

Behandling och sociala stödinsatser vid samsjuklighet mellan beroende och andra psykiatriska tillstånd/Treatment and social support measures in case of comorbidity between addiction and other psychiatric conditions, report 372 (2025)

## Appendix 8 – Included health economic studies

**Table 1** Economic evaluation comparing a contingency-management intervention (CM) added to treatment-as-usual (TAU), with TAU alone for stimulant use in people with serious mental illness.

Author	Murphy et al.
Year	2015
Reference	[1]
Country	USA
Study design	RCT-based CEA
	Time horizon: 12 (intervention) and 24 weeks (follow-up)
Population	People with stimulant use and serious mental illness. Aged 18-64 years (mean age 43 years).
	Women 34.5 %.
Setting	Community mental health centre in Seattle, Washington, USA
Perspective	Provider and paver
Intervention	CM + TAU (n=91): For each urine sample that was negative for stimulants participants earned
	one draw from a bowl of tokens. The tokens varied in value between 0 USD and 80 USD. For
	every full week of abstinence, participants received an additional opportunity to draw a
	token
vs	vs
control	TAU with noncontingent rewards (n=85); TAU participants received prizes for submitting urine
	samples (drug-free or not) and received the same number of prices as the CM group.
	TAU included services provided for mental health, chemical dependency, housing, and
	vocation.
Incremental cost	Total costs per participant at 12 weeks (provider perspective)
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	QALYs at 24 weeks CM+TAU: 0.83 vs. TAU: 0.82; difference 0.01 (SE 0.02, p=0.7)
	Conversion of Positive and negative syndrome scale (PANSS) scores to utilities through a mapping function [2]
ICER	The cost per QALY gained at 12 weeks was \$308 665 (provider perspective) and \$303 900 (payer perspective). At 24 weeks, CM+TAU dominated TAU (payer perspective). Small and insignificant differences in QALYs resulted in low levels of certainty (wide confidence intervals around point estimates). The cost per SFY gained at 12 weeks was \$48,133 (provider perspective) and \$47,390 (payer perspective). At 24 weeks, CM+TAU dominated TAU (payer perspective).
Study quality and transferability*	Moderate quality* Moderate transferability to Sweden*
Further information Comments	<ul> <li>The main trial results are reported in McDonell et al. 2013.</li> <li>Loss to follow-up for 57% of participants at 24 weeks for HRQoL data</li> <li>SFY is scaled up from 12 weeks to one year.</li> <li>Authors' conclusions are based only on SFY ("CM appears to be a wise investment for both the provider and the payer with regard to the clinical outcome of SFY"), this seems to be a questionable conclusion given the uncertainties surrounding the results and the lack of deterministic sensitivity analyses.</li> </ul>

\*Assessed using SBU's checklist for trial-based health economic studies [3]. Abbreviations: **CEA** = Cost-effectiveness analysis; **CM** = Contingency management; **ICER** = Incremental cost-effectiveness ratio. **QALY** = Quality adjusted life years; **RCT** = Randomized Controlled Trial; **SFY** = Stimulant-free years; **TAU** = Treatmentas-usual; **USD** = United States Dollar

## **Table 2** Economic evaluation comparing a contingency-management intervention (CM) added to treatment-as-usual (TAU), with TAU alone <u>for stimulant use in people with cannabis use in early</u> psychosis.

Author	Rains et al.
Year	2019
Reference	[4]
Country	England
Study design	RCT-based CEA
	Time horizon: 12 weeks (intervention), 18 months (follow-up)
Population	People with early psychosis, having used cannabis at least once in 12 of the previous 24
	weeks. Aged 18 – 36 (mean age 25 years). Women 15%.
Setting	Participants were recruited via Early Intervention in Psychosis (EIP) services across the
	Midlands and South East of England.
Perspective	NHS/Social care
Intervention	CM+TAU (n=278): Participants attended weekly CM sessions at which they were immediately
	rewarded with vouchers if urine analysis indicated cannabis abstinence since the previous
	session. Voucher values began at 5 GBP per sample; in total, participants could receive 240
	GBP in vouchers during the intervention.
vs	
control	VS
	TAU (n=273): A standardised version of a good quality psychoeducation, which was delivered
	by EIP staff in a digital format.
Incremental cost	Total costs at 18 months (after imputation), mean (SD)

	CM+TAU: 15 614 GBP (29 360) vs TAU: 16 620 GBP (33 283)
	Total incremental costs (after adjusting for baseline costs)
	-1625 GBP (bootstrapped 95% Cl, -3355 GBP to 6869 GBP)
	Costs included intervention costs, health care/ social service costs, and medication.
	Costs reported in GBP year 2015/16.
Incremental	Total mean QALYs at 18 months (EQ-5D-3L utility scores)
effect	CM+TAU: 1.2218 vs. TAU: 1.1855
	Total incremental OALVs (EQ-5D-3L utility scores: after adjusting for baseline utility)
	0.054 QALIS
	Tatal many OALVa at 10 months (CE CD utility secure)
	Total mean QALYS at 18 months (SF-oD utility scores)
	CM+1AU: 1.0682 vs. 1AU: 1.0585
	Total incremental QALYs (SF-6D utility scores; after adjusting for baseline utility):
	0.0063 QALYs
	Primary outcome was time to admission to an acute psychiatric service.
	No measure of variance reported.
	EQ-5D-3L and SF-6D utility scores increased over time for both groups.
ICER	A CEAC analysis showed that, at a threshold of £20,000, the probabilities of CM being cost
	effective compared to TAU were 0.81 (using EQ- 5D-3L utility scores) and 0.75 (using SF-6D
	utility scores)
Study quality and	Moderate quality*
transferability*	Moderate transferability to Sweden*
,	
	<ul> <li>The results are also presented in an HTA-report by the National Institute for Health</li> </ul>
Eurthor information	Posoarch NILLP (Johnson et al. 2010)
Commente	Research, Mirik (Juliison, et al. 2019).
comments	Information on now total QALYS were calculated is lacking.
	<ul> <li>Information about how costs were valued and calculated is lacking.</li> </ul>
	<ul> <li>Loss to follow-up for assessment interviews were &gt;50 % at 18 months.</li> </ul>

\*Assessed using SBU's checklist for trial-based health economic studies [3].

Abbreviations: **CEA** = Cost-effectiveness analysis; **CEAC** = Cost-effectiveness acceptability curve; **CM** = Contingency management; **EIP** = Early intervention in psychosis; **GBP** = Great British Pound; **ICER** = Incremental cost-effectiveness ratio; **NIHR** = National Institute for Health Research; **QALY** = Quality adjusted life years; **RCT** = Randomized Controlled Trial; **TAU** = Treatment-as-usual

## References

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Stockholm: Statens beredning för medicinsk och social utvärdering (SBU); 2023. [accessed April 23 2025]. Available from: <u>https://www.sbu.se/globalassets/ebm/mall\_empirisk\_halsoekonomi.pdf</u>.

4. Rains LS, Marston L, Hinton M, Marwaha S, Craig T, Fowler D, et al. Clinical and costeffectiveness of contingency management for cannabis use in early psychosis: The CIRCLE randomised clinical trial. BMC Medicine. 2019;17(1). Available from: <u>https://doi.org/10.1186/s12916-019-1395-5</u>.