

Appendix 9 Characteristics of included health economic studies

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Table 1 Costs and benefits of an early intervention for juvenile offenders – The ‘Treatment Foster Care Oregon Program’.

Author	Vimefall et al.
Year	2022
Reference	[174]
Country	Sweden
Study design	Model based CBA. Time horizon: 3 years.
Population	Based on the population in Bergrström and Højman [139]: 46 teenagers, 12–17 years old who fulfilled the diagnostic criteria for conduct disorder and were at immediate risk of out-of-home placement. n(TFCO)=19; n(TAU)=27.
Setting	Foster homes and institutional care.
Perspective	Societal perspective with defined limitations.
Intervention vs control	Treatment Foster Care Oregon (TFCO) vs Treatment as Usual (TAU)
Incremental cost	Reported to be –31.171 USD per individual in baseline calculations. Costs reported in USD year 2018.
Incremental effect	Based on the crime rates observed in Bergström and Højman [139]: the crime rate for TFCO was 0% in years 1–3, whereas for TAU it was 26% in year 1, 15% in both years 2 and 3. This difference between the groups corresponds to an incremental monetary benefit of USD 6.658 per individual.
Result (NPV)	Baseline calculations indicate a net present value (NPV) of USD 37.829 per participant (NPV = 6.658 – (–31.171) = 37.829). Sensitivity analyses show that the results are particularly sensitive to assumptions regarding TAU and the duration of the placement.
Study quality and transferability*	Major methodological limitations. High transferability to Sweden
Further information	<ul style="list-style-type: none"> • High uncertainty in input data means the results should be interpreted with caution; results are based on a crime rate of 0 for TFCO.
Comments	<ul style="list-style-type: none"> • Sensitivity analysis show both positive and negative NPVs. • Despite claiming a societal perspective, the analysis applies a limited one, with a short time horizon and incomplete inclusion of costs and effects. • This study is included due to its novelty and transparency, but further development is needed to provide a robust basis for decision-making.

CBA = Cost-Benefit Analysis; **NPV** = net present value; **TFCO** = Treatment Foster Care Oregon; **TAU** = Treatment as Usual

*Assessed using SBU Health Economic Assessment Tool, version 1.0 [107].

Table 2 Long-Term Economic Benefit of Treatment Foster Care Oregon (TFCO) for Adolescent Females Referred to Congregate Care for Delinquency.

Author	Saldana et al.
Year	2010
Reference	[156]
Country	USA (Washington State and Oregon)
Study design	RCT-based within-trial CBA. The original RCT is described, for example, in Leve et al. (2013) [152]
Population	Long-term follow up of 152 adult women, aged approximately 15 years at baseline and 25 years at follow-up, who had been mandated to community-based, out-of-home care due to chronic delinquency and serious family adversity.
Setting	Foster homes and institutional care.
Perspective	Societal perspective with defined limitations.
Intervention vs control	Treatment Foster Care Oregon (TFCO) vs Treatment as Usual (TAU).
Incremental cost	Not reported.
Incremental effect	Percentage with DHS involvement: 34% in TAU vs 22% in TFCO. Convicted charges present in court cases: 69 charges in TAU vs 49 charges in TFCO. Mean arrests: 0.9 arrests in TAU vs 0.5 arrests in TFCO. Jail duration: 105 days in TAU vs 30 days in TFCO. Prison duration: 688 days in TAU vs 687 in TFCO. Probation duration: 1.013 days in TAU vs 1.233 in TFCO. Parole duration: 584 days in TAU vs 287 in TFCO.
Result (Benefit-Cost Ratio)	A benefit to cost ratio of USD 3.15 suggest that every dollar spent on TFCO yields an estimated return of USD 3.15.
Study quality and transferability*	Major methodological limitations. Moderate transferability to Sweden
Further information	<ul style="list-style-type: none"> • Despite access to longitudinal register data, key measures of uncertainty and sensitivity analyses are lacking.
Comments	<ul style="list-style-type: none"> • Cost calculations are insufficiently described. • The analysis applies a narrow societal perspective, excluding several relevant sectors and quality-of-life outcomes. • Poor description of usual care.

CBA = Cost-Benefit Analysis; **TFCO** = Treatment Foster Care Oregon; **TAU** = Treatment as Usual

*Assessed using SBU Health Economic Assessment Tool, version 1.0 [107].

References (same numbering as in the report)

107. SBU:s hälsoekonomiska granskningsmall. Stockholm: Statens beredning för medicinsk och social utvärdering (SBU); 2025. [accessed Jan 18 2026]. Available from: <https://www.sbu.se/sv/metod/halsoekonomi/>
139. Bergström M, Højman L. Is multidimensional treatment foster care (MTFC) more effective than treatment as usual in a three-year follow-up? Results from MTFC in a Swedish setting. *Eur J Soc Work*. 2016;19(2):219-35. Available from: <https://doi.org/10.1080/13691457.2015.1030361>
156. Saldana L, Campbell M, Leve L, Chamberlain P. Long-Term Economic Benefit of Treatment Foster Care Oregon (TFCO) for Adolescent Females Referred to Congregate Care for Delinquency. *Child Welfare*. 2019;97(5):179-95.
152. Leve LD, Kerr DCR, Harold GT. Young Adult Outcomes Associated With Teen Pregnancy Among High-Risk Girls in a Randomized Controlled Trial of Multidimensional Treatment Foster Care. *J Child Adolesc Subst Abuse*. 2013;22(5):421-34. Available from: <https://doi.org/10.1080/1067828X.2013.788886>
174. Vimefall E, Sahrblom F, Nordlöf K. Costs and benefits of an early intervention for juvenile offenders – The ‘Treatment Foster Care Oregon Program’. *Child Youth Serv Rev*. 2022;142. Available from: <https://doi.org/10.1016/j.chilyouth.2022.106452>