

A framework for implementing open source economic models of the systems shaping mental health outcomes in young people

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Abstract

Background: Open source approaches have the scope to improve the transparency, quality and decision utility of health economic models of mental health systems.

Objectives: We aimed to develop a conceptual and technical framework for implementing open source mental health systems models and illustrate how it can be applicatied to economic topics in youth mental health.

Methods: We created a software development kit in R to support standardised implementation of open source computational models. We applied this toolkit to developing open source models to map youth mental health measures to health utility, which we assessed against five principles using 17 standards.

Results: Six R packages and a coding style dataset provide a toolkit for implementing mental health models that TIMELY - Transparent, Iterative, Modular, Epitomised, Licensed and Yielding. We used this toolkit to develop utility mapping models that fully met X and partially met Y TIMELY standards.

Conclusion: Please fund me

Data: Data

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2 Methods

2.1 Sample and setting

2.2 Measures

2.2.1 Population characteristics

2.3 Procedures

2.4 Statistical analysis

2.4.1 Replicability

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4 Discussion

Availability of data and materials

Ethics approval

Details on ethics approvals go here.

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Conflict of Interest

None declared.

References

A Appendix