

Commentary on “Delivering quality care more efficiently interim report”

Submission to the Productivity Commission by the Health Economics Group, School of Public Health and Preventive Medicine, Monash University

15th September 2025

Authors: Prof. Cathy Mihalopoulos, Matthew Hamilton, Dr. Yong Yi Lee, Dr. Long Le, Dr Jemimah Ride and Dr. Mary Lou Chatterton

Submission purpose and scope

This submission provides feedback by the Health Economics Group (HEG) at Monash University to the Productivity Commission's *Delivering quality care more efficiently interim report*. This submission aims to outline how the recent and ongoing work of HEG relates to selected aspects of the interim report. We confine our feedback to Section 3 of the interim report (*A national framework to support government investment in prevention*). Our commentary has a particular focus on issues relating to the prevention of mental disorders.

About the Health Economics Group at Monash University

We are a health economics research group comprising 26 staff members in the School of Public Health and Preventive Medicine at Monash University. We undertake research and contract program evaluation studies in multiple health areas, with a major focus on mental health. Our relevant expertise - relating to the focus of this submission - includes a long history of publishing original research and review papers over a 20-year period, to evaluate the value for money credentials of preventive interventions for mental disorders as well as interventions targeting mental health promotion.

However, the content of this submission is primarily informed by work that we have undertaken over the last five years as we believe that this time period is likely to be of most relevance to the current policy context. Since 2020 we have published 16 original papers and eight review articles that directly address questions around which preventive interventions are cost-effective for improving mental health and delaying/averting the occurrence of mental disorders. We have also contributed to mental health policy analysis and commentary, alongside ongoing contributions to the development of methods relevant to health economic analysis. We provide a list of relevant studies at the end of this submission document.

More information about HEG is available at: <https://www.monash.edu/medicine/sphpm/health-economics-group>

Response to the interim report

Our response to the interim report includes several overall comments, followed by more specific comments about selected aspects of information requests 3.1 and 3.2.

Overall comments

We support the interim report's conclusions that:

- “investment in prevention can produce significant benefits to individuals, government and the community, relative to its costs”;

- “high-quality prevention programs can generate social benefits such as reduced crime, longer and healthier lives, and improved educational outcomes”; and
- gains are often concentrated in the most disadvantaged communities.

These conclusions are all valid in the context of investments to promote mental health and prevent or delay the onset and worsening of mental disorders.

The importance of preventing mental disorders and promoting good mental health

Based on our experience evaluating prevention programs in mental health, we believe that the report has correctly identified as essential goals for meaningful prevention funding reform to: (i) increase the total amount of funding; and (ii) better allocate funding to the right mix of programs.

While we understand that the report used discrete examples of preventive interventions as case studies, it is unclear on what basis these case studies were chosen. Given the current burden associated with mental disorders and in particular, the alarming growth of such disorders in young people¹, perhaps some local mental health focused case studies that have been shown to be excellent value for money, particularly for young people (including children), would be a useful addition. We have evaluated such interventions ourselves, which we list in our relevant prior work below. A few recent notable examples include:

- Le, L.K., E.J. Tan, P. Hay, J. Ananthapavan, Y.Y. Lee, and C. Mihalopoulos, The modelled cost-effectiveness of a prevention program targeting both eating disorders and high BMI. *Int J Eat Disord*, 2024. 57(9): p. 1945-1958. <https://doi.org/10.1002/eat.24238>
- Le LK-D, Engel L, Lee YY, Lal A and Mihalopoulos C. 'The cost-effectiveness of a school-based intervention for bullying prevention: An Australian case study'. *Mental Health & Prevention*. 2021, 24:200224. <https://doi.org/https://doi.org/10.1016/j.mhp.2021.200224>
- Lee YY, Le LK-D, Lal A, Engel L, Mihalopoulos C. The cost-effectiveness of delivering an e-health intervention, MoodGYM, to prevent anxiety disorders among Australian adolescents: A model-based economic evaluation. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200210>
- Lee YY, Le LK-D, Lal A, Engel L, Mihalopoulos C. The cost-effectiveness of delivering universal psychological interventions in schools to prevent depression among Australian adolescents: a model-based economic evaluation. *Mental Health & Prevention*. 2021 (4). <https://doi.org/10.1016/j.mhp.2021.200213>.
- Lal A, Le LK-D, Engel L, Lee YY, Mihalopoulos C. Modelled cost-effectiveness of a parent education program for the prevention of anxiety disorders in children. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200219>

All of these interventions, despite adopting fairly conservative modelling assumptions, represent excellent value for money and positive returns on investment. Furthermore, the benefits are realised over relatively short time horizons.

The four later publications cited above were published from a commissioned piece of work we undertook for the National Mental Health Commission (NMHC) - a summary of this report and results may be found here:

<https://www.mentalhealthcommission.gov.au/publications/economic-case-investing-mental-health-prevention-summary>.

We separately published each of the 10 preventive interventions modelled for this report in a series of papers in the journal “Mental Health & Prevention”, which are all referenced below. Nine of the ten interventions had positive return on investment (ROI) values that were greater than 1, showing that for every dollar invested, greater than one dollar’s worth of benefits were generated.

¹McGorry, P.D., C. Mei, N. Dalal, M. Alvarez-Jimenez, S.J. Blakemore, V. Browne, B. Dooley, I.B. Hickie, P.B. Jones, D. McDaid, C. Mihalopoulos, et al. The Lancet Psychiatry Commission on youth mental health. *Lancet Psychiatry*, 2024. 11(9): p. 731-774.

Our other recent original research and research review studies have identified a wide range of programs that are cost-effective for improving mental health and delaying/averting the occurrence of mental disorders. However, many of these programs have yet to be adopted at scale in the Australian context. We include a list of the original economic evaluation research we have conducted in the last five years (16 studies), along with eight systematic reviews in the list of our relevant work at the end of this submission. If the Productivity Commission is interested in a full compendium of our research relevant to this topic over the last 20 years, we are happy to provide this.

Barriers to the implementation of cost-effective interventions

Our experience in the evaluation of mental disorder prevention and mental health promotion interventions also leads us to agree that two major barriers to achieving these funding reform goals are: (i) limitations in the existing evidence evaluating prevention programs; and (ii) misalignment between siloed funding approaches and the multisectoral nature of many prevention programs.

Although it is unclear as to all of the reasons why the results of many local economic evaluations, despite showing excellent value for money credentials, have not been fully used to inform policy and practice, we suspect that many of the limitations highlighted by the Productivity Commission are relevant. These include:

- the cross-sectoral nature of the interventions (e.g. school-based interventions), which require funding commitments across different government departments;
- methodological choices about the types of cost and outcomes impacts that are assessed and the timeframes over which assessments are made that can limit the usefulness of evaluations to some types of potential government funders; and
- (for model-based evaluations) the limited use of scientific computing methods and infrastructure that would facilitate the adequate and ongoing maintenance of models to assess prevention programs (i.e., to prevent the validity and relevance of model findings diminishing over time) and made readily available to third parties to independently test, replicate, reuse and adapt.

Siloed funding arrangements can be a major issue for mental disorder prevention and mental health promotion programs, where both implementation and benefits may be diffused across multiple government portfolio areas (e.g., health, education, justice, private commercial) and different tiers of government.

We endorse the interim report's recommendation to establish a National Prevention Investment Framework (the framework) as an important step to advancing meaningful reform in prevention funding. We further endorse the two central components of the framework: (i) establishment of an independent, cross-sectoral body to assess and make recommendations on program proposals; and (ii) a process for consistent and transparent funding decisions.

However, we believe that the framework will have the greatest potential to catalyse major positive change if it is planned and implemented in a manner that appropriately leverages the broader ecosystem in which prevention programs are evaluated in Australia. This is because it is likely that:

- the number of prevention programs that will be evaluated under the framework will represent a relatively small fraction of the number of potential programs that could be evaluated and funded;
- members of the framework team are likely to rely on evidence generated by other evaluators to guide decisions as to which programs to evaluate under the framework and how these programs should be evaluated; and
- the range of skills required to appropriately undertake evaluations under the framework are likely to be too diverse to reside in a single organisation.

We therefore believe that consideration should be given to:

- making it a goal of the new framework to promote the adoption of a small set of explicitly defined practices that improve the quality, consistency and interoperability of evaluation outputs by the broader community involved in Australian prevention program evaluation; and
- supporting the implementation of the framework with complementary policy measures that address data, skills or infrastructure barriers to undertaking high-quality evaluation of prevention programs at adequate scale.

Responses to information request 3.1

We will restrict our commentary to providing feedback on the following questions identified in information request 3.1.

When prioritising different proposals, how should factors such as overall net benefits, net fiscal effects, cost-effectiveness, equity, ease of implementation, timescale and the value of future benefits and costs be weighted?

We believe that the appropriate weighting of the multiple factors relevant to investment decisions may vary across decision-makers and decision contexts. Although a major potential benefit of the proposed framework is promoting consistency in evaluation and decision-making, we recommend that the framework strike a balance between standardising some methods and processes and allowing flexibility for decision-makers to explore alternative weightings of decision criteria. We recommend four broad strategies for facilitating such flexibility:

- adopting priority setting frameworks similar to that used in the Assessment of Cost-Effectiveness in Prevention study (ACE-Prevention²) to support structured, but flexible approaches to the generation and assessment of multiple types of evidence relating to prevention investment decisions;
- promoting consistency in adherence to clearly specified guidance on selected methodological choices such as the choice of discount rate for short-, medium- and long- term time horizons as well as the choice of perspective;
- the possibility of adopting formal tools for synthesising different decision criteria such as Distributional Cost-Effectiveness Analysis (DCEA)³ to jointly explore equity and efficiency domains and blended modelling approaches⁴ or multi-criteria decision analysis (MCDA) tools⁵ to integrate, in a unified modelling framework, analysis and weighting of multiple topics such as feasibility and value for money; and
- promoting the use of open-source “living models” that can be readily reused and updated to adapt to varying decision-maker requirements, new evidence and an evolving decision-context.

However, we wish to caution that the adoption of frameworks or criteria that are markedly different to those used in existing health technology assessment processes within Australia, such as via the Pharmaceutical Benefits Advisory Committee (PBAC) and the Medical Services Advisory Committee (MSAC) should be implemented so as to not bias against preventive interventions. Furthermore, any adoption of other criteria in formal evaluation frameworks, such as via DCEA or MCDA need to be balanced against existing HTA frameworks.

² We note that the Productivity Commission has already referenced the main report of the ACE-Prevention project in which some of our team members were named authors.

³ Meunier A, Longworth L, Kowal S, Ramagopalan S, Love-Koh J, Griffin S. Distributional cost-effectiveness analysis of health technologies: data requirements and challenges. *Value in Health*. 2023 Jan 1;26(1):60-3.

⁴ A brief discussion of blended modelling approaches is included in: Whiteford H, Bagheri N, Diminic S, Enticott J, Gao CX, Hamilton M, Hickie IB, Khanh-Dao Le L, Lee YY, Long KM, McGorry P. Mental health systems modelling for evidence-informed service reform in Australia. *Australian & New Zealand Journal of Psychiatry*. 2023 Nov;57(11):1417-27.
<https://doi.org/10.1177/00048674231172113>

⁵ See for example, <https://analysisfunction.civilservice.gov.uk/policy-store/an-introductory-guide-to-mcda/>

Are there existing frameworks that do this well?

In our previous response, we identified the Assessing Cost-Effectiveness (ACE) approach as used in ACE-Prevention and other priority setting projects⁶, DCEA and MCDA as potential frameworks to explore. Under the ACE priority setting framework⁷ that has been used in Australia and adopted by the ACE-Prevention study, quantitative analyses determined the cost-effectiveness ratios of over 200 interventions; however, other criteria deemed important to decision-making, such as equity, feasibility, sustainability, etc were qualitatively described for each intervention. Rather than formally weighing such criteria (as could be done in MCDA), that can change according to decision contexts and interventions, in our more recent studies, such as our evaluations of the 10 interventions for mental disorders for the NMHC or our project evaluating the cost-effectiveness of interventions that prevent both high BMI and eating disorders, we either colour-coded these other decision-making criteria or gave them an overall ranking of positive, uncertain or negative. For example, if the intervention was likely to be highly acceptable to a wide range of key stakeholders, this criterion was coded green or deemed positive, however, if the same intervention was not very sustainable in terms of current funding mechanisms, the criterion was coded red or deemed negative.

This approach allows the decision maker to assess the respective importance of these criteria for themselves in the specific context they are considering. This blends consistency of criteria that are considered across different contexts with the flexibility for criteria weighting to vary between contexts. More formal weights, such as those developed via MCDA can be restrictive.

There are other existing credible sources of good practice guidance that could be reviewed as part of a process to identify a small number of priority guidelines for assessing the investment case for prevention programs in Australia. The concept of “Living Health Technology Assessment” is relatively new⁸ and shows promise as an open transparent process of model maintenance and continuous improvement. Scientific computing infrastructure including open-source programming languages like Python and R, online repositories like Zenodo and Dataverse and version control systems like git are well established and now widely used in health economic evaluation and are key enablers of developing, maintaining, updating, adapting and combining models.

Should there be minimum cost-effectiveness and/or cost-benefit ratios and how should they be set?

Neither PBAC nor MSAC have formal willingness-to-pay (WTP) thresholds for outcomes to inform cost-effectiveness determinations, as compared to the UK’s National Institute for Health and Care Excellence (NICE), which uses a WTP threshold of £20,000-£30,000 per Quality Adjusted Life Year (QALY)⁹. Therefore, the adoption of WTP thresholds, such as \$50,000/QALY (for example) for cost-utility analyses (CUAs) of preventive interventions may bias interventions that target prevention, given that interventions that are evaluated by PBAC and MSAC are sometimes funded with incremental cost-effectiveness ratios that are higher than this threshold¹⁰. However, specifying preferred willingness-to-pay values will be useful to ensure consistency in how health gains are valued for broader cost-benefit analyses (CBA) types of analyses that allow for cross-sectoral comparisons.

⁶ For example, Le, L.K., E.J. Tan, P. Hay, J. Ananthapavan, Y.Y. Lee, and C. Mihalopoulos, The modelled cost-effectiveness of a prevention program targeting both eating disorders and high BMI. *Int J Eat Disord*, 2024. 57(9): p. 1945-1958. <https://doi.org/10.1002/eat.24238>

⁷ Carter, R., Vos, T., Moodie, M., Haby, M., Magnus, A., Mihalopoulos C. (2008) Priority Setting in Health: Origins, Description and Application of the Australian Assessing Cost Effectiveness (ACE) Initiative. *Expert Review of Pharmacoeconomics and Outcomes*, 8(6):593-617.

⁸ Thokala P, Srivastava T, Smith R, Ren S, Whittington MD, Elvidge J, Wong R, Uttley L. Living Health Technology Assessment: Issues, Challenges and Opportunities. *Pharmacoeconomics*. 2023 Mar;41(3):227-237. doi: 10.1007/s40273-022-01229-4. Epub 2023 Jan 18. PMID: 36652184; PMCID: PMC9848020.

⁹ <https://www.nice.org.uk/news/blogs/should-nice-s-cost-effectiveness-thresholds-change->

¹⁰ Harris AH, Hill SR, Chin G, Li JJ, Walkom E. The role of value for money in public insurance coverage decisions for drugs in Australia: a retrospective analysis 1994-2004. *Med Decis Making*. 2008 Sep-Oct;28(5):713-22. doi: 10.1177/0272989X08315247. Epub 2008 Mar 31. PMID: 18378939.

We suggest that all analyses consistently adopt at least two reference case WTP values for health outcomes but that no minimum threshold is specified for decision-makers.

How should decision makers balance the need to assess early effectiveness of programs with the need to maintain consistent long-term funding for programs with long-term benefits?

Economic thinking suggests that investment and funding decisions should be based on strong principles of allocative and technical efficiency that lead to the greatest benefit for the community or population for which investment decisions are being made. It has been argued that the longer time horizon required for many preventive interventions is one of the reasons that they may be inherently disadvantaged due to time preference discounting, commonly used in economic evaluations. However, this is not necessarily true for all preventive interventions - as we highlight above many preventive interventions have more proximal benefits. We suggest results of all studies should be presented with and without discounting. We encourage any future framework that is developed to assess the economic credentials of preventive interventions by carefully considering which discount rates should be adopted in the base case and sensitivity analyses used to assess the impact of varying these. PBAC and MSAC currently use 5%, however other jurisdictions internationally use lower rates. For example, Sweden uses 3% and it has recently been argued that this should be lowered¹¹.

In terms of funding arrangements, we recommend the government commit to a substantive increase in funding to be allocated to prevention as opposed to the current rate of around 2% of health spending. We also recommend the amount allocated to broad categories of care be made transparent, notwithstanding that some interventions may benefit more than one health area (such as our analyses of one intervention that could prevent eating disorders and high BMI). Our group has attempted to determine how much of the 2% of health funding allocated for prevention is directed towards mental health promotion and/or prevention of mental disorders and have been unable to determine this amount. A dedicated pool of funds should be established that is earmarked for preventive interventions across a broad range of health areas that can be robustly assessed under the national framework.

How could a diversification strategy be designed to ensure that prevention programs from different sectors and with benefits across different timeframes are funded?

We believe that a diversification strategy should focus on diversifying risk and timeframes. Diversifying sectors is potentially attractive, particularly for an underfunded domain like mental health, but may be more difficult to operationalise as many prevention programs impact multiple health and care domains.

We recommend that a broad cross-sectoral approach that includes multiple stakeholders, including but not limited to education, welfare, and housing etc be involved in the formation of the framework from the outset to ensure that all viewpoints are considered and to make it more likely that the results of the analyses will be adopted.

It is unlikely that CUAs, that is the mainstay of most HTA agencies both in Australia and internationally, will meet the needs of all relevant decision-makers. This has been stated in the interim report already, and CBA as an alternate framework has been discussed. The use of both CBA and CUA are not mutually exclusive and can be used in a complementary manner. For example, the monetisation of health outcomes such as QALYs (via the use of various WTP thresholds) means that they can be easily incorporated in CBA frameworks. The Department of Treasury already recommends the use of CBA for investment decisions, although this is not used in health HTA decision-making for reasons that are well developed.

¹¹Cohen, J. T. (2024). It Is Time to Reconsider the 3% Discount Rate. *Value in Health*, 27(5), 578-584. doi:10.1016/j.jval.2024.03.001

Responses to information request 3.2

We will restrict our commentary to providing feedback on the first question posed by the Commission.

How should a National Prevention Investment Framework be implemented?

We support the interim report's suggestion that the assessment process implemented by the framework would adopt a rigorous approach to evaluating value for money that explicitly includes assessment of equity and feasibility issues. We suggest that the assessment domains should also explicitly include affordability (e.g., through budget impact analysis). In mental health, more is known about the value for money of programmes than about their affordability, a distinction that is important because even cost-effective prevention programs may not be cost-saving and can be expensive to scale up. However, as we mentioned above, many of the interventions we have evaluated have favourable ROI ratios.

We recommend that, where it is feasible to do so and proportionate to the economic importance of a decision problem, assessments undertaken under the framework:

- use both the cost-benefit analysis and cost-utility analysis types of economic evaluation frameworks;
- include at least two reference case perspectives on costs - health sector and societal - with the flexibility to include additional perspectives that relate to relevant potential program funders (e.g. state and territory, local government, primary health networks (PHNs), etc);
- include at least two reference willingness-to-pay threshold values for outcomes such as quality-adjusted life years (QALYs);
- incorporate affordability considerations through the use of budget impact analysis;
- incorporate equity considerations using approaches such as Distributional Cost-Effectiveness Analysis (DCEA); and
- adopt a flexible approach to assessing program feasibility that can incorporate: modelled demography, epidemiology and workforce forecasts; preference research on program uptake^{12 13}; and multiple scenario-based sensitivity analyses.

We believe that the Prevention Framework Advisory Board (the board) should, informed by existing good practice guides and consultations with decision-makers and model developers, identify a core set of a small number of items to comprise practice guidance that promotes consistency in key aspects of evaluations of prevention programs. We believe that the board would be more effective in promoting adoption of these practices if it:

- commissioned evaluations from multiple providers; and
- provided the prevention program evaluation community with practical tools.

An example of an important practical tool that the board could consider providing the Australian prevention program evaluation community with is access to the actuarial model discussed in the interim report. We recommend that the model be developed as an open-source resource that is maintained and routinely updated. In addition to providing a practical means of helping the wider prevention program evaluation community adopt consistent approaches, more widespread use of the actuarial model will lead to it being more comprehensively tested and help support innovation in

¹² Terris-Prestholt F, Quaife M, Vickerman P. Parameterising User Uptake in Economic Evaluations: The role of discrete choice experiments. *Health Economics*. 2016;25(S1):116-23. <https://doi.org/10.1002/hec.3297>

¹³ van den Broek-Altenburg E, Atherly A. Using discrete choice experiments to measure preferences for hard to observe choice attributes to inform health policy decisions. *Health Economics Review*. 2020 2020/06/11;10(1):18. 10.1186/s13561-020-00276-x

the development of third-party extensions to enhance the features and utility of the model. A community of practice could be established to support the appropriate use and development of the actuarial model.

However, as frequent users of many of the data sources that might be used to populate and develop such models we wish to draw the Productivity Commission's attention to some notable gaps that will mean that there may be important limitations for the mental health context in particular. The provision of mental health services in Australia is complex and is funded by all levels of government in both the health sector and outside the health sector (e.g. education). The provision of services is also complex and includes government-funded employees as well as private service providers. We will not detail these arrangements here as they are well known and described in multiple reports (e.g. the AIHW publishes annual reports on Australian mental health services¹⁴). Furthermore, the focus on linking Australia's multiple data sets by organisations such as the ABS and AIHW is very welcome. However, even linked data that is available via the AIHW National Health Data Hub or via the ABS' Person Level Data Integration Asset (PLIDA) have important limitations in characterising who receives which mental health services in Australia. Some limitations include:

- Lack of linkage of important data sets. For example, the Primary Mental Health Care Minimum Dataset (PMH-MDS¹⁵) is not linked to other administrative data sets such as MBS, PBS or state-based services. Given that PHNs commission a broad range of mental health services, this is an important consideration. Some practical suggestions for improving data-linkage in mental health were made in a recent article that we contributed to¹⁶.
- Lack of diagnostic information. Mental disorders are complex and can change over time. This complexity is not yet adequately captured in any of the datasets and more importantly, diagnoses are not included at all in many datasets. For example, MBS provided services capture occasions of service use with no corresponding information regarding what the services (e.g. under Better Access) were used for or what the services comprised. Linkage to other datasets may assist with this limitation (e.g. the National Study of Mental Health and Well-being) however these datasets do not include all mental health problems and are cross-sectional. To make data on funded services fit-for-purpose and facilitate better decision-making, it may be time to require that diagnostic or other clinical information is reported by providers across all data sets. Working with provider groups to build this reporting may offer a way to do this with minimal burden to them.
- Lack of or inconsistent outcome measures. Outcomes are variably defined across the different datasets and in reality, it is unlikely that one outcome will be fit for purpose for all mental health contexts or areas. For example, the most commonly used outcome measure in federally funded youth-focused or adult services such as Headspace or Medicare Mental Health Centres is the K10 (available via the PMH-MDS) - which is a measure of psychological distress. Furthermore, it is variably completed across the different services. State-based services use the measures recommended by the Australian Mental Health Outcomes and Classification Network and made available via the National Outcomes and Casemix Collection¹⁷. It is likely that a range of outcomes are important to people with mental health problems¹⁸ and urgent attention to furthering what these are and ensuring they are appropriately captured in our services and datasets will also benefit the estimation of the value of preventing mental disorders and promoting good mental health.

¹⁴ <https://www.aihw.gov.au/mental-health/overview/australias-mental-health-system>

¹⁵ <https://pmhc-mds.net/#/>

¹⁶ Cotton SM, Menssink JM, Hamilton M, et al. Using data linkage for mental health research in Australia. *Australian & New Zealand Journal of Psychiatry*. 2025;59(7):588-601. doi:[10.1177/00048674251333574](https://doi.org/10.1177/00048674251333574)

¹⁷ https://www.amhocn.org/__data/assets/pdf_file/0010/697303/nocc_domain_framework_ver_1.0_20181205.pdf#697303

¹⁸ O'Loughlin, R., Lambert, C., Olsen, G. et al. What are the priorities of consumers and carers regarding measurement for evaluation in mental healthcare? Results from a Q-methodology study. *Health Res Policy Sys* 22, 150 (2024). <https://doi.org/10.1186/s12961-024-01239-y>

In conclusion, we hope our brief response to the interim report has provided some useful additional information for the Productivity Commission. Please do not hesitate to reach out to our team should you require further information on anything we have presented here or would like to discuss anything further with us. Our contact details are:

Professor Cathy Mihalopoulos

Email: [REDACTED]

Mr Matthew Hamilton

Email: [REDACTED]

Dr Yong Yi Lee

Email: [REDACTED]

Dr Long Le

Email: [REDACTED]

Dr Jemimah Ride

Email: [REDACTED]

Dr Mary Lou Chatterton

Email: [REDACTED]

Relevant prior work

Additional background information to this submission can be found in some of our recent published work relating to: original economic evaluation research papers; review articles; policy analysis and commentary; methods papers; and a costing paper.

Original economic evaluation research studies of preventive strategies in the mental health context

1. Chatterton ML, Perez JK, Lee YY, Le LK-D et al. Cost-Utility Analysis of a School-Based Universal Program for the Prevention of Anxiety, Depression, and Substance Use: The Climate Schools Combined Trial. *International Journal of Mental Health and Addiction*. 2024: 1-19. <https://doi.org/10.1007/s11469-024-01423-9>
2. Le LK-D, Tan EJ, Hay P, Ananthapavan J, Lee YY, Mihalopoulos C. The Modeled Cost-Effectiveness of a Prevention Program Targeting Both Eating Disorders and High BMI. *Eating and Weight Disorders*. 2024. <https://doi.org/10.1002/eat.24238>.
3. Krysinska K, Andriessen K, Bandara P, Reifels L, Flego A, Page A, Schlichthorst M, Pirkis J, Mihalopoulos C, Le LK-D. The cost-effectiveness of psychosocial interventions following self-harm in Australia. 2023; <https://doi.org/10.1027/0227-5910/a000926>
4. Le, LK-D., Flego, A., Krysinska, K., Andriessen, K., Bandara, P., Page, A., et al. (2023). Modelling the cost-effectiveness of brief aftercare interventions following hospital-treated self-harm. *BJPsych Open*, 9(5), E139. <https://doi.org/10.1192/bjo.2023.525>
5. Flego, A., Reifels, L., Mihalopoulos, C., Bandara, P., Page, A., Fox, T., Skehan, J., Hill, N. T. M., Krysinska, K., Andriessen, K., Schlichthorst, M., Pirkis, J., & Le, LK-D. (2022). Cost-effectiveness of media reporting guidelines for the prevention of suicide. *Suicide and Life-Threatening Behavior*, 00, 1–10. <https://doi.org/10.1111/sltb.12902>
6. Bandara P, Pirkis J, Clapperton A, Shin S, Too L. S., Reifels L, Onie S, Page A, Andriessen K, Krysinska K, Flego A, Schlichthorst M, Spittal M. J., Mihalopoulos C, Le LK-D. Cost-effectiveness of installing barriers at bridge and cliff sites for suicide prevention in Australia. *JAMA Network Open*. 2022: 1;5(4):e226019. <https://doi.org/10.1001/jamanetworkopen.2022.6019>

7. Le LK-D, Engel L, Lee YY, Lal A and Mihalopoulos C. 'The cost-effectiveness of a school-based intervention for bullying prevention: An Australian case study'. *Mental Health & Prevention*. 2021, 24:200224, <https://doi.org/10.1016/j.mhp.2021.200224>
8. Lee YY, Le LK-D, Lal A, Engel L, Mihalopoulos C. The cost-effectiveness of delivering an e-health intervention, MoodGYM, to prevent anxiety disorders among Australian adolescents: A model-based economic evaluation. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200210>
9. Le LK-D, Lee YY, Lal A, Engel L, Mihalopoulos C. Psychological workplace interventions to prevent major depression: a model-based economic evaluation. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200209>
10. Engel L, Lee YY, Le LK-D, Lal A, Mihalopoulos C. Reducing loneliness to prevent depression in older adults in Australia: a modelled cost-effectiveness analysis. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200212>
11. Lal A, Le LK-D, Lee YY, Engel L, Mihalopoulos C. Modelled cost-effectiveness of interpersonal therapy and exercise classes for the prevention of postnatal depression. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200214>
12. Lee YY, Le LK-D, Lal A, Engel L, Mihalopoulos C. The cost-effectiveness of delivering universal psychological interventions in schools to prevent depression among Australian adolescents: a model-based economic evaluation. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200213>
13. Lal A, Le LK-D, Engel L, Lee YY, Mihalopoulos C. Modelled cost-effectiveness of a parent education program for the prevention of anxiety disorders in children. *Mental Health & Prevention*. 2021 (24). <https://doi.org/10.1016/j.mhp.2021.200219>
14. Lee YY, Skeen S, Melendez-Torres GJ, et al. School-based socio-emotional learning programs to prevent depression, anxiety and suicide among adolescents: a global cost-effectiveness analysis. *Epidemiology and Psychiatric Sciences*. 2023;32:e46. <https://doi.org/10.1017/S204579602300029X>
15. Lee YY, Chrisolm D et al. The cost-effectiveness of banning highly hazardous pesticides to prevent suicides due to pesticide self-ingestion across 14 countries: an economic modelling study. *The Lancet Global Health*. 2021;9 (3), e291 - e300. [https://doi.org/10.1016/S2214-109X\(20\)30493-9](https://doi.org/10.1016/S2214-109X(20)30493-9)
16. Chatterton ML, Bayer JK, Engel L et al. Cost-effectiveness of preventing child internalising problems: Results from the translational trial of Cool Little Kids at school. 2020: 7. <https://doi.org/10.1016/j.janxdis.2020.102191>

Reviews of economic evaluations of prevention strategies in the mental health context

17. Le LK-D, Esturas AC, Mihalopoulos C, Chiotelis O, Bucholc J, Chatterton ML, et al. Cost-effectiveness evidence of mental health prevention and promotion interventions: A systematic review of economic evaluations. *PLoS Medicine*. 2021;18(5):e1003606. <https://doi.org/10.1371/journal.pmed.1003606>.
18. Le DQ, Le LK-D, Le PH, Yap MBH, Mihalopoulos C. Cost effectiveness of interventions to prevent the occurrence and the associated economic impacts of child maltreatment: A systematic review. *Child Abuse & Neglect*. 2024;106863. <https://doi.org/10.1016/j.chiabu.2024.106863>
19. Faller J, Perez JK, Mihalopoulos C, Chatterton ML, Engel L, Lee YY, Le PH, Le LK-D. Economic evidence for prevention and treatment of eating disorders: An updated systematic review. 2023; <https://doi.org/10.1002/eat.24113>
20. J Faller, LK-D Le, ML Chatterton, JK Perez, O Chiotelis, HNQ Tran, M Sultana, N Hall, YY Lee, C Chapman, N Newton, T Slade, M Sunderland, M Teesson, C Mihalopoulos. A systematic review of economic evaluations for opioid misuse, cannabis and illicit drug use prevention. 2023; 9(5): e149. <https://doi.org/10.1192/bjo.2023.515>
21. LK-D Le, J Faller, ML Chatterton, JK Perez, O Chiotelis, HNQ Tran, M Sultana, N Hall, YY Lee, C Chapman, N Newton, T Slade, M Sunderland, M Teesson, C Mihalopoulos (2023). Interventions to prevent alcohol use: systematic review of economic evaluations. *BJPsych Open*. <https://doi.org/10.1192/bjo.2023.81>
22. Engel, L., Rizal, M.F., Clifford, S. et al. An Updated Systematic Literature Review of the Economic Costs of Loneliness and Social Isolation and the Cost Effectiveness of Interventions. *PharmacoEconomics* 43, 1047–1063 (2025). <https://doi.org/10.1007/s40273-025-01516-w>

23. Darab, M.G., Engel, L., Henzler, D. et al. Model-Based Economic Evaluations of Interventions for Dementia: An Updated Systematic Review and Quality Assessment. *Appl Health Econ Health Policy* 22, 503–525 (2024). <https://doi.org/10.1007/s40258-024-00878-0>
24. Sampaio, F., Nystrand, C., Feldman, I. et al. Evidence for investing in parenting interventions aiming to improve child health: a systematic review of economic evaluations. *Eur Child Adolesc Psychiatry* 33, 323–355 (2024). <https://doi.org/10.1007/s00787-022-01969-w>

Policy analysis and commentary relating to prevention in the mental health context

25. McGorry PD, Mei C, Dalal N, et al. The Lancet Psychiatry Commission on youth mental health. *The Lancet Psychiatry*. 2024 Sep 1;11(9):731-74. [https://doi.org/10.1016/S2215-0366\(24\)00163-9](https://doi.org/10.1016/S2215-0366(24)00163-9)
26. Whiteford H, Bagheri N, Diminic S, Enticott J, Gao CX, Hamilton M, Hickie IB, Khanh-Dao Le L, Lee YY, Long KM, McGorry P. Mental health systems modelling for evidence-informed service reform in Australia. *Australian & New Zealand Journal of Psychiatry*. 2023 Nov;57(11):1417-27. <https://doi.org/10.1177/00048674231172113>
27. Taouk Y, King T, Ride J, LaMontagne AD. COVID-19: An opportunity to combat the burden of poor mental health in Australian workplaces. *The Lancet Regional Health - Western Pacific*. 2022 Aug;25:100537. <https://doi.org/10.1016/j.lanwpc.2022.100537>
28. McDaid D, Hamilton M, King D, Park A, Hoffmann MC, Silva-Ribeiro W, Ziebold C, Evans-Lacko S. An investment framework to build mental capital in young people. Melbourne: Orygen and World Economic Forum 2020. **not peer reviewed but relevant to current context

Methodological innovations relating to economic evaluation and preference studies (includes relevant studies >5 years old)

29. Ride J, Goranitis I, Meng Y, LaBond C, Lancsar E. A reporting checklist for discrete choice experiments in health: the DIRECT checklist. *Pharmacoeconomics*. 2024 Oct;42(10):1161-75. <https://doi.org/10.1007/s40273-024-01431-6>
30. Hamilton MP, Gao C, Wiesner G, Filia KM, Mensink JM, Plencnerova P, Baker DG, McGorry PD, Parker A, Karnon J, Cotton SM. A prototype software framework for transferable computational health economic models and its early application in youth mental health. *Pharmacoeconomics*. 2024 Aug;42(8):833-42. <https://doi.org/10.1007/s40273-024-01378-8>
31. Mihalopoulos C, Vos T, Pirkis J, Carter R. The economic analysis of prevention in mental health programs. *Annual review of clinical psychology*. 2011 Apr 27;7(1):169-201. <https://doi.org/10.1146/annurev-clinpsy-032210-104601>

Cost study relating to prevention in the mental health context

32. Ride J, Kasteridis P, Gutacker N, Gravelle H, Rice N, Mason A, Goddard M, Doran T, Jacobs R. Impact of prevention in primary care on costs in primary and secondary care for people with serious mental illness. *Health Economics*. 2023 Feb;32(2):343-55. <https://doi.org/10.1002/hec.4623>