

***EVALUATING THE IMPACT OF
HEALTHCALL AS PART OF THE
TIPPECANOE COUNTY
COMMUNITY
CORRECTIONS PRETRIAL
RELEASE PROGRAM***

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Committee Members

- **Co-chair: Nicole Adams, PhD, RN, CEN**
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IMPORTANT TERMS

- **HealthCall:** a software company that produces the HealthCall electronic health record (EHR) and appointment scheduler
- **PRP (Pretrial release program):** planned program that offers a less criminalized, more rehabilitative approach to deal with PMI who have committed a crime

BACKGROUND: MENTAL ILLNESS IN INDIANA

- 1.21 million adults in Indiana have a mental health condition
- >30% not receiving needed mental health care (SAMHSA, 2021)

BACKGROUND: DRUG USE ON HEALTH

Drug-related Statistics within Tippecanoe County, 2020-2022

Variable	2020	2021	2022
Emergency department visits for drug overdose	449	472	395
Hospitalizations due to drug overdose	120	98	103
Deaths related to drug overdose	34	43	45

Indiana Department of Health (2022)

BACKGROUND: MENTAL ILLNESS AND THE CRIMINAL JUSTICE SYSTEM

- Mental health issues, substance use, poverty, homelessness, and unemployment may be co-occurring factors during the commission of a crime (Mundia, 2016)

- Indiana: 1 in 4 persons with a serious mental health issue arrested
- 2 in 5 adults in jail or prison have a history of mental illness (NAMI Indiana, 2022).

- Persons who become justice-involved often have concurrent mental health or substance use issues
- Severity of mental illness plus unemployment, substance use, and homelessness increase the risk of committing violent crimes (Ghiasi et al., 2023)

BACKGROUND: *THEREFORE...*

More support for PMI after an arrest



Encouragement of the use of mental health services

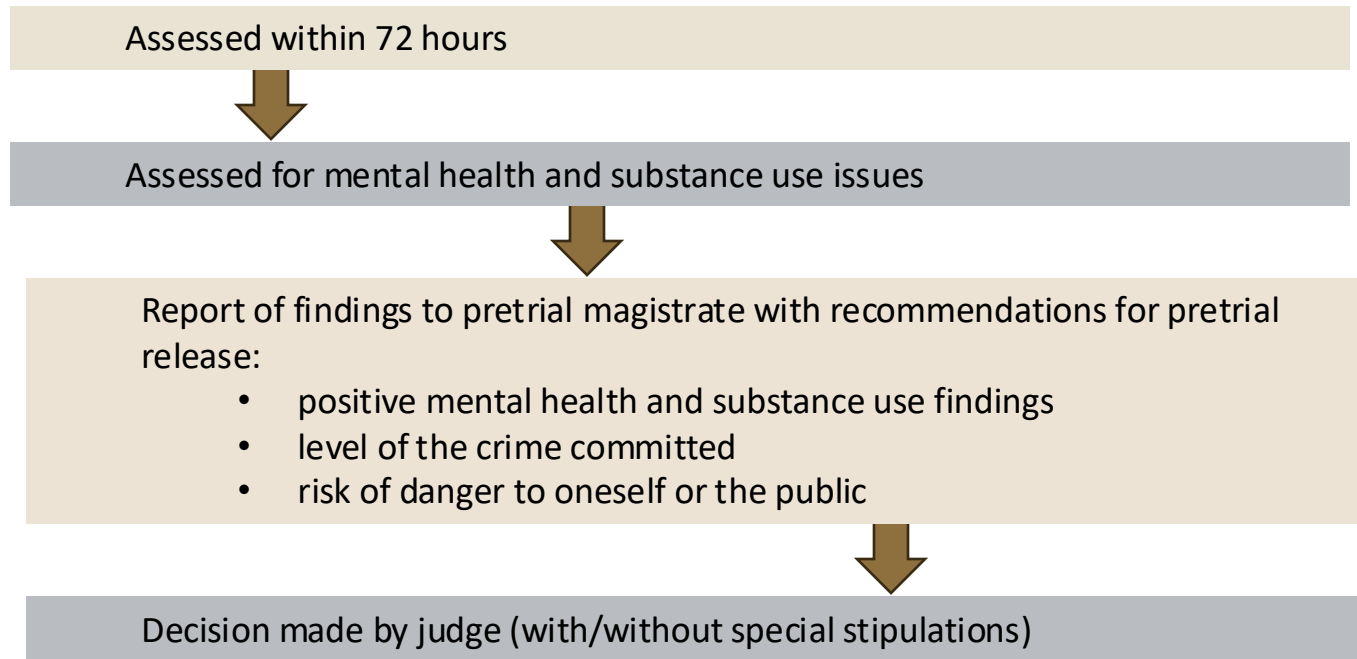


Reduction of the risk of PMI reoffending later

(Zgoba et al., 2020).

BACKGROUND: PRP SELECTION PROCESS

- **In Tippecanoe County, who qualifies for PRP?**
 - Persons who commit low level, nonviolent crimes
- **How are persons selected?**



BACKGROUND: HEALTHCALL

- HealthCall is a software company that produces the HealthCall electronic health record and scheduling platform
- HealthCall was contracted by Purdue Healthcare Advisors as part of a project funded by the Indiana Family and Social Services Administration
- TCCC volunteered to pilot test the software
- TCCC collaborated with external mental health and substance use providers within Tippecanoe County
- The TCCC's internal providers now enter their availability in HealthCall (Tippecanoe Community Corrections COAP, 2023).

BACKGROUND: HEALTHCALL

CONT'D

- Tippecanoe County Community Corrections (TCCC) PRP uses the HealthCall scheduler to schedule participants with external mental health and substance use providers
- Providers enter their available appointments into HealthCall
- Case managers go in HealthCall and select an available appointment

BACKGROUND: QRT



HealthCall sends referrals participants to quick response team (QRT) for peer support and transportation assistance



Operated by Phoenix Paramedic Solutions, a community-based paramedical service and mobile integrated health unit



Supported by grant funding



QRT team comprises of certified recovery specialists, community health workers, and certified peer recovery coaches (PRSQRT.com, 2023).

PROBLEM STATEMENT

- To determine the effect of using the HealthCall scheduling software in the Tippecanoe County Community Corrections (TCCC) pretrial release program (PRP) on connecting released persons to mental health and substance use providers

METHODOLOGY: STUDY DESIGN



Ethics approval was obtained from the Institutional Review Board (IRB) of Purdue University in 2020 and 2022



Mixed methods design

METHODOLOGY: DATA COLLECTION



Pre-implementation period: Inception of the PRP in 2019 through March 2020



Post-implementation period: March 2020-December 2022



Quantitative data: Aggregate facility level data provided by the TCCC pretrial coordinator; collected 2020-2022



Qualitative data: Pre- and post-implementation interviews of case managers; collected March 2020 and February 2023

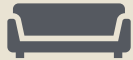


TCCC administration granted approval for the data collection process through a data-use agreement with Purdue University



Data was uploaded into a secure L2 Box file

METHODOLOGY: DATA COLLECTION CONT'D.



Setting: Private room at the TCCC



Procedure: Semi-structured
interviews of the case managers

Written consent attained

Pre-implementation interviews were
conducted in March 2020

Post-implementation interviews of the
current case managers in February 2023

Interviews done face-to-face and audio
recorded

METHODOLOGY: VARIABLES

Quantitative:

- Offenders screened for participation in the PRP
- Offenders identified with a substance use disorder (SUD)
- Offenders identified with a mental illness requiring a referral
- Service provider appointments scheduled
- Participants who completed, have pending appointments, and have not completed appointments
- Demographic data: gender, ethnicity, and age group

METHODOLOGY: VARIABLES CONT'D.

Qualitative:

- Roles and responsibilities (pre/post)
- Challenges experienced by case managers with the PRP (pre/post)
- Rewarding aspects of the case managers' jobs (pre/post)
- Expectations of the benefits of HealthCall (pre)
- Benefits of using HealthCall (post)

DATA ANALYSIS

- Quantitative: descriptive statistics used



- Qualitative: changes in case managers' responses were identified and analyzed



FINDINGS: DEMOGRAPHIC DATA OF PERSONS ASSESSED FOR PRP

Demographic Data	2020	2021	2022
Gender			
Male	103	115	378
Female	61	86	157
Ages (years)			
18-25	62	92	114
26-35	56	158	191
36-45	27	75	128
46-55	12	45	65
56-65	6	21	31
66-75	0	3	5
76-85	1	0	0
Race			
African American	57	113	155
Asian	2	4	1
Caucasian	93	250	342
Hispanic/Latino	10	23	28
Multiracial	0	2	6
Native American	0	2	2
Other	2	0	0
Pacific Islander	0	0	1

FINDINGS: DISPOSITION OF PERSONS ASSESSED FOR PRP

Variable	2020	2021	2022
Number released and supervised by PRP	44	25	43
Number of direct placements to TCCC	15	59	119
Number released without supervision	101	304	373
Total number of persons assessed	164	394	535

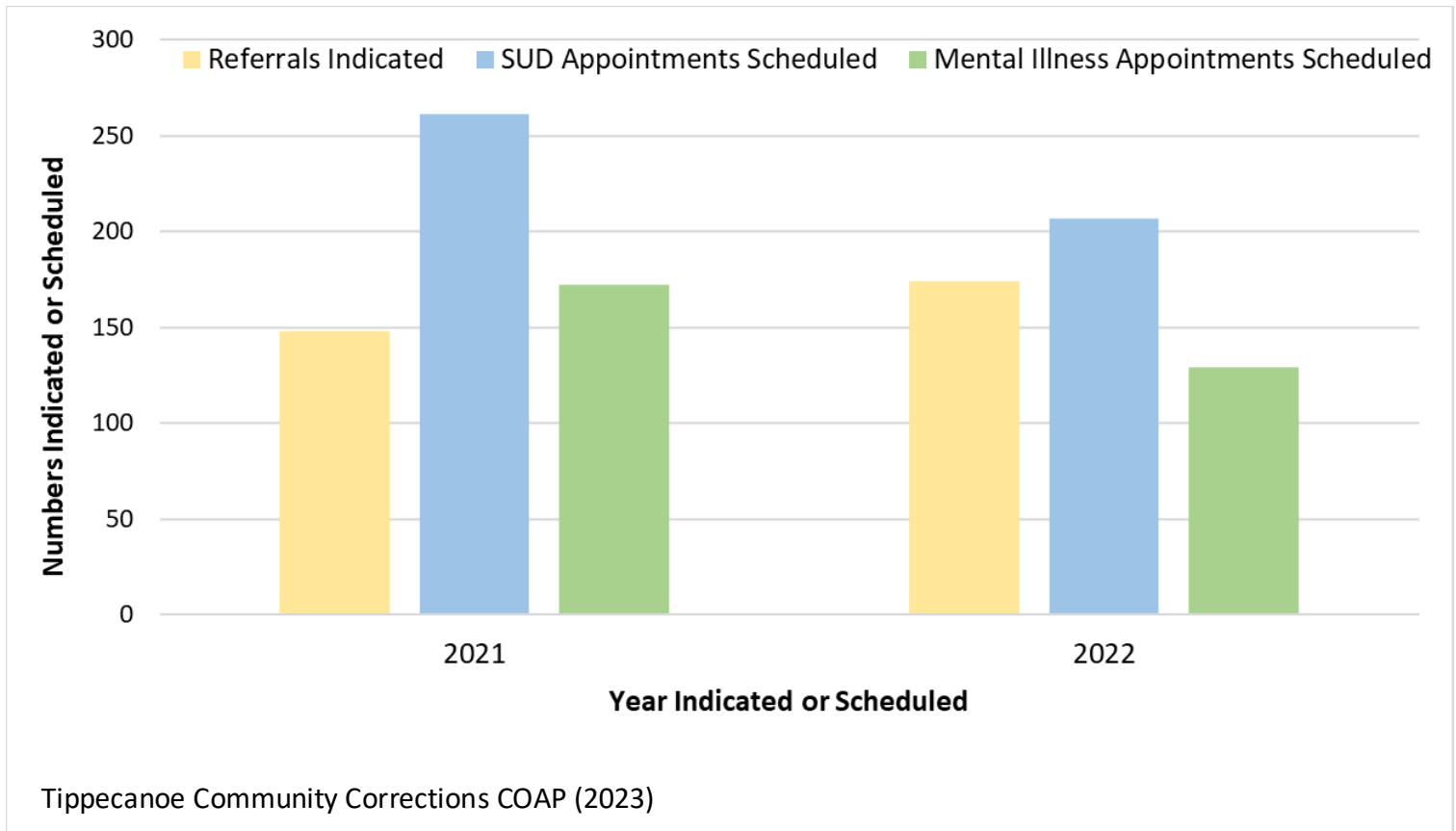
Tippecanoe Community Corrections COAP (2023)

FINDINGS: REASONS PERSONS WERE NOT ASSESSED BY PRP

Variable	2020	2021	2022
Parole/Probation/Pre-trial for offense prohibited by rule	-	620	543
Safety concern	-	356	156
Weapon offense	-	156	87
Bonding out	-	115	97
Sex or violent offense	-	115	130
Refused to participate	-	107	130
Ran out of time	-	106	142
Habitual offense	-	85	48
Language barrier	-	15	8
Escape/failure to return to lawful detention offense	-	3	0

Tippecanoe Community Corrections COAP (2023)

FINDINGS: SERVICE PROVIDER APPOINTMENTS SCHEDULED



FINDINGS: QUALITATIVE RESULTS

Themes	Findings
Roles and responsibilities	<ul style="list-style-type: none"> ▪ Pre-HealthCall <ul style="list-style-type: none"> ▪ Case managers x 5 ▪ Field training officer x 1 ▪ Case manager supervisor x 1 ▪ Post-HealthCall <ul style="list-style-type: none"> ▪ Case managers x 4 ▪ Pretrial coordinator x 1 ▪ Therapist x 1
Challenges and expectations	<ul style="list-style-type: none"> ▪ Long wait periods for appointments ▪ High caseloads; up to 100 ▪ Participants having a lack of financial and other personal resources ▪ Expected “faster services, follow through, getting an appointment, and not having to have that middle person” ▪ Expected improved access to appointments ▪ Expected increased appointments available to participants
Benefits of HealthCall	<ul style="list-style-type: none"> ▪ Cuts out the back and forth of calling facilities ▪ Reduces wait times for get appointments ▪ Improved efficiency of the case managers ▪ Better to keep track of participants’ appointments.
Challenges after HealthCall	<ul style="list-style-type: none"> ▪ Helpful for initial appointments which are usually intake and not treatment appointments ▪ All appointments scheduled goes to the QRT ▪ Respondents have been using it to create internal appointments which is labor-intensive, time consuming, and inefficient ▪ HealthCall, though beneficial, cannot guarantee participant compliance ▪ HealthCall does not tell if the participant has kept their appointment or not

DISCUSSION AND LIMITATIONS

- HealthCall was beneficial: improved efficiency of case managers in scheduling service appointments for participants
- Participants getting in with provider appointments for mental health and substance use intake appointments more quickly
- Participants may still have to wait for long periods to see a treating provider following their intake appointments
- Many role changes and staff turnover- different respondents in the post-implementation period
- Role diversity of users suggests that HealthCall is communicative and connecting both internally and externally to create and schedule appointments
- Need for more efficiency in notifying the QRT
- Improving efficiency would reduce time spent on searching through appointments and provide QRT more time to be spent on assisting participants
- Pre-implementation data unavailable for most quantitative data

IMPLICATIONS: SYSTEM

- HealthCall facilitates communication and collaboration between both the healthcare and criminal justice systems; essential for effective management of justice-involved individuals with serious mental illness (Kamin et al., 2022)
- Releasing PMI from detention without access to treatment and other supportive services will increase negative outcomes regarding their mental health recovery and future involvement with the criminal justice system (Kopak & Singer, 2022)
- Risks include unintentional drug overdose; leading cause of death among persons released from prison, especially within the first 2 weeks after their release (Waddell et al., 2021)

IMPLICATIONS: POLICY

- Multiorganizational service availability and provision because of the diverse and complex nature of mental health issues and its recovery process (Borg & Kristiansen, 2004)
- Organizational policies that prioritize treatment appointments over intake appointments for persons who do not already have care established elsewhere
- Development of policies by local government that encourage the participation of healthcare agencies in scheduling sharing platforms, which may include incentives like assistance with funding
- Policy to reimburse community clinics to provide screening and brief intervention services (SBIRT) for persons at risk for serious afflictions related to substance abuse, as a prior authorization is not required (Indiana Family and Social Services Administration (FSSA), 2022)

IMPLICATIONS: PRACTICE

- Respect, trust, communication, and cooperation are among the requirements for a successful patient-focused, interorganizational collaboration (Karam et al., 2018)
- Needed for longevity of the collaboration between the TCCC and the participating community organizations to set apart appointments for participants of the PRP
- Interagency meetings within the criminal justice and healthcare systems can promote partnerships that may provide the treatment support needed for PMI and help reduce recidivism (Dlugacz, 2015)
- Having shared scheduling platforms such as HealthCall across agencies where clients seek services serves as an additional boost to collaborative care
- Collaborative care may improve access to mental health and substance use care, provide care in a more client-centered manner, and improve clinical results (Reist et al., 2022)
- Can even serve to merge physical care with behavioral care

IMPLICATIONS: ECONOMIC

- Estimated annual cost of crime in the US is \$4.71-\$5.76 trillion (Anderson, 2021)
- Cost of mental health care in prison is about \$72 million for psychological services, over \$5.6 million on psychotropic medications, and over \$4 million for residential community re-entry programs such as half-way houses (US Government Accountability Office, GAO, 2018)
- Direct costs of crime: crime victims' loss of money/loss or damage of property, and governmental funding for supporting the criminal justice (BJS.gov, 2022)
- Indirect costs: psychological, physical, and long term financial negative effects on victims of crime, their families, and communities
- Lost wages, reduced investments, and overwhelm on social services (BJS.gov, 2022)
- HealthCall program at the TCCC is operated at a cost
- Treatment reduces recidivism

RECOMMENDATIONS TO THE TCCC

Reevaluating How HealthCall is Used

Using HealthCall Internally Vs. Externally

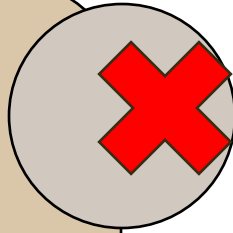
Relationship Building and Maintenance

Regular Feedback from Staff

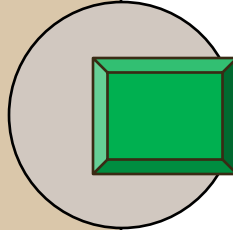
RECOMMENDATIONS TO HEALTHCALL

Potential Software Modifications

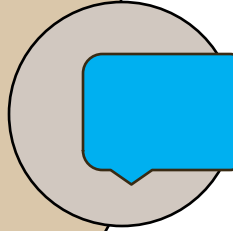
- Checkboxes, symbols and/or a color-coded system to differentiate appointment types, appointment completion status, or the need for extra resources.



Example 1: For external appointments, having a symbol like a 'checkmark' show up beside the participant's appointment indicating that the appointment was completed and an 'X' indicating that they did not show-up, would serve as a simple, yet efficient way of communication between agencies.



Example 2: If a case manager wants to schedule their client with an internal provider, there is not a way to tell if the appointment slot is for an evaluation or a follow-up appointment. The use of a color-coded system could help resolve this issue. Instead of having to click on each appointment to see if it is open or filled, having the slot turn gray when it is filled would also be beneficial.



Example 3: There should be a system in place to differentiate the appointments that need QRT involvement such as a being able to click a checkbox. *"To sign somebody up, we've got six slots there. They had to create six separate ticks or six separate instances of this class at that time. That gets very confusing...If we need more slots, we have to make more...Sometimes you'll see 15 things scheduled at the exact same time, by the exact same person. So, it gets a little confusing."*

CONCLUSION

- HealthCall as a scheduling platform is beneficial to both clients and case managers
- Getting earlier appointments was promoted with HealthCall
- Participants have a better chance of getting the mental and substance use help they need in a timelier manner
- Overall, the utilization of HealthCall at the TCCC is seen in a positive light by its users
- However, the software has its shortcomings in the context in which it is being used. For any software to be beneficial to its user and for optimal results, it must be tailored to meet their needs

REFERENCES

- Borg, M. & Kristiansen, K. (2004). Recovery-oriented professionals: Helping relationships in mental health services. *Journal of Mental Health*, 13(5), 493-505, <https://doi.org/10.1080/09638230400006809>
- BJS.gov. "Costs of Crime." Bureau of Justice Statistics, 2022, <https://bjs.ojp.gov/costs-crime>.
- Dlugacz, H. A. (2015). Community re-entry preparation/coordination. In Trestman, R. L., Appelbaum, K. L., & Metzner, J. L. *Oxford Textbook of Correctional Psychiatry* (pp. 76– 79). Oxford University Press. <https://books.google.com/books?hl=en&lr=&id=XDBmBgAAQBAJ&oi=fnd&pg=PA76&ots=1eHhrrer6f&sig=BrSDyBogsK5796462FbLMbBQNc0#v=onepage&q&f=false>
- Ghiasi, N., Azhar, Y., & Singh, J. (2023). Psychiatric Illness and Criminality. In StatPearls. StatPearls Publishing. http://www.ncbi.nlm.nih.gov/books/NBK537064/https://www.bluecrossmafoundation.org/sites/g/files/cspkphws2101/files/2021-09/BH_Open_Access_final_updated%20logo.pdf
- Indiana Family and Social Services Administration (FSSA). (2022). Indiana health coverage programs: Provider reference module: Behavioral health services. Gainwell Technologies. <https://www.in.gov/medicaid/providers/files/modules/behavioral-health-services.pdf>
- Indiana.gov. (2022, February 21). Indiana Drug Overdose Dashboard. Overdose Prevention. <https://www.in.gov/health/overdose-prevention/overdose-surveillance/indiana/>
- Kamin, D., Weisman, R. L., & Lamberti, J. S. (2022). Promoting mental health and criminal justice collaboration through system-level partnerships. *Frontiers in Psychiatry*, 13, 805649. <https://doi.org/10.3389/fpsy.2022.805649>
- Karam, M., Brault, I., Van Durme, T., & Macq, J. (2018). Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research. *International Journal of Nursing Studies*, 79, 70–83. <https://doi.org/10.1016/j.ijnurstu.2017.11.002>

REFERENCES CONT'D.

- Kopak, A. M., & Singer, A. J. (2023). Substance Use Disorder, Bail Reform, and Failure to Appear in Court: Results from a Naturalistic Study. *Journal of Drug Issues*, 53(2), 183– 195. <https://doi.org/10.1177/00220426221107561>
- Mundia, L., Matzin, R., Mahalle, S., Hamid, M. H., & Osman, R. S. (2016). Contributions of sociodemographic factors to criminal behavior. *Psychology Research and Behavior Management*, 9, 147–156. <https://doi.org/10.2147/PRBM.S95270>
- PRSQRT.com. “What We Do.” Phoenix Recovery Solutions QRT, 2023, <https://www.prsqrt.com/community-based-peer-supports>.
- Reist, C., Petiwala, I., Latimer, J., Raffaelli, S. B., Chiang, M., Eisenberg, D., & Campbell, S. (2022). Collaborative mental health care: A narrative review. *Medicine*, 101(52), e32554. <https://doi.org/10.1097/MD.00000000000032554>
- SAMHSA.gov. (2021). National Survey on Drug Use and Health. (NSDUH). <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>
- Tippecanoe Community Corrections COAP. (2023). COAP Statistical Data (p. 6) [Statistics]. (May be requested from the Pretrial release coordinator at the Tippecanoe County Community Corrections)
- United States Government Accountability Office. (2018). Federal prisons: Information on inmates with serious mental illness and strategies to reduce recidivism: Report to congressional committees (GAO-18-182). <https://www.gao.gov/assets/gao-18-182.pdf>
- Waddell, Elizabeth Needham, et al. “Reducing Overdose after Release from Incarceration (ROAR): Study Protocol for an Intervention to Reduce Risk of Fatal and Non-Fatal Opioid Overdose among Women after Release from Prison.” *Health & Justice*, vol. 8, no. 1, 2020, p. 18, <https://doi.org/10.1186/s40352-020-00113-7>.
- Zgoba, K. M., Reeves, R., Tamburello, A., & Debilio, L. (2020). Criminal Recidivism in Inmates with Mental Illness and Substance Use Disorders. *The Journal of the American Academy of Psychiatry and the Law*, 48(2), 209–215. <https://doi.org/10.29158/JAAPL.003913-20>

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QUESTIONS?

THANK YOU