Received: 3 March 2023 | Accepted: 4 March 2023

DOI: 10.1002/cbm.2286

ORIGINAL ARTICLE

WILEY

Economic evaluations of mental health interventions in criminal justice

Martin Knapp[1] | **Gloria Wong**[2]

[1]London School of Economics and Political Science, London, UK

[2]The University of Hong Kong, Hong Kong, Hong Kong

Correspondence
Martin Knapp.
Email: m.knapp@lse.ac.uk

Abstract

Background: Mental health interventions targeting crime perpetrators are available. An overview of the current scenario of their economic benefits will help policy decisions.

Aim: To provide an update on economic evidence for mental health interventions in criminal justice, and to identify challenges and responses in using economic evidence to inform policy.

Method: Narrative review with an analysis frame that organises evidence around four points on the criminal justice system pathway: (a) point of contact; (b) post-arrest; (c) incarceration/punishment and (d) post-incarceration.

Results: There is a paucity of high-quality economic evidence, especially from cost-benefit analyses. However, there is some evidence of cost-effectiveness in support of interventions at the point of incarceration, such as cognitive behavioural therapy, multisystemic therapy for juvenile delinquents, therapeutic communities, electronic monitoring and telepsychiatry in forensic psychiatry settings. There is also evidence that post-incarceration interventions such as assertive community treatment can be cost-effective.

Conclusion: There remain large evidence gaps. There are also challenges in turning economic evidence on mental health interventions in criminal justice into policy changes and improved practice, such as hidden costs, silo budgeting

and delayed pay-off. Research incorporating multi-sectoral costs and benefits recommended by health economics and health technology assessment groups should be prioritised to support difficult resource allocation decisions faced by policy makers.

KEYWORDS
cost-benefit, cost-effectiveness, health technology assessment, implementation challenges, mental health economics, societal costs

1 | INTRODUCTION

The many links between mental health and criminal justice demand evidence-informed policy across sectors. Mental (ill-)health and crime (both victimisation and perpetration) interact at various points: from risk of perpetrating crime to the criminal behaviour itself, diversion or incarceration, and post-incarceration. There are significant economic costs at each point on this pathway, as well as potential economic and other consequences of successful and unsuccessful interventions.

Policy makers want reliable information on the relevant costs and outcomes of mental health interventions in the criminal justice sector to support their decisions. In an earlier review by Frank and McGuire (2010, p. 1), inconclusive evidence left unanswered the question: 'is mental health treatment a cost-effective way to reduce crime and lower criminal justice costs?' Here, we provide an updated narrative review of economic evaluations—including cost-benefit analyses where available—of mental health interventions in criminal justice. We approach this by looking at the links between mental health and crime along the pathway in the criminal justice system (CJS) and review current evidence in the context of challenges and responses in using economic evidence to inform policy.

1.1 | Analysis frame: Mental health interventions along the CJS pathway

People with mental health problems are more likely than the general population to come into contact with the CJS, as victims or perpetrators of crime. Direct and indirect relationships between mental health and crime can occur over a long period in life (Frank & McGuire, 2010).

Given the vast scope of the subject matter, we have limited our review to mental health interventions aimed at perpetrators, although evaluations will usually aim to include victim costs of crime as well as CJS costs. By mental health interventions, we refer to those targeting to ameliorate or prevent common mental disorders (often including mood and anxiety disorders) and severe disorders (usually referring to psychotic disorders, but could also include severe mood disorders). Substance abuse is also included. We have excluded behavioural problems in children and adolescents.

Within this scope, however, different types of mental disorders may be linked to different crimes and criminal behaviours in different ways. For example, prison environments can also contribute to development or worsening of psychopathology and suicidal ideation (Kutcher & McDougall, 2009; Sanislow et al., 2003), while violence can sometimes be caused by psychotic symptoms, although this is less common compared with indirect linkage through other general risk factors (Skeem et al., 2011). We focus here on interventions that target aspects of mental health that are considered as contributing to risk of offending/re-offending or criminogenic needs.

Based on this, mental health interventions can be categorised by their timing in relation to criminal behaviour:

1. Point of contact: Some criminal behaviours, such as violence, can be the direct result of psychopathology. Mental health interventions can be delivered at this point.

2. Post-arrest: Growing attention is being paid to the ethical problem of 'criminalisation of mental illness' and the high costs associated with incarceration of people with mental illness (Delgado et al., 2020). This implies a need to make comparisons between diverting for mental health interventions versus continuing a regular CJS pathway.
3. Incarceration/punishment: Interventions at this point refer to those designed for offenders/prison inmates with mental health needs, including specific interventions in forensic psychiatry.
4. Post-incarceration: Interventions can be provided at/after release from prison for people with mental health problems, including follow-up services to avert future crime and improve health. 'Recidivism' is an issue at this point, which can be related to system bias (e.g., stigma and close monitoring) in people with mental illness (Skeem et al., 2011).

1.2 | Use of mental health economics to inform policy

Economic evaluations take various forms, but all compare resource expenditure (costs) with achievements (outcomes). In health services research, where the primary concern is what achieves the best health gains for the population (or specific population subgroups), the most common economic evaluation type is cost-effectiveness analysis. This compares the costs and health gains (usually measured by symptom, functioning and/or wellbeing scales) of two or more treatments or policies. It is very rare for health gains to be converted to monetary measures, in part because of computational difficulties and in part because there are conceptual challenges, such as how to interpret differences in willingness to pay (the basis for monetising health benefits) that stem from differences in individuals' characteristics, such as socioeconomic status. Consequently, cost-benefit analyses are uncommon.

Of course, a treatment or policy that alleviates symptoms and thereby reduces future health service expenditure would allow comparison of costs incurred with costs saved, but an analysis of that kind would generate only limited evidence to inform resource allocation decisions because it does not assess impacts on health outcomes. To anticipate findings presented later in this paper, our review found few cost-benefit analyses of mental health interventions in the criminal justice field, and none that attached monetary values to *health* outcomes.

To support resource allocation decisions, it is common for cost-effectiveness findings to be compared with willingness-to-pay thresholds of the kind employed by health technology assessment bodies (e.g., the National Institute of Health and Care Excellence (NICE) in England) as the basis for making recommendations. Those comparisons often use a generic outcome measure such as quality-adjusted life years (QALYs) to support *strategic* decision-making, for example, for the healthcare system as a whole (see Knapp & Wong, 2020 for a more detailed discussion).

Regardless of methods, a major challenge in mental health interventions remains the large evidence gaps. We highlight some key evidence below (see Table 1 for a summary).

2 | ECONOMIC EVIDENCE OF MENTAL HEALTH INTERVENTIONS ALONG THE CJS PATHWAY

2.1 | Point of contact

The effectiveness of policing-related mental health interventions—such as liaison and diversion, street triage with mental health professionals, and mental health professionals embedded in police contact control rooms—has been reviewed (Kane et al., 2018). While these interventions seem to have positive impacts, the authors recommended more rigorous evaluation. They found little cost-effectiveness evidence. For pre-arrest diversion in general, there is a similar dearth of cost-effectiveness evidence. Some analyses suggest potential cost savings compared with traditional courts: for example, in a pilot neighbourhood outreach scheme in England, nurse-led screening of people with suspected mental illness had an impact on both health and crime (Earl et al., 2015).

TABLE 1 Economic evaluations (comparing costs with outcomes) and reviews profiled in the current narrative review.

CJS pathway	Study	Study type	Type of economic evaluation	Key findings
Point of contact	Cowell et al. (2004)	Observational study	Cost-effective analysis (jail diversion) in four US sites	Only one site showed improved outcomes and higher costs for estimating a cost-effectiveness ratio. Findings were unclear.
Incarceration/ punishment	De Leon (2010)	Literature review	Cost-effective and cost-benefit analyses (therapeutic communities)	Therapeutic communities reduce criminal activity costs and provide employment gains.
	Aos and Drake (2013)	Simulation modelling	Cost-benefit analysis (cognitive behavioural therapy)	CBT has a cost-benefit ratio of $1 to $25
	Barrett and Tyrer (2012)	Narrative review	Cost-effectiveness and cost-consequence analysis, decision economic modelling (DSPD programmes)	There is a lack of randomised trials to allow adequate cost-effectiveness evaluation.
	Barrett and Byford (2012)	Markov decision model	Cost-effectiveness analysis (DSPD programmes) over the 25 years	Cost-effectiveness was unlikely, although adjustments to the programme such as delivering it in a lower-cost prison could lead to improved cost-effectiveness.
	Caldwell et al. (2006)	Propensity score matched control trial	Cost-benefit analysis (intensive mental health treatment for juvenile delinquency vs. secured juvenile corrections facility)	The treatment programme has a return of $7 benefit for every $1 it costed.
	Vermeulen et al. (2017)	Randomised controlled trial	Cost-effectiveness analysis (multisystemic therapy vs. treatment as usual)	There is no advantage to the young offenders' quality of life, but substantial cost-benefits from a societal perspective.

TABLE 1 (Continued)

CJS pathway	Study	Study type	Type of economic evaluation	Key findings
	Dopp et al. (2014).	25-year follow up of a randomised trial	Cost-benefit analysis (multisystemic therapy vs. individual therapy)	For each dollar invested, $1.18 can be recovered for taxpayers, or $5.04 if both tangible and intangible benefits for the crime victim are included.
Post-incarceration	Mayfield (2009)	Quasi-experimental approach with matched controls	Cost-benefit analysis (Dangerous Mentally Ill Offender programme)	A return of $1.64 for every dollar spent within 4 years considering both taxpayers and victims.
	Hunter et al. (2022)	Randomised controlled trial	Cost-effectiveness and cost-consequences analysis (Engager plus usual care vs. usual care)	No evidence of cost-effectiveness at 12-month post-release, although some outcomes may only be observed with longer follow-up

Abbreviations: CJS, criminal justice system; DSPD, dangerous and severe personality disorder.

However, a systematic review concluded that evidence on the effectiveness of pre-arrest diversion on criminal and mental health outcomes was unclear (Bird & Shemilt, 2019). As for economic analysis, only 10 studies included cost data, and only one compared costs with outcomes. This was a cost-effectiveness study comparing a crisis intervention team model with treatment as usual (Cowell et al., 2004): police-based diversion was associated with higher direct care costs, driven mainly by inpatient psychiatric care.

2.2 | Post-arrest

Post-arrest diversion is another point in the pathway where mental health interventions could be cost-effective, but again clear evidence is awaited. A US estimate suggested that mental health diversion can lead to over $1 billion in savings per year (Delgado et al., 2020).

Offenders with serious mental illness may be diverted to receive community-based interventions, such as forensic assertive community treatment (FACT). Supported by a team that may include a psychiatrist, nurse, probation officer and peer recovery specialist, FACT participants receive assistance regarding mental health, substance misuse, housing, employment, and other needs (Cusack et al., 2010). In their cost analysis based on a randomised trial in California comparing FACT with treatment as usual in jail, Cusack and colleagues noted that higher outpatient costs can be partially offset by reduced inpatient and jail costs, and suggested that, by including other CJS costs, the programme could have been more cost-effective.

Early cost estimates of mental health courts (MHCs) were promising. In the US, for example, savings were estimated at $3.5 million over 2 years (Kaplan, 2007), and some data suggested reduced use of crisis and emergency services (Boothroyd et al., 2003). Other studies concluded that MHCs are associated with *higher* total costs

in the first 18–24 months, but that cost savings in mental health service and/or CJS may be observed thereafter (Lindberg, 2009; Ridgely et al., 2007). However, a 6-year follow-up found MHCs were *not* cost-saving, and recommended more targeted services for people with greatest needs (Steadman et al., 2014). A more recent cost analysis in Canada found increased costs in the first 2 years post-court entry, mainly due to administrative charges (Zidenberg et al., 2022).

2.3 | Incarceration/punishment

There is more economic evaluation evidence here, including for forensic psychiatric admissions, prison-based interventions, and specific related services. Forensic psychiatric institutions (called 'secure hospitals' in some countries) are high-cost settings for people with severe mental illness considered to be high-risk violence perpetrators. There is relatively little research information on the use of pharmacological and psychological interventions in these settings. Two systematic reviews of international literature conducted in Sweden reached cautious conclusions about the economic benefits: although no recommendations were made due to the absence of robust economic evidence, it was suggested that the cost of these interventions/treatments would be relatively low, so that if they shorten forensic psychiatric care time, the cost-effectiveness ratio could be promising (Swedish Agency for Health Technology Assessment and Assessment of Social Services, 2018a, 2018b). Another systematic review of pharmacological treatments in forensic psychiatric settings similarly noted a lack of economics analysis (Howner et al., 2019). A rare economics study, using simulation modelling, concluded that cognitive behavioural therapy had a cost-benefit ratio of $1 to $25, making it one of the few interventions with an attractive return-on-investment (Aos & Drake, 2013).

A historical cohort study highlighted how outcomes vary markedly for people discharged from forensic psychiatric hospitals: people with personality disorder have the highest risk of violent offending (Fazel et al., 2016). Referring to it as 'warehousing', Tyrer et al. (2010) noted earlier that few therapeutic activities happen in the placement of people with dangerous and severe personality disorder (DSPD) in England. In a randomised trial comparing prisoners in a DSPD assessment service with a waitlist control group of prisoners in the high-secure prison system, a statistically non-significant trend of worse outcomes was found (Barrett et al., 2009). Considering the substantial costs associated with DSPD assessment, the authors thought it unlikely that the programme would be cost-effective.

A later narrative review of the cost-effectiveness of DSPD programmes identified few randomised trials: savings from reduced serious offences were small compared to costs of the programme, and short-term treatment outcomes including violence risk reduction were not good (Barrett & Tyrer, 2012). From the same group of researchers, Barrett and Byford (2012) used a Markov decision model to explore DSPD programme cost-effectiveness over the longer term (25 years), looking at reoffending rates. Their conclusion was that cost-effectiveness was unlikely, but they also suggested that alternatives such as specialist intervention programmes based in mainstream prisons should be considered, and that it was important to consider outcomes other than reoffending. In other words, unless outcomes in addition to reoffending are considered, cost-effectiveness is unlikely given the high cost of the programme.

An earlier review including five studies of Therapeutic Community (TC) programmes for substance abusers suggested favourable cost-benefit findings. This includes in-prison TC and aftercare services for offenders. In a long-term study of TC included in the review, reduced reincarceration was noted, which contributed to a lower cost over time (De Leon, 2010).

Other studies have focussed on mental health interventions for serious and violent *juvenile* delinquents, such as the Mendota Juvenile Treatment Centre programme, a clinical and correctional hybrid infrastructure. Compared with usual treatment in a secured juvenile corrections facility, this programme yielded a $7 benefit for every $1 it cost (Caldwell et al., 2006). In this population, there are more research studies on multisystemic therapy (MST), a home- and community-based intervention. Positive findings of effectiveness, cost-effectiveness and cost-benefit of MST have been reported earlier, although the evidence has tended to come mainly from the US (see Vermeulen et al., 2017 for a discussion). These authors conducted a randomised trial in the Netherlands: despite having no advantage to

the young offenders' quality of life compared with treatment as usual, there were substantial cost-benefits with MST from a societal perspective. This study also highlighted the importance of considering the policy/service context: in the Netherlands, treatment as usual is of a high standard, and includes family-focussed interventions and standard supervision (Vermeulen et al., 2017).

Another cost-benefit analysis of MST of note is the 25-year follow-up of a randomised trial, covering a wide range of costs and outcomes, including outcomes for young offenders' siblings (Dopp et al., 2014). For each dollar invested in MST, $1.18 can be recovered for taxpayers—modest but tangible benefits—or $5.04 if both tangible and intangible benefits for crime victims are included.

Some studies have investigated use of technology to reduce use of forensic psychiatric care facilities. One study, looking at electronic monitoring for offenders on leave, concluded that a global positioning system (GPS) device could be cost-saving: quicker recovery, shorter stays and lower costs, with public safety benefits (Tully et al., 2016). Other studies have examined forensic telepsychiatry on the premise that forensic psychiatric services are 'high cost, low volume', while telepsychiatry might reduce costs (e.g., see Khalifa et al., 2008; Sales et al., 2018).

2.4 | Post-incarceration

While a few post-incarceration mental health interventions have been evaluated—such as release planning, assertive community treatment, and intensive case management—there is not much economic evidence. An exception is a study of the Dangerous Mentally Ill Offender (DMIO) programme in Washington state, which provides mentally ill prisoners with up to 5 years of post-release services. Based on earlier reports of cost savings, a cost-benefit analysis found a return of $1.64 for every dollar spent within 4 years (Mayfield, 2009).

Cost-effectiveness findings have recently been published for a complex intervention for common mental health problems (called 'Engager') for male prisoners near to, or shortly after release in England (Hunter et al., 2022). Compared to usual care alone, there was no evidence that Engager was cost-effective at 12-month post-release, although the authors noted that some outcomes may only be observed with longer follow-up and so economic benefits might also emerge at that later point.

3 | CONCLUSIONS

In this narrative review, we aimed to provide an update on economic evidence relating to mental health interventions in criminal justice, and to identify challenges and responses in using economic evidence to inform policy. More than a decade after the review by Frank and McGuire (2010), the jury is still out. We identified several challenges in relation to economic evidence of mental health interventions in the CJS (broadly defined).

The most obvious challenge is the paucity of high-quality evidence, especially cost-benefit analyses based on rigorous methods and with benefit measures that capture key outcomes. The lack of high-quality evidence in this area is not only a limitation of health economics research, but the implementation of effective mental health interventions in general. A recent systematic review and meta-analysis of psychological interventions in prison, for example, concluded that there is only thin evidence of their effects on recidivism, which came from two therapeutic community studies, due to publication bias and small-study effects (Beaudry et al., 2021). The few studies that have generated cost-benefit evidence have been conducted in high-income countries. Service, policy, infrastructural and economic circumstances can have considerable impact on the findings, reinforcing the familiar caution that cost-benefit and other evaluative evidence does not always transfer well from one context to another, and particularly between countries. Understandably, decision-makers generally want *local* data to guide resource allocation.

Besides these evidence gaps, there are other challenges in turning economic evaluation evidence into good mental health and criminal justice policy and practice, including hidden costs, silo budgeting, and delayed pay-offs

(Knapp & Wong, 2020). For example, costs associated with mental health care use by *victims* of crime are less visible economic consequences, and are rarely included in evaluations, even though a significant proportion of mental health service users have been found to be crime victims (Cohen & Miller, 1998). Policy recommendations vary depending on whether a healthcare perspective, criminal justice perspective or joint perspective is taken (Ramponi et al., 2021).

Silo-budgeting may pose barriers for implementation of cost-effective interventions if costs are incurred in one sector, but economic and other benefits are accrued in another sector, such as treatment costs of mental illness in the CJS (Jacobs et al., 2016). PECUNIA, a European health economics and health technology assessment consortium, has recently consolidated a list of intersectoral costs and benefits to ensure important societal costs are included in economic evaluations of mental health interventions in the CJS (Janssen et al., 2020). A collaborative framework for supporting justice-involved adults with serious mental illness has also been proposed (Kamin et al., 2022).

Mental health interventions can be effective in preventing or reducing crime, and in supporting people who commit or are victims of crime. Although available evidence remains modest in volume and variable in quality, marshalling cost-benefit and other economic evidence on interventions can contribute importantly to the perennially difficult resource allocation decisions faced by governments.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

REFERENCES

Aos, S., & Drake, E. (2013). *Prison, police, and programs: Evidence-based options that reduce crime and save money*. Washington State Institute for Public Policy.

Barrett, B., & Byford, S. (2012). Costs and outcomes of an intervention programme for offenders with personality disorders. *British Journal of Psychiatry*, *200*(4), 336–341. https://doi.org/10.1192/bjp.bp.109.068643

Barrett, B., Byford, S., Seivewright, H., Cooper, S., Duggan, C., & Tyrer, P. (2009). The assessment of dangerous and severe personality disorder: Service use, cost, and consequences. *Journal of Forensic Psychiatry and Psychology*, *20*(1), 120–131. https://doi.org/10.1080/14789940802236864

Barrett, B., & Tyrer, P. (2012). The cost-effectiveness of the dangerous and severe personality disorder programme. *Criminal Behaviour and Mental Health*, *22*(3), 202–209. https://doi.org/10.1002/cbm.1829

Beaudry, G., Yu, R., Perry, A. E., & Fazel, S. (2021). Effectiveness of psychological interventions in prison to reduce recidivism: A systematic review and meta-analysis of randomised controlled trials. *The Lancet Psychiatry*, *8*(9), 759-773, https://doi.org/10.1016/s2215-0366(21)00170-x

Bird, S. K., & Shemilt, I. (2019). The crime, mental health, and economic impacts of prearrest diversion of people with mental health problems: A systematic review. *Criminal Behaviour and Mental Health*, *29*(3), 142–156. https://doi.org/10.1002/cbm.2112

Boothroyd, R. A., Poythress, N. G., McGaha, A., & Petrila, J. (2003). The Broward Mental Health Court: Process, outcomes, and service utilization. *International Journal of Law and Psychiatry*, *26*(1), 55–71. https://doi.org/10.1016/s0160-2527(02)00203-0

Caldwell, M. F., Vitacco, M., & Van Rybroek, G. J. (2006). Are violent delinquents worth treating? A cost-benefit analysis. *Journal of Research in Crime and Delinquency*, *43*(2), 148–168. https://doi.org/10.1177/0022427805280053

Cohen, M. A., & Miller, T. R. (1998). The cost of mental health care for victims of crime. *Journal of Interpersonal Violence*, *13*(1), 93–110. https://doi.org/10.1177/088626098013001006

Cowell, A. J., Broner, N., & Dupont, R. (2004). The cost-effectiveness of criminal justice diversion programs for people with serious mental illness co-occurring with substance abuse: Four case studies. *Journal of Contemporary Criminal Justice*, *20*(3), 292-314, https://doi.org/10.1177/1043986204266892

Cusack, K. J., Morrissey, J. P., Cuddeback, G. S., Prins, A., & Williams, D. M. (2010). Criminal justice involvement, behavioral health service use, and costs of forensic assertive community treatment: A randomized trial. *Community Mental Health Journal*, *46*(4), 356–363. https://doi.org/10.1007/s10597-010-9299-z

De Leon, G. (2010). Is the therapeutic community an evidence-based treatment? What the evidence says. *Therapeutic Communities*, *31*, 104–128.

Delgado, D., Breth, A., Hill, S., Warburton, K., & Stahl, S. M. (2020). Economics of decriminalizing mental illness: When doing the right thing costs less. *CNS Spectrums*, *25*(5), 566–570. https://doi.org/10.1017/s1092852919001792

Dopp, A. R., Borduin, C. M., Wagner, D. V., & Sawyer, A. M. (2014). The economic impact of multisystemic therapy through midlife: A cost-benefit analysis with serious juvenile offenders and their siblings. *Journal of Consulting and Clinical Psychology*, *82*(4), 694-705, https://doi.org/10.1037/a0036415

Earl, F., Cocksedge, K., Rheeder, B., Morgan, J., & Palmer, J. (2015). Neighbourhood outreach: A novel approach to liaison and diversion. *Journal of Forensic Psychiatry and Psychology*, *26*(5), 573–585. https://doi.org/10.1080/14789949.2015.1045428

Fazel, S., Wolf, A., Fiminska, Z., & Larsson, H. (2016). Mortality, rehospitalisation and violent crime in forensic psychiatric patients discharged from hospital: Rates and risk factors. *PLoS One*, *11*(5), e0155906. https://doi.org/10.1371/journal.pone.0155906

Frank, R., & McGuire, T. (2010). *Mental health treatment and criminal justice outcomes*. National Bureau of Economic Research.

Howner, K., Andine, P., Engberg, G., Ekstrom, E. H., Lindstrom, E., Nilsson, M., Radovic, S., & Hultcrantz, M. (2019). Pharmacological treatment in forensic psychiatry – A systematic review. *Frontiers in Psychiatry*, *10*, 963. https://doi.org/10.3389/fpsyt.2019.00963

Hunter, R. M., Anderson, R., Kirkpatrick, T., Lennox, C., Warren, F., Taylor, R. S., Shaw, J., Haddad, M., Stirzaker, A., Maguire, M., & Byng, R. (2022). Economic evaluation of a complex intervention (Engager) for prisoners with common mental health problems, near to and after release: A cost-utility and cost-consequences analysis. *The European Journal of Health Economics*, *23*(2), 193–210. https://doi.org/10.1007/s10198-021-01360-7

Jacobs, P., Moffatt, J., Dewa, C. S., Nguyen, T., Zhang, T., & Lesage, A. (2016). Mental health services costs within the Alberta criminal justice system. *International Journal of Law and Psychiatry*, *47*, 102–108. https://doi.org/10.1016/j.ijlp.2016.04.008

Janssen, L. M. M., Pokhilenko, I., Evers, S., Paulus, A. T. G., Simon, J., Konig, H. H., Brodszky, V., Salvador-Carulla, L., Park, A. L., Hollingworth, W., Drost, R. M. W. A. (2020). Exploring the identification, validation, and categorization of the cost and benefits of criminal justice in mental health: The PECUNIA project. *International Journal of Technology Assessment in Health Care*, *36*, (4), 1-8. https://doi.org/10.1017/S0266462320000471

Kamin, D., Weisman, R. L., & Lamberti, J. S. (2022). Promoting mental health and criminal justice collaboration through system-level partnerships. *Frontiers in Psychiatry*, *13*. https://doi.org/10.3389/fpsyt.2022.805649

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

Kaplan, A. (2007). *Mental health courts reduce incarceration, save money* (Vol. 24). Psychiatric News. http://www.psychiatrictimes.com/display/article/10168/54266?verify=0

Khalifa, N., Saleem, Y., & Stankard, P. (2008). The use of telepsychiatry within forensic practice: A literature review on the use of videolink. *Journal of Forensic Psychiatry and Psychology*, *19*(1), 2-13, https://doi.org/10.1080/14789940701560794

Knapp, M., & Wong, G. (2020). Economics and mental health: The current scenario. *World Psychiatry*, *19*(1), 3–14. https://doi.org/10.1002/wps.20692

Kutcher, S., & McDougall, A. (2009). Problems with access to adolescent mental health care can lead to dealings with the criminal justice system. *Paediatrics and Child Health*, *14*(1), 15–18. https://doi.org/10.1093/pch/14.1.15

Lindberg, A. J. (2009). *Costs and benefits of behavioral health court: Findings from "examining the program costs and outcomes of San Francisco's Behavioral Health Court"*. Office of Justice Programs, U.S. Department of Justice.

Mayfield, J. (2009). *The Dangerous Mentally Ill Offender program: Cost effectiveness 2.5 years after participants' prison release*. Washington State Institute for Public Policy.

Ramponi, F., Walker, S., Griffin, S., Parrott, S., Drummond, C., Deluca, P., Coulton, S., Kanaan, M., & Richardson, G. (2021). Cost-effectiveness analysis of public health interventions with impacts on health and criminal justice: An applied cross-sectoral analysis of an alcohol misuse intervention. *Health Economics*, *30*(5), 972–988. https://doi.org/10.1002/hec.4229

Ridgely, M. S., Engberg, J., Greenberg, M. D., Turner, S., DeMartini, C., & Dembosky, J. W. (2007). *Justice, treatment, and cost: An evaluation of the fiscal impact of Allegheny county mental health court*. RAND Corporation.

Sales, C. P., McSweeney, L., Saleem, Y., & Khalifa, N. (2018). The use of telepsychiatry within forensic practice: A literature review on the use of videolink – A ten-year follow-up. *Journal of Forensic Psychiatry and Psychology*, *29*(3), 387–402. https://doi.org/10.1080/14789949.2017.1396487

Sanislow, C. A., Grilo, C. M., Fehon, D. C., Axelrod, S. R., & McGlashan, T. H. (2003). Correlates of suicide risk in juvenile detainees and adolescent inpatients. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*(2), 234–240. https://doi.org/10.1097/00004583-200302000-00018

Skeem, J. L., Manchak, S., & Peterson, J. K. (2011). Correctional policy for offenders with mental illness: Creating a new paradigm for recidivism reduction. *Law and Human Behavior*, *35*(2), 110–126. https://doi.org/10.1007/s10979-010-9223-7

Steadman, H. J., Callahan, L., Robbins, P. C., Vesselinov, R., McGuire, T. G., & Morrissey, J. P. (2014). Criminal justice and behavioral health care costs of mental health court participants: A six-year study. *Psychiatric Services*, *65*(9), 1100–1104. https://doi.org/10.1176/appi.ps.201300375

Swedish Agency for Health Technology Assessment and Assessment of Social Services. (2018a). Pharmaceutical treatment in forensic psychiatric care: A systematic review and assessment of the medical, economic, social and ethical aspects. https://www.sbu.se/en/publications/sbu-assesses/psychological-and-psychosocial-interventions-in-forensic-psychiatric-care/

Swedish Agency for Health Technology Assessment and Assessment of Social Services. (2018b). Psychological and psychosocial interventions in forensic psychiatric care: A systematic review and assessment of medical, economic, social and ethical aspects. https://www.sbu.se/en/publications/sbu-assesses/psychological-and-psychosocial-interventions-in-forensic-psychiatric-care/

Tully, J., Cullen, A. E., Hearn, D., & Fahy, T. (2016). Service evaluation of electronic monitoring (GPS tracking) in a medium secure forensic psychiatry setting. *Journal of Forensic Psychiatry and Psychology*, *27*(2), 169–176. https://doi.org/10.1080/14789949.2015.1122823

Tyrer, P., Duggan, C., Cooper, S., Crawford, M., Seivewright, H., Rutter, D., Maden, T., Byford, S., & Barrett, B. (2010). The successes and failures of the DSPD experiment: The assessment and management of severe personality disorder. *Medicine, Science & the Law*, *50*(2), 95–99. https://doi.org/10.1258/msl.2010.010001

Vermeulen, K. M., Jansen, D. E., Knorth, E. J., Buskens, E., & Reijneveld, S. A. (2017). Cost-effectiveness of multisystemic therapy versus usual treatment for young people with antisocial problems. *Criminal Behaviour and Mental Health*, *27*(1), 89–102. https://doi.org/10.1002/cbm.1988

Zidenberg, A., Kerodal, A., Jewell, L., & Luther, G. (2022). Cost analysis of the Saskatoon Mental Health Strategy (MHS) court. *Journal of Community Safety and Well-Being*, *7*(3), 122–130. https://doi.org/10.35502/jcswb.241

How to cite this article: Knapp, M., & Wong, G. (2023). Economic evaluations of mental health interventions in criminal justice. *Criminal Behaviour & Mental Health*, 1–10. https://doi.org/10.1002/cbm.2286