



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Evolution of Multidisciplinary Teams

Team Name	Year Established with STCC	Agencies Involved	Threat/ 911 High Utilizer	High Volume Emergency Detention	Follow up	Response	Peer Support	Medical Support	LE Support
PICC *Program for Intensive Care Coordination*	2019	SAPD SAFD CHCS		X	X			X	X
CCSI *Chronic Crisis Stabilization Initiative*	2019	SAPD CHCS	X		X	X			X
SMART *Specialized Multidisciplinary Alternate Response Team*	2020	BCSO Acadian, Bexar Co EMS, CHCS			X	X	X	X	X
SA-CORE *San Antonio Community Outreach & Resiliency Effort*	2021	SAPD SAFD CHCS			X	X		X	X

SAN ANTONIO POLICE

SAN ANTONIO FIRE DEPT

PICC

PROGRAM FOR INTENSIVE CARE COORDINATION

THE CENTER FOR HEALTH CARE SERVICES

Mental Health & Substance Use Solutions

Where hope and healing begin.

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Program of Intensive Care Coordination (PICC)

- Initiated in 2019, a collaborative with Southwest Texas Regional Advisory Council (STRAC), SA Police Department, SA Fire Department and CHCS. Funded by STRAC Consortium.
- PICC is staffed with 4 QMHP's, 0.5 Psychiatrist and 0.5 LVN. Mostly field based with SAPD - Mental Health Officers and SA Fire Department Mobile Integrated Health Unit
- Primary role is to provide aggressive referral, linkage and transition to next level of care
- Target population are individuals who have had more than 6 Emergency Detentions or frequent users of our Psychiatric Emergency Services (PES) System within the last 12 months.
- Goal: Reduce EDO's therefore reducing the utilization of ER's and PES beds.
- We hope to manage a caseload of 100 in this program

Capital Healthcare Planning & Meadows Mental Health Policy Institute Analysis (PICC): *2021*

Process Overview – Evaluating PICC Effectiveness in Bexar County

- The effectiveness of PICC is being evaluated three ways:

1. **Describing PICC clients' utilization patterns for ER visits, EDOs, PES encounters, and inpatient admissions**

	Pre-PICC Average	Post-PICC Average	Reduction in Encounters	Efficiencies
ER Visits	7.98	2.06	5.92	**$781,000**
EDOs	8.85	1.21	7.64	**$1,884,000**
PES Encounters	0.60	0.02	0.58	**$149,000**
IP Admissions	4.02	2.90	1.12	**$1,718,000**
Total Efficiencies				**$4,532,000**
Net Efficiencies*				**$3,032,000**

*Net Efficiencies = Total Efficiencies less the cost of PICC program ($1.5M)

PROGRAM FOR INTENSIVE CARE COORDINATION 2021

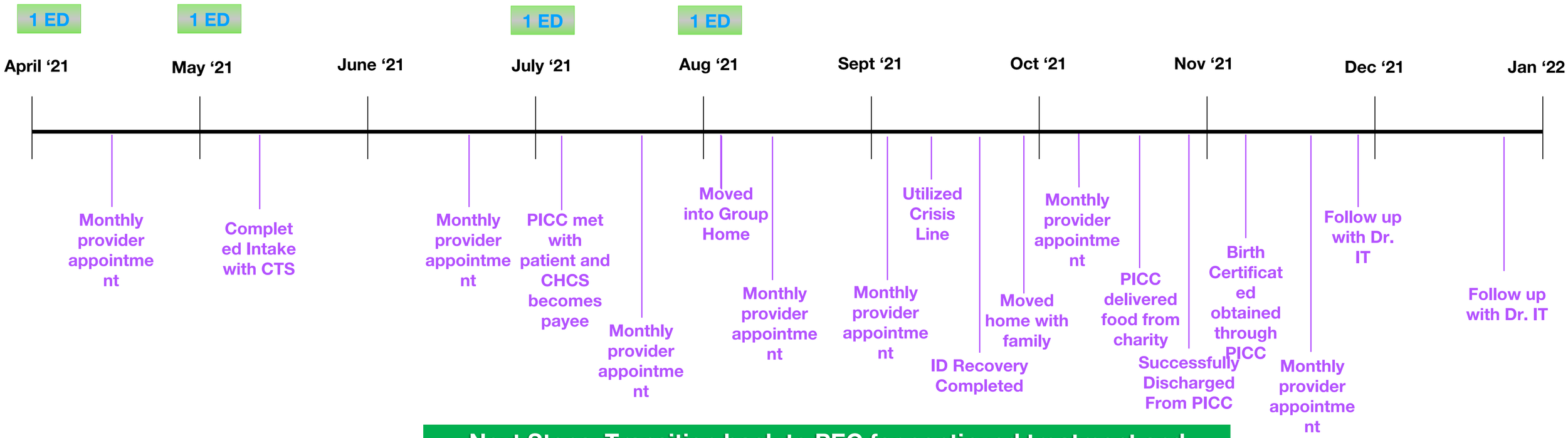
Added to PICC
February 2021

Patient Profile:
- 50-Year-old male
- Schizoaffective, Bipolar Type
- Type 2 Diabetes

Patient Utilization: January ‘20- December ‘21:
- PD Contacts – 289
- Emergency Detentions – 9
- EMS: PICC and EMS Runs – 73

STCC Program Utilization
- Law Enforcement Navigation

PICC Contacts 12/1/20-12/1/21:
Phone with Patient – 25
In Person with Patient – 81
Phone with Other – 6
In Person with Other – 7
Doctor Appointment with Patient – 8
Total PICC Contacts: 127



Next Steps: Transition back to PEC for continued treatment and continue to maintain stable housing.

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MAPPS

- Initiated in 2019 in Partnership with San Antonio Police Department and funded by City of San Antonio (COSA)
- MAPS has Licensed Clinicians / Mostly field based working with SAPD-Mental Health Officers
- Goal is to connect clients to services for the first time or direct them back to services
- Consumer focus: Folks considered High Threat Individuals identified by SAPD Fusion Center. If mental health is a concern, our clinicians become involved.
- Examples: Individuals with high police contacts / high usage of the 911 system / have high number of Emergency Detentions
- With this program there is a focus on helping the chronic homeless population

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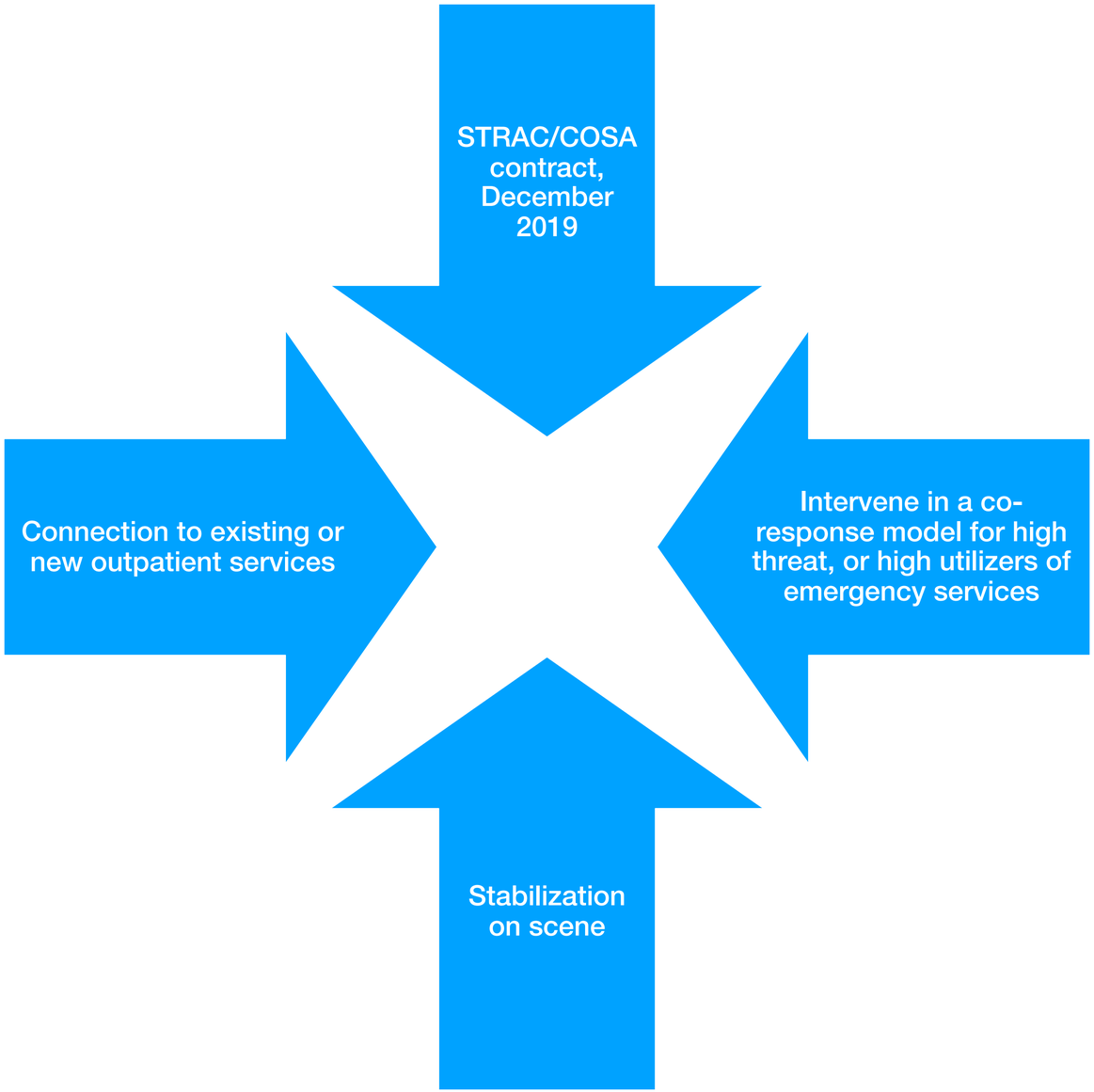
Program Details



Mobile Crisis Outreach Team (MCOT)

- Since 2002 CHCS has funded adult and children's mobile outreach teams
- Provide face-to-face crisis assessments, crisis intervention services and short term intensive mental health treatment and support for adults experiencing a psychiatric crisis.
- MCOT has multiple clinicians (QHMPs) with 24/7 coverage
- Goal is to provide screening and assessment for individual experiencing a crisis and to provide intensive interventions aimed at de-escalating the crisis and, whenever possible diverting away from psychiatric hospitalizations.

Specialized Multidisciplinary Alternate Response Team(SMART)

- Initiated in 2020 in collaboration with STRAC, Bexar County Sherriff Mental Health Unit and Acadian Ambulance. Funder is Bexar County
- Acadian provided van is utilized along with a Bexar County Sheriff Tahoe
- Focuses on Bexar County and the unincorporated areas
- Goal is to address 9-1-1 mental health related calls with a trained multidisciplinary team to divert individuals experiencing a mental health crisis away from jail, emergency departments and use the least restrictive treatment environment

Crisis Response Current practice

Emergency Rooms

Emergency Rooms

- For many people experiencing an acute mental health problem, attending the emergency department (ED) of a local genera hospital is the default option in a crisis (Fossey), and in some mental health systems primary care referrals may be directed to this setting Despite efforts to develop alternatives, mental health presentations to the ED have been reported to be on the rise across the US. (Santillanes)

- Fossey M, Godier-McBard L, Guthrie EA et al. Understanding liaison psychiatry commissioning: an observational study. Ment Health Rev 2020;25:301-16.
- Santillanes G, Axeen S, Lam CN et al. National trends in mental health-related emergency department visits by children and adults, 2009-2015. Am J Emerg Med 2020;38:2536-44.

Despite these high levels of use, EDs are often reported to be poor environments for mental health care. They tend to be hectic and may expose service users to long waiting times and distressing sights and sounds. Assessments take place in a very different and more institutional environment from service users' usual social context, and ED assessment has been reported to be more likely to result in hospital admission than when similar crises are assessed elsewhere(Cotton)

Cotton M-A, Johnson S, Bindman J et al. An investigation of factors associated with psychiatric hospital admission despite the presence of crisis resolution teams. BMC Psychiatry 2007;7:52.

- Negative attitudes towards people with mental health presentations have frequently been reported(Clark), especially towards those who present on multiple occasions following self-harm and who may have a “personality disorder” diagnosis (Rayner)

- Clarke D, Usick R, Sanderson A et al. Emergency department staff attitudes towards mental health consumers: a literature review and thematic content analysis. Int J Ment Health Nurs 2014;23:273-84.

- Rayner G, Blackburn J, Edward KL et al. Emergency department nurse’s attitudes towards patients who self-harm: a meta-analysis. Int J Ment Health Nurs 2019;28:40-53.

Psychiatric Emergency Services

- Unlike the standard ED approach of triage and transfer, PES have extra capability to observe and provide intensive treatment, typically for a period of up to 24 hours, aiming to stabilize the crisis within this time and reduce the need for admission. Routine data on the impact of a PES serving a large area of California and linked to several EDs indicated that it substantially reduced both ED waiting times and admission rates.

- Zeller S, Calma N, Stone A. Effects of a dedicated regional psychiatric emergency service on boarding of psychiatric patients in area emergency departments. West J Emerg Med 2014;15: 1-6.

- Crisis assessment services may also be situated away from the general hospital in freestanding centres, within community mental health service premises, or co-located with specialist psychiatric hospitals. Evidence is lacking regarding which locations are best and for whom.

Assessment at Home

- Assessment at home may be more feasible and less frightening or distressing for many. It enables evaluation of someone’s living situation, current coping, and potential risks in the home. It can help clinicians to consider social precipitants of a crisis, which may otherwise be overlooked(Polak).

- Polak P. Patterns of discord: goals of patients, therapists, and community members. Arch Gen Psychiatry 1970;23:277-83.

- For these reasons, home-based crisis assessment services have been developed as part of the community psychiatry movement, with “psychiatric first aid” multi- disciplinary teams in the Netherlands in the 1930s being an early example.

- Querido A. Community mental hygiene in the city of Amsterdam. Mental Hygiene 1935;19:177-95.

Multidisciplinary Teams

- Dedicated crisis resolution and home treatment teams (CRHTTs) have therefore been developed, with the sole function of providing assessment and short-term, multi-disciplinary home treatment for people during a mental health crisis. Pioneered in the US and Australia, CRHTTs are now provided nationally in England and Norway, and in many areas across Europe, North America and Australia. Established fidelity criteria for CRHTTs include standards for ease of referral, rapid response time, a 24/7 service, assertive engagement and comprehensive initial assessment (Lloyd-Evans)

- Lloyd-Evans B, Bond GR, Ruud T et al. Development of a measure of model fidelity for mental health Crisis Resolution Teams. BMC Psychiatry 2016;16:427.

- Regarding rapid response, in-person assessment within four hours from referral has been adopted as a nationally audited performance indicator in England.

- Less than a third of Norwegian CRHTTs achieve good fidelity for the rapid response criterion. CRHTT staff highlight the competing pressures of responding rapidly to new referrals while reliably maintaining frequent, scheduled home treatment appointments with people being offered crisis support.

- Morant N, Lloyd-Evans B, Lamb D et al. Crisis resolution and home treatment: stakeholders' views on critical ingredients and implementation in England. BMC Psychiatry 2017;17:254.

- To address this issue, a recent trend in England has been to split crisis assessment and brief crisis home treatment functions into two different teams. This split model is now provided in over a third of English health care regions.

- Dalton-Locke C, Johnson S, Harju-Seppanen J et al. Emerging models and trends in mental health crisis care in England: a national investigation of crisis care systems. BMC Health Serv Res 2021;21: 1174.

- Crisis assessment teams, sometimes called “first response” teams, have achieved marked improvements in service accessibility and response times in local evaluations, and offer a “no wrong door” point of access for people in mental health crisis of any severity. However, they risk introducing new discontinuities between assessment and treatment, with opportunities for information to be lost or people in crisis being required to tell their story multiple times to different professionals. As yet, no robust evidence compares effectiveness or users’ experience of integrated CRHTTs versus split assessment and treatment teams.

- Northumberland Tyne and Wear NHS Foundation Trust. Sunderland and South of Tyne Initial Response Team. https://www.ntw.nhs.uk.

- A Cochrane review cautions that people with the highest risks or using drugs and alcohol were typically excluded from studies that have provided positive evaluations of CRHTTs.

- Murphy S, Irving CB, Adams CE et al. Crisis intervention for people with severe mental illnesses. Cochrane Database Syst Rev 2015;12: CD001087.

- Effective system integration with police and ambulance services is required for circumstances where the need for immediate access to hospital or clinic-based care becomes apparent during a home assessment, and help from emergency services is necessary to ensure safe conveyance of the person.

- A 2016 literature review estimated that, for around one in ten individuals, the police were involved in their pathway to mental health care.

- Livingston JD. Contact between police and people with mental disorders: a review of rates. Psychiatry Serv 2016;67:850-7.

- In a Canadian city, around half of mental health-related police contacts resulted in apprehension using mental health legislation, and half of these led to a hospital admission. Concerns have been reported around the world that police officers, without adequate training or support, are often acting as frontline mental health workers, potentially resulting in worse outcomes for people in mental health crisis, increased trauma and coercion, and higher numbers of unnecessary arrests and escorts to hospitals.

- Charette Y, Crocker AG, Billette I. Police encounters involving citizens with mental illness: use of resources and outcomes. Psychiatr Serv 2014;65:511-6.

- In Toronto, Canada, a model involving additional training and a joint response by mental health nurses and police officers was found to result in lower rates of involuntary escorts to hospital and of arrest and injury, although total numbers of escorts to hospital increased.

- Lamanna D, Shapiro GK, Kirst M et al. Co-responding police-mental health programmes: service user experiences and outcomes in a large urban centre. Int J Ment Health Nurs 2018; 27:891-900.

- A systematic review of co-response models found studies carried out in Australia, Canada, UK, and US56. There were indications that these services reduced the use of police powers to detain people under mental health legislation, and of police custody.

- Puntis S, Perfect D, Kirubarajan A et al. A systematic review of co-responder models of police mental health ‘street’ triage. BMC Psychiatry 2018;18:256.

Teams with Police

- Internationally, mental health-related crises represent a substantial proportion of emergency calls to police departments. In some regions, this proportion is increasing ranging from 3%–16% of total call volumes .

- Nasser, S. (2020). Canada's largest mental health hospital calls for removal of police from front lines for people in crisis. *CBC*, https://www.cbc. ca/news/canada/toronto/police-mental-crisis-1.5623907

- The shift from institutional to community care for individuals with complex mental health needs, in concert with a lack of compensatory funding and resources for community-based services, led police officers to become de facto mental health crisis providers (Cotton & Coleman, 2006).

- Cotton, D., & Coleman, T. (2006). *Contemporary policing guidelines for working with the mental health system*. Canadian Association of Chiefs of Police Ottawa.

- Without adequate mental health training and with a mandate to protect the public over the welfare of service users, increased police involvement in mental health crises has led to increased injuries and fatalities to services users (Kindy & Elliott, 2015; Saleh et al., 2018). For example, between 23% and 70% of fatalities during police en- counters in Canada were related to mental health or substance use concerns, and 25% of fatal police shootings in the United States in 2015 involved indi- viduals in emotional crisis (Kindy & Elliott, 2015).

- Kindy, K., & Elliott, K. (2015). *990 people were shot and killed by police this year: Here's what we learned*. Washington Post. https://www.washi ngtonpost.com/graphics/national/police-shootings-year-end/

- Saleh, A. Z., Appelbaum, P. S., Liu, X., Scott Stroup, T., & Wall, M. (2018). Deaths of people with mental illness during interactions with law enforcement. *International Journal of Law and Psychiatry*, *58*, 110– 116. https://doi.org/10.1016/j.ijlp.2018.03.003

- A largescale United Kingdom study of 13, 472 participants found that individuals flagged as having mental health concerns were more likely to be charged with a criminal offense and more likely to spend longer in police custody than those without such flag (Kane et al., 2018). Moreover, many service users have reported feeling stigmatised and criminalised following crisis interactions with police (Puntis et al., 2018).

- Kane, E., Evans, E., & Shokraneh, F. (2018). Effectiveness of current policing-related mental health interventions: A systematic re- view. *Criminal Behaviour and Mental Health: CBMH*, *28*(2), 108–119. https://doi.org/10.1002/cbm.2058

- Puntis, S., Perfect, D., Kirubarajan, A., Bolton, S., Davies, F., Hayes, A., Harriss, E., & Molodynski, A. (2018). A systematic review of co- responder models of police mental health 'street' triage. *BMC Psychiatry*, *18*, https://doi.org/10.1186/s12888-018-1836-2

- Efforts to improve mental health crisis outcomes have resulted in the adoption of two crisis intervention models involving police internationally: the Crisis Intervention Team (CIT) model or the ‘Memphis model’ (Kasick & Bowling, 2013), and the co-responder model (Shapiro et al., 2015), which resembles the ‘street triage’ models in the United Kingdom. CIT involves 40 hr of police training on how to identify individuals with mental health issues, on verbal de-escalation, community resources, as well as partnerships with mental health providers, advocates and other stakeholders. The co-responder model involves pairing police officers with mental health clinicians, and typically functions as a secondary response (i.e. after police have deemed that the call does not present a threat of violence) (Dempsey et al., 2020).

- Kasick, D. P., & Bowling, C. D. (2013). Crisis Intervention Teams: A boundary-spanning collaboration between the law enforcement and mental health communities. *Modern Community Mental Health: an Interdisciplinary Approach*, 304–315.

- Shapiro, G. K., Cusi, A., Kirst, M., O'Campo, P., Nakhost, A., & Stergiopoulos, V. (2015). Co-responding police-mental health pro- grams: A review. *Administration and Policy in Mental Health*, *42*(5), 606–620. https://doi.org/10.1007/s10488-014-0594-9

- Dempsey, C., Quanbeck, C., Bush, C., & Kruger, K. (2020). Decriminalizing mental illness: Specialized policing responses. *CNS Spectrums*, *25*(2), 181–195. https://doi.org/10.1017/S1092852919001640

- As efforts to decrease over-reliance on police-based crisis intervention models intensify, there is an urgent need for evidence-based decision making as municipalities, law enforcement, policy makers and mental health stakeholders collaborate to design effective, ser- vice user-centered crisis intervention models. There is little research to date synthesizing and comparing the evidence in relation to police only models (CIT), co-responder models and non-police models.

The CIT Model

- The CIT Model—essentially officers getting trained in a 40 hour Mental Health Course has had mixed outcomes when studied. No one argues that training officers in mental health response is bad. The question is simply what should that training look like. Maybe more provocatively—is 40 hours enough?

Use of Force

- Use of force rates from descriptive, observa- tional studies varied from 3.9% of mental health-related calls in rural Virginia, USA (Yang et al., 2018), 5% of ($n = 6353$) calls in Colorado, USA (Khalsa et al., 2018) to 12% of ($n = 1153$) calls in Georgia, USA. A descriptive study of CIT officers in Colorado, USA found that only 0.4% of service user injuries were police-inflicted (Khalsa et al., 2018).

- Yang, S.-M., Gill, C., Kanewske, L. C., & Thompson, P. S. (2018). Exploring police response to mental health calls in a nonurban area: A case study of Roanoke County, Virginia. *Victims & Offenders*, *13*(8), 1132–1152. https://doi.org/10.1080/15564886.2018.1512540

- Khalsa, H.-M., Denes, A. C., M. Pasini-Hill, D., Santelli, J. C., & Baldessarini, R. J. (2018). Specialized police-based mental health crisis response: The first 10 years of Colorado's Crisis intervention team imple- mentation. *Psychiatric Services (Washington. D.C.)*, *69*(2), 239–241. https://doi.org/10.1176/appi.ps.201700055

- Use of force amongst CIT trained officers varies wildly depending on the study. Some studies show that CIT trained officers had much less use of force than non-CIT trained officers yest in another study officers who volunteered for CIT training were actually more likely to use force.

- You SHOULD NOT conclude that CIT training is bad. These are much harder things to study than one would think.

Arrest Rates

- Two descriptive studies of police found that the arrest rate for mental health-related calls was around 5% in both a study of CIT officers ($n = 6353$) and in a mixed study of CIT and non-CIT officers ($n = 428$) (; Watson & Wood, 2017).

- Watson, A. C., & Wood, J. D. (2017). Everyday police work during mental health encounters: A study of call resolutions in Chicago and their implications for diversion. *Behavioral Sciences & the Law*, *35*(5–6), 442–455. https://doi.org/10.1002/bsl.2324

- Two studies also found that service users under the influence of substances were more likely to be arrested or transported to jail (Khalsa et al., 2018; Watson et al., 2010). Transport to jail was also more likely for service users with a weapon, those threatening violence or at risk of suicide (Khalsa et al., 2018). Evidence is mixed on whether CIT training reduces the arrest rate.

- Khalsa, H.-M., Denes, A. C., M. Pasini-Hill, D., Santelli, J. C., & Baldessarini, R. J. (2018). Specialized police-based mental health crisis response: The first 10 years of Colorado's Crisis intervention team imple- mentation. *Psychiatric Services (Washington. D.C.)*, *69*(2), 239–241. https://doi.org/10.1176/appi.ps.201700055

- A Chicago, Illinois, observational study using a random sample of officers ($n = 112$) (Watson et al., 2011) and a quasi-experimental comparison study found no effect of CIT-training on arrest rate ($p = 0.15$; $F[1, 437] = 0.155$, $p = 0.214$; Acker, 2011).

- Acker, J. A. T. (2011). The effect of crisis intervention team training on the outcomes of mental health crises calls for law enforcement. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *72*(1-B), 518.

Access to referrals and resources

- Research on providing access to resources or referral generally indi- cated that CIT officers were more likely to provide resources or refer- rals to service users than non-CIT officers. This finding was reported in a systematic review of quasi-experimental studies ($n = 23$; Kane et al., 2018), a quasi-experimental study in Florida ($p = 0.048$, $df = 441$) and the correlation 0.094 (Tau b) (Acker, 2011), an observational study in Chicago ($F[1, 95] = 5.35$, $p < 0.05$; Watson & Wood, 2017) and observational research in Georgia, USA (OR = 1.70, $p = 0.026$; Compton et al., 2014). While significant, these findings indicate a small or weak effect of CIT training on access to resources or referral.

Resolution on the scene

- Two observational studies found that CIT training status had no effect on ‘contact only’ or resolution on scene outcomes (Compton et al., 2014; Watson et al., 2010). The study of officers ($n = 112$) in different Chicago districts found that ‘contact only’ outcomes were lower among CIT officers in high resource districts ($F[1, 95] = 5.73$, $p < 0.05$), but not low resource districts (Watson et al., 2011), suggesting that location and density of referral resources could impact outcomes.

- Descriptive US studies of CIT and non-CIT officers in Chicago and of CIT officers in Colorado found that 45%–51% of mental health calls resulted in transport to treatment centre or hospital (Khalsa et al., 2018; Watson & Wood, 2017).

- Khalsa, H.-M., Denes, A. C., M. Pasini-Hill, D., Santelli, J. C., & Baldessarini, R. J. (2018). Specialized police-based mental health crisis response: The first 10 years of Colorado's Crisis intervention team imple- mentation. *Psychiatric Services (Washington. D.C.)*, *69*(2), 239–241. https://doi.org/10.1176/appi.ps.201700055

- Watson, A. C., & Wood, J. D. (2017). Everyday police work during mental health encounters: A study of call resolutions in Chicago and their implications for diversion. *Behavioral Sciences & the Law*, *35*(5–6), 442–455. https://doi.org/10.1002/bsl.2324

Co-responder Models

Use of Force

- A more recent Sherbrooke, Quebec quasi-experimental, case-control study of 399 interactions comparing regular patrols to co-response interven- tions found that force was used less frequently when co-responder teams attended the call (phi = 0.13; $p \leq 0.01$; Blais et al., 2020).

- Blais, E., Landry, M., Elazhary, N., Carrier, S., & Savard, A.-M. (2020). Assessing the capability of a co-responding police-mental health program to connect emotionally disturbed people with com- munity resources and decrease police use-of-force. *Journal of Experimental Criminology*, 1–25. https://doi.org/10.1007/s1129 2-020-09434-x

Arrest Rates

- Two of the systematic reviews of co-responder models, including a number of quasi-experimental studies, indicated that these mod- els either had a positive impact on arrests or had low arrest rates (Kane et al., 2018; Shapiro et al., 2015).

- Kane, E., Evans, E., & Shokraneh, F. (2018). Effectiveness of current policing-related mental health interventions: A systematic re- view. *Criminal Behaviour and Mental Health: CBMH*, *28*(2), 108–119. https://doi.org/10.1002/cbm.2058

- Shapiro, G. K., Cusi, A., Kirst, M., O'Campo, P., Nakhost, A., & Stergiopoulos, V. (2015). Co-responding police-mental health pro- grams: A review. *Administration and Policy in Mental Health*, *42*(5), 606–620. https://doi.org/10.1007/s10488-014-0594-9

Resolved on Scene

- While studies vary greatly co-responder teams generally had higher on-scene resolution numbers. study described that arrest or transport to treatment is typically the default action for police only teams, whereas co-responder programme provided a wider range of options, including resolution on scene and frequent referrals (Helfgott Kane, E., Evans, E., & Shokraneh, F. (2018).

- Effectiveness of current policing-related mental health interventions: A systematic re- view. *Criminal Behaviour and Mental Health: CBMH*, *28*(2), 108–119. https://doi.org/10.1002/cbm.2058

Follow-up

- A review of co-response studies ($n = 33$) found that most co-response models described some form of follow-up, which varied from within 24–48 hr to within 7 days. Follow-up ranged from general practitioner or mental health professionals, to ensuring engagement with referrals/services, or family follow-up (Park et al., 2019).

- Park, A., Booth, A., Parker, A. J., Scantlebury, A., Wright, K., & Webber, M. (2019). Models of mental health triage for individuals coming to the attention of the police who may be experiencing mental health crisis: A scoping review. *Policing: A Journal of Policy and Practice*, *15*(2), 859–895.

Time spent on team

- Regarding time spent on call, two case-control, interrupted time series studies found that co-responder units took less time on calls than police only models (Student's t test = 3.4, df = 1649, $p < 0.001$; Kisely et al., 2010; n = 709, b = −48.82, SE = 13.20, $p < 0.001$; Semple et al., 2020). Finally, three Canadian co- responder studies highlighted that co-responder models lead to de- creased median wait times in the ED compared to police only models (Fahim et al., 2016; Lamanna et al., 2015; Lamanna et al., 2018), for example (U = 1,580,530.0, z = 8.73, $p < 0.001$, r = 0.124; Lamanna et al., 2015; Lamanna et al., 2018).

- Semple, T., Tomlin, M., Bennell, C., & Jenkins, B. (2020). An evaluation of a community-based mobile crisis intervention team in a small Canadian police service. *Community Mental Health Journal*, *57*(3), 567–578. https://doi.org/10.1007/s10597-020-00683-8

- Lamanna, D., Kirst, M., Shapiro, G., Matheson, F., Nakhost, A., & Stergiopoulos, V. (2015). Toronto Mobile Crisis Intervention Team (MCIT): Outcome evaluation report.

- Lamanna, D., Shapiro, G. K., Kirst, M., Matheson, F. I., Nakhost, A., & Stergiopoulos, V. (2018). Co-responding police-mental health pro- grammes: Service user experiences and outcomes in a large urban centre. *International Journal of Mental Health Nursing*, *27*(2), 891– 900. https://doi.org/10.1111/inm.12384

Emergency Detention

- An international co-response systematic review included 5 studies that found the co-response model decreased the number of service users subject to Mental Health Act detention (Puntis et al., 2018). Time series studies in England (Keown et al., 2016) and Australia (McKenna et al., 2015) evidenced a reduction in apprehension rates following the introduction of a co-responder model.

- McKenna, B., Furness, T., Oakes, J., & Brown, S. (2015). Police and men- tal health clinician partnership in response to mental health crisis: A qualitative study. *International Journal of Mental Health Nursing*, *24*(5), 386–393. https://doi.org/10.1111/inm.12140

- Keown, P., French, J., Gibson, G., Newton, E., Cull, S., Brown, P., Parry, J., Lyons, D., & McKinnon, I. (2016). Too much detention? Street Triage and detentions under Section 136 Mental Health Act in the North- East of England: A descriptive study of the effects of a Street Triage intervention. *British Medical Journal Open*, *6*(11), e011837. https://doi.org/10.1136/bmjopen-2016-011837

Transport to ERs

- Rates of transport to treatment for co-response models varied from 14% of service users in Boston being transported to a crisis facility (Morabito et al., 2018), to 27%–32% of service users in Australian studies (Huppert & Griffiths, 2015; Lee et al., 2015), and 38%–45% of co-response interactions in Toronto, resulting in ED transport (Lamanna et al., 2015). While the Toronto study found that co-responder interactions were more likely to result in ED escort compared to police-only models (v2 [1] = 391.05, $p < 0.001$, (OR) = 2.27; Lamanna et al., 2015), a number of other studies have found the opposite.

- Huppert, D., & Griffiths, M. (2015). Police mental health partnership proj- ect: Police Ambulance Crisis Emergency Response (PACER) model development. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists*, *23*(5), 520–523. https:// doi.org/10.1177/1039856215597533

- Lee, S. J., Thomas, P., Doulis, C., Bowles, D., Henderson, K., Keppich- Arnold, S., Perez, E., & Stafrace, S. (2015). Outcomes achieved by and police and clinician perspectives on a joint police officer and mental health clinician mobile response unit. *International Journal of Mental Health Nursing*, *24*(6), 538–546. https://doi.org/10.1111/ inm.12153

- Lamanna, D., Kirst, M., Shapiro, G., Matheson, F., Nakhost, A., & Stergiopoulos, V. (2015). Toronto Mobile Crisis Intervention Team (MCIT): Outcome evaluation report.

QUESTIONS AND ANSWERS

15 Minute Open Discussion Period