Examining how well economic evaluations capture the value of mental health.

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Summary

Health economics informs healthcare decision-making but has historically paid insufficient attention to mental health. Economic evaluations in health must define an appropriate scope for benefits and costs and decide how to value them. This Health Policy article provides an overview of these processes and considers to what extent they capture the value of mental health. We suggest that although current practices are both transparent and justifiable, there are distinct limitations for mental health. Most social value judgements, such as the exclusion of interindividual outcomes and intersectoral costs, diminish the value of improving mental health, and this may be disproportionate compared to other types of health. Economic analyses may have disadvantaged interventions which comparatively improve mental health, but research is required to test the size of such differential effects and any subsequent impact on decision-making, such as health technology assessment. Collaboration between health economics and the mental health sciences is crucial for achieving mental–physical health parity in evaluative frameworks and ultimately improving population mental health.

Mental health, health economics, and economic evaluation

The global burden of mental disorders is increasing, as is their share of total disability-adjusted life years (DALYs).[1] However, expenditure on mental health accounts for less than two percent of governmental health expenditure globally.[2] The World Health Organization has argued that we must 'deepen the value given to mental health',[3] and others have called for mental health to be considered in all policies beyond health.[4,5] The development of such evidence-based policymaking worldwide requires ways to measure and assign value. Government bodies and economists use established frameworks to value health and inform policymaking, but across the mental health sciences there is little awareness of health economics and its role in healthcare decision-making.[6] Equally, economics has historically neglected mental health, and while that is slowly being rectified, considerable knowledge gaps remain.[6–8]

This Health Policy article addresses one such gap: to what extent do economic evaluations in health capture the value of improving mental health? (Panel). We do not aim to address all the problems mental health faces in economics, nor the numerous difficulties faced when translating evidence into policy, i.e., health economics informs, but does not make, health policy (Figure 1).[7–9] Instead, we aim to raise awareness of the profound impact of health economics on how mental health is valued and provoke discussion around the underlying principles and judgements. Examples cited are not an indictment of any actor, or the role of health economics in decision-making; the issues highlighted often result from iterative and well-intentioned developments in evaluative practices.

National Health Technology Assessment (HTA) systems (e.g. NICE in England and Wales),[10–12] inform local to national-level decisions on treatment provision, spanning healthcare technologies, clinical guidelines, and public health guidance. Their recommendations are based on evidence of clinical and cost-effectiveness, which in turn rely upon deciding what benefits and costs are important and how to value them, collectively termed social value judgements (Figure 1). Such appraisals have global relevance. Decisions made and methods used by NICE can influence healthcare decision-making worldwide.[13] Social value judgements are also relevant beyond economic evaluations in health: from the non-economic use of generic health status instruments,[14] the productivity losses estimated by cost of illness studies,[15] to the discount rates used widely across governments. Although the practices of HTAs and economic evaluations in health do not directly dictate such use, they undoubtedly influence them.

HTA bodies usually apply social value judgements equally to all interventions, regardless of the disease area. However, mental health differs from physical health in several important ways, such as the challenges of measurement and diagnosis, societal stigma, the contribution of sectors beyond healthcare to outcomes, and the interconnected nature of mental disorders and other health conditions.[16] Crucially, mental health has multiple downstream impacts beyond the individual. These include effects on interpersonal relationships and family cohesion, employment and finance, and wider impacts on social services and the criminal justice system. This is not to say that physical health conditions cannot have such impacts, but we argue that these consequences are often more pronounced for mental health conditions. If parity is sought between mental and physical health, social value judgements must account for these impacts. For example, the introduction of NHS Talking

Therapies, formerly known as Improving Access to Psychological Therapies (IAPT), is widely considered to be pioneering. However, economic evaluation of such schemes required a more comprehensive collection of outcomes and resource-use measures to demonstrate the value of reducing functional impairment, the incidence of harmful behaviours, or intersectoral costs.[17,18]

We categorise five key themes subject to social value judgements: (i) Which outcome to measure health benefit, (ii) Where are relevant resources used, (iii) Whose health matters, (iv) How should health and resource use be valued, and (v) Accounting for when health and costs are accrued. For each, we provide an overview of current practices and weigh evidence on the extent to which they capture the value of mental health. We then discuss the possible effects on decision-making and propose the next steps for research and policy development.

Which outcome to measure health benefit

The choice of outcome depends on numerous judgements, such as: the purpose of treatment, what we mean by health, and how to quantify mental health adequately. Medical decision-making incurs an opportunity cost: treating one individual means the same resources cannot be used to treat another;[19] therefore, a single summary figure of health is helpful to compare the benefits of different treatments. Economic evaluations employ such a standardised health measure as a generic outcome that is sensitive to health change in different disease areas as a complement to disease-specific outcomes.[20] The applicability of such generic measures as outcomes in mental health has been scrutinised,[21] and Brazier et *al.*[22] provide a rigorous guide to their use in economic evaluations. Of these, the EQ-5D, a generic five-dimensional health status instrument, is the most used in health-economic appraisals worldwide.[23] The EQ-5D has one item related to mental health (the self-identified presence of depression or anxiety). This adequately captures these common mental disorders,[24,25] however, the EQ-5D lacks sensitivity to other mental health conditions such as psychosis, schizophrenia, and bipolar disorders,[26–28] and the composite nature of the question leads to an under-reporting of problems.[29] Recognising that such generic instruments may favour physical over mental health, there are calls for developing a better instrument for use in mental health populations.[24]

Other generic or condition-specific preference-based measures can be used to compare mental health interventions when the EQ-5D is unsuitable,[11,30] but none fully cover the dimensions that are important to individuals with mental health problems.[31] Recent attempts to improve content validity include the Recovering Quality of Life (ReQoL) measure,[32] the CORE-6D,[33] the Mental Health Quality of Life Questionnaire (MHQoL).[34] Moreover, changing the health status measure for mental health settings is potentially problematic as it could impinge upon comparability within healthcare systems and across research. Such a change would also imply that disorder-based criteria can define mental health and neglect the central role of mental health in the lives of individuals.[16] Capturing mental health is essential in all healthcare settings because although mental healthcare requires some threshold for intervention (e.g. disorder-based criteria), mental health (i.e., psychopathology and psychological differences between individuals) exists on a continuous spectrum.[35] As such, interventions do not have to treat mental disorders directly to improve mental health, particularly when mental health problems can also be caused by, be a cause of, or share common causes with physical health conditions.[36]

Therefore, generic measures are likely to remain integral to equitable evaluation, especially if mental health is to be accounted for in all policymaking.[4,5] To this end, there are pushes in economics to expand the evaluative space towards subjective wellbeing.[37,38] The EQ-5D currently captures little of the variation caught by instruments for mental wellbeing,[39] and the lack of social domains in the EQ-5D has been noted as a particular barrier to demonstrating the value of treating behaviour problems in childhood and adolescence.[40] Recently developed generic instruments may offer improvements, such as the EQ Health and Wellbeing (EQ-HWB) instrument, which combines health and wellbeing domains to facilitate cross-sectoral comparisons,[41,42] or the Investigating Choice Experiments Capability Measure for Adults (ICECAP-A).[43] However, wellbeing evaluation has some challenges, such as adaptation, i.e., a permanent improvement in an outcome may only be temporarily associated with improved wellbeing.[38]

Where are relevant resources used

The relevance of resource use is inherently associated with a decision, is highly context-dependent,[44] and can take different perspectives ranging from the individual or payer to society as a whole. Evaluations tend to follow the guidance of executive public bodies (e.g. NICE),[10,11] or a consensus of experts such as the Second Panel on Cost-Effectiveness in Health and Medicine,[45] or the taskforces of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR).[46] Globally, most HTA guidelines recommend a healthcare or payer perspective as their reference case,[47] but some countries, such as the Netherlands, consider all costs to be relevant regardless of where they are accrued.[48] In practice, most evaluations have followed a narrow healthcare perspective.[47] Such a perspective is recommended because these bodies do not set healthcare budgets; instead, they offer guidance on what represents an efficient use of healthcare resources without necessarily reflecting on where all the consequences of treatment lie.[7]

Many economic evaluations report additional analysis under a broader societal perspective. Although the term societal implies the capture of intersectoral spillovers, most costs beyond the healthcare sector are infrequently captured.[47,49] In practice, societal perspectives are usually limited to one form of productivity loss: the time off work due to ill-health (absenteeism).[50] Poor mental health is associated with sizeable absenteeism costs but also influences the workplace productivity of an individual when present at work (presenteeism).[51,52] These costs are rarely included in economic evaluations,[53] despite evidence that improving mental health leads to greater reductions in presenteeism than absenteeism costs.[54]

Mental health has bidirectional relationships with intersectoral resource use, and the societal burden of mental illness and psychosocial problems exceeds, and extends beyond, healthcare costs and absenteeism.[55] Primary care and mental health services bear only a fraction of the costs of mental ill-health. In adolescents, most are borne by frontline or special education.[54,56,57] In adults, they also lie across the criminal justice and welfare sectors.[6,52,54,58,59] This is a problem because while one treatment may appear less expensive than another, the costs may have moved to another sector where they are not measured.[60] For instance, in the United States, investing in community-based mental health programs, while costly, is significantly outweighed by the potential cost savings from averting individuals' involvement in the criminal justice system.[61] In the UK, Layard and

Clark offer a tangible example that scaled-up evidence-based psychotherapies can pay for themselves if costs, such as welfare benefits or increased tax revenue, are considered.[18] Encouragingly, there is recognition that more comprehensive cost collection is essential,[49] and the PECUNIA consortium has recently developed a questionnaire to aid the collection of health-related multi-sectoral resource use.[62]

Whose health matters

If societal perspectives intend to support optimal societal decisions, impacts on the health of others may be as important as intersectoral costs. For example, mental health problems are often implicated in criminal behaviours, and the health impact of physical and emotional harm to victims exceeds the costs to the criminal justice system and productivity losses;[59] however, the value of averting adverse events is unlikely to be captured in primary data collection.[63] More generally, families, friends, and broader networks of people interact dynamically as a complex system, and a lack of social network weighting in generic health instruments has been noted as a barrier to demonstrating the full value of improvements in mental health.[40] This is overlooked because such instruments measure individual rather than collective health.[64] For instance, NICE guidance over the past decade indicated that: "the perspective on outcomes should be all direct health effects, whether for patients or other people".[10] What constitutes direct effects is ill-defined and has been generally interpreted as effects on informal caregivers alone. Similarly, HTA bodies worldwide vary in their recommendations, ranging from the guidelines of Canada and Australia, which specify that health beyond the individual should not be included in base case analysis, to those of the Netherlands, which considers the health of all impacted individuals to be relevant.[48]

Informal carers for those with mental health problems are invaluable to society and are integral to the health and social care system. Poor mental health causes and is a consequence of caregiver burden, wherein caregiving affects the psychological health of the carer to a greater degree than their physical health,[65] and caregivers of people with mental illness experience a higher subjective burden than those caring for people with a somatic illness.[66] In practice, informal care (when relevant) is usually included as a cost, not an outcome,[67] and carer health is rarely included, even in disease areas where informal caregiving is common.[48,68]

A focus on caregiver burden, and not the wider social network, overlooks the fact that informal caregiving is not dichotomous and may underestimate the benefits of improving mental health; for example, family illness leads to significant decrements in mental health among family members, independent of carer status.[69] This may be because the current interpretation of caregiver burden neglects other forms of transmission, and despite recognition of interindividual effects in tackling antimicrobial resistance,[70] there has been no similar call for mental health. This is surprising when the mental health sciences have long acknowledged the communicable nature of mood and mental health.[71] For example, caring about a family member may have just as much impact as caring for them,[72] and poor peer health increases mood problems.[73] Spillovers may be greatest within families, and parent-child relationships contribute to significant intergenerational effects.[74] Emotional contagion may spread up to three degrees of separation,[75] and although such effects are likely context-specific, there is moderate evidence for the contagion of anxiety and depression.[76] The inclusion of the health of non-caregiving

family members in applied economic evaluation is extremely rare (primarily found in vaccination studies) and has mainly been investigated using the EQ-5D.[77]

Although this section has predominantly tackled health, spillovers may culminate in resource use by others.[64] From a societal perspective, which individual used resources is irrelevant to governmental budgets, barring distributional concerns.[49] Figure 2 shows a dimensional breakdown of current evidence capture in economic evaluations, inspired by the Impact Inventory Template produced by the Second Panel on Cost-Effectiveness in Health and Medicine.[45] If a benefit is included within an evaluation, the cost should be included, and vice versa. This practice is termed the rule of symmetry, or internal consistency;[78] however, future unrelated (indirect) costs and benefits are often treated asymmetrically.[79] Over time, a broader outcome measure may capture the aggregate effects of all intersectoral outcomes. Figure 2 also does not include socially desirable outcomes, such as pro-sociality or environmental behaviours, which do not easily fit within the remit of the specified sectors.

How should health and resource use be valued

Once health status is measured, responses are weighted by a societal tariff to represent the relative value the public places on different health states. This produces a health-related quality of life (HRQoL) index, which is typically anchored between zero (death) and one (full health). There are numerous ways to elicit preferences,[80] and the development of HRQoL value sets are methodologically complex and subject to considerable scrutiny.[20,81] Whose preferences matter is a pivotal question that significantly influences the value attributed to health states.[82,83] Such values differ across communities and populations, so country-specific tariffs are used where available.[11,45] But there are other well-documented problems, from participant's immediate preoccupation when values are elicited to health states impacting individuals differently from how they imagine them.[84]

From the perspective of mental health, patients give a higher weight to mental health dimensions compared to physical health dimensions than do members of the general population,[21] and mental health states may be more difficult to understand than their physical counterparts,[84] but alternative approaches to preference elicitation, such as using subjective wellbeing data,[85] may overcome such drawbacks. Any comparisons of approaches are inextricably tied to the items of HRQoL instruments and what individuals are asked to value. For example, the moderate or extreme "anxious or depressed" states in the EQ-5D-3L may impact on subjective wellbeing more than their stated preferences indicate.[85] This links to the broader debate about whether health states should be valued in terms of the activities they permit or their subjective wellbeing,[86,87] and whether these values should reflect those of patients or the general population.[83]

Economic evaluation typically values resource use, such as healthcare, through attachment to established unit costs; however, the valuation of other forms of resource use is not always straightforward. Because we can only give value to what is captured, here we discuss the productivity losses to which societal perspectives in economic evaluation are usually constrained,[47,50] and which are frequently employed by cost-of-illness studies.[53] All of these approaches assume that one monetary unit of productivity loss is equivalent to one in healthcare benefit or cost. The most frequently used method is the human capital approach, which assumes that gross wages represent the productivity of an individual, i.e., their time off work due to ill-health is multiplied by their

pro-rata wage.[58,88] Evaluations that derive absenteeism costs frequently use the national average or median wage instead to avoid disadvantaging individuals with severe mental illness.[89] An alternative method is the friction cost approach, which limits absenteeism costs to the time it takes to hire and train a replacement worker, i.e., previous levels of productivity return after a friction period.[88]

Newer approaches use compensation and multiplier effects to better represent real-world production losses attributable to absenteeism.[90] These reflect that an individual's absence often has a larger (multiplied) or smaller (compensated) impact than their wage indicates. Notably, for mental health, presenteeism multipliers may be equal to or higher than absenteeism multipliers.[91] Given the substantial costs, there is no doubt that the capacity to work is essential,[52,58] but focusing on technical dimensions may overlook the normative dimensions of social relevance.[92] For example, mental health has a causal impact on employment status,[93] and employment itself may be considered a critical mental health intervention,[52,94] but current methods give no value to the gain or loss of employment, i.e., we value averting productivity losses but not productivity gains. Overall, productivity losses are not an opportunity cost in governmental spending unless through the channel of tax revenue, which would also attribute value via gains in employment.

Accounting for when health and costs are accrued

Economic evaluations adjust lifespan for life quality, such that (the index of) weighted HRQoL responses are transformed to quality-adjusted life years (QALYs), generally through the linear interpolation of these HRQoL indices at each observed time point. QALYs and costs accrued beyond the first year are discounted (compounded annually) to account for the opportunity cost of investment and time preferences for health, i.e., people preferring current health over future health.[19] The rationales and methodologies of discounting within economic evaluation vary globally,[95] with a discount rate of 5% being the most common.[96] NICE and the UK government specify a constant discount rate of 3.5% for benefits and costs,[10,11] which means a QALY (and a cost) in ten years is worth around 70% of one now, falling to 25% after 40 years, and 13% after 60 years. Discounting will always be required to some degree; however, there are problems such as double discounting,[96] or decision-makers also preferring current health,[7] which further reduce the value of long-term benefits. The practice also relies on several assumptions;[96] for example, that returns to spending will be as, or more, efficient in the future.

Discounting distorts the perceived effectiveness of interventions with long-term or cumulative consequences, so the value of prevention may be affected more than treatment. Most mental health problems emerge in adolescence and;[97] therefore, the value of the most effective avenues for intervention (earlier) may be the most affected by discounting. In recognition, NICE now supports a lower rate of 1.5% in some scenarios, such as for treatments whose benefits are sustained over a long period.[11] Longitudinal evidence, where available, highlights the long-term impacts of mental health on later health, social, and economic outcomes,[98] and mental health spillovers onto the health of others do not appear to decrease over time.[99] There is also evidence of greater long-term adverse consequences for earlier life poor mental health compared to poor physical health,[100] and that improvements in mental health are preventative for all-cause mortality or suicide.[101] However, it is uncertain whether improving mental health in adulthood has longer-term benefits than other health improvements.

Can social value judgements affect decision recommendations?

There is a paucity of data on whether methodological change can impact the conclusions of economic evaluations, but some limited evidence exists on the inclusion of intersectoral costs and interindividual outcomes. Including spillovers, such as family health or societal costs, generally makes interventions more cost-effective (more health is produced per monetary unit).[48,77,102,103] When economic evaluations compare treatments, a minor change in the cost-effectiveness calculation, such as the inclusion of social costs, can affect the value of each treatment differently and alter decision recommendations.[68,104–106] This means that the optimal treatment judged by healthcare perspectives can be suboptimal from a societal perspective. Broadening perspectives is likely to increase the relative effectiveness of interventions which improve health domains or symptomologies with greater spillover than those without.[107–109] We argue that mental health is one such domain and that it is particularly subject to bidirectional spillovers, e.g. conditions such as depression affect the health of others to a greater degree than some physical health conditions,[99,110] and family illness leads to severe decrements in mental health; comparable evidence is not found for other health dimensions.[69,99]

Discussion: towards capturing the value of mental health

Current practices for economic evaluation are justifiable but have limitations. Current social value judgements underestimate the value of improving mental health to some degree and possibly do so disproportionately compared to other forms of health (Figure 3). Differential undervaluation may not always be a problem, as mental health is correlated with other health, and many healthcare decisions would likely remain the same under other perspectives. However, much of the value of mental health is not captured in economic evaluations, and minor changes in perspective can impact on their conclusions. This suggests that, at times, decision-making based on economic evidence may have disadvantaged interventions which comparatively improve mental health domains. HTA criteria and methodologies also influence the value of treatment, which may shape the research priorities of (and innovation by) the private health research sector.

Whether mental health is disadvantaged in economic evaluations should be empirically tested, and we need to ask questions such as: “Do recommendations align with the comparator that maximises mental health symptomology?”, “How frequently are healthcare perspectives suitable surrogates for wider perspectives?”, or “Could mental health serve as such a surrogate?”. However, such research depends on data availability and is limited by whether studies disaggregate their reported health and social data.

These considerations also apply to conditions and symptomologies beyond mental health. Health economics does not undertake nosology, but it should identify conditions with downstream consequences where social value judgements may similarly impact on equitable evaluation. For example, including presenteeism costs increases the value of improving mental health but would also help to capture the value of improving chronic somatic diseases.[51]

We believe that societal perspectives should move from individual- to population-centric and that an all-government approach to health should be adopted.[111] Interindividual health and intersectoral costs are

compatible with current value frameworks in healthcare, are integral to understanding the ramifications of spending (or not spending) on population health,[78,79,108] and may help to address inequalities, e.g. mental health spillovers are greater in lower-income households.[69] Others have also argued for the inclusion of certain spillovers, such as caregiver and family effects,[48,67,72,106,109,112,113] and the public also views these effects as important,[113] but there are opposing arguments which span a range of normative and technical domains.[114] There are some scenarios in which a population-centric approach introduces moral quandaries; for example, if interindividual effects are included, does this imply that the health of individuals with larger social networks is worth more?[113] We believe engaging with public opinion on such dilemmas and further empirical examination of the size of spillovers across disease areas is essential.[108,113] However, at present, the data required to examine such questions are rarely collected.[106]

Amending HTA criteria to require more comprehensive benefits and costs would raise minimum data requirements, but the consequences of any changes would need to be considered carefully. Accordingly, this paper aims to motivate mental health practitioners, researchers, and funders to consider broader data collection in randomised studies and to encourage the reporting of disaggregated health economics data to permit secondary analysis.[115] Many observational studies, such as national surveys and panel datasets, do not collect broader health economic data, but linkage to administrative data offers an opportunity to enrich these datasets and the opportunity to improve the integration of economics with lifecourse epidemiology.

We recognise that extra data collection comes at a cost, whether in terms of money, participant burden, item completion, or clinical objectives.[116] A broader trade-off between precision in healthcare versus societal costs should be considered. Although we argue that all spillovers are important, that does not mean they are equally observable. For example, presenteeism costs are notoriously difficult to measure,[53] whereas the receipt of welfare benefits is less subjective. The acceptability of collecting such self-reported data from participants compared with other less burdensome approaches (e.g., administrative records) should be investigated. The development of multipliers to account for interindividual effects would be a pragmatic way to inform economic evaluation;[108] such methods are already used to adjust individual self-reports to reflect production losses better.[90]

Top-down evidence generation, which accounts for the total effects of governmental expenditure, may offer a more accurate assessment of the wider value of improvements in mental health. For example, area-level data largely account for inter-individual spillovers. Such evidence is exceptionally scarce; therefore, population-level research should be a priority to generate practice-based evidence in mental health. This includes analysis of the productivity of mental health expenditure versus other forms of government spending,[111] which may require investment into data linkage across the health, education, welfare, and criminal justice sectors.

Economic evaluations could use additional instruments that demonstrate better psychometric properties to address outcome sensitivity. However, because generic outcome measures are used to set priorities across healthcare systems, other approaches could be explored for mental health, such as a bolt-on to the EQ-5D.[41] This should be paired with an examination of how we attribute value. Encouragingly, Euroqol wishes to support

research that examines the basis/rationale of value sets by patient groups,[23] and evidence suggests that the public supports asking those who have experienced heath-states to inform policy.[84] HTA bodies have a long history of involving the public and patients to inform guidance, but research is required across settings, countries, and cultures to reflect population and societal diversity. There are other approaches to the outcome and valuation problems, such as using a broader generic outcome;[41–43] and mental health experts and health economists should work together to explore the validity of these instruments with transdiagnostic classification systems and modern conceptualisations of mental health.[117,118] Mental health practitioners and researchers are well placed to increase patients' voices in all of the issues raised by this paper.[20]

In conclusion, mental health has far-reaching consequences not captured by economic evaluations in health. Progress requires interdisciplinary collaboration between economics and the mental health sciences. While funding for mental health promotion, treatment, and research is essential, a broader focus on evaluative processes may strengthen the economic case for mental health and so benefit population mental health. Everyone is a stakeholder in health economics and economic evaluation.

Search strategy and selection criteria

This review did not address questions that could be synthesised via a systematic review. Instead, we relied on extensive conceptual research informed by hands-on experience and a snowball search approach (recursive examination across a wide range of publications). We also received detailed expert feedback to ensure completeness in the narrative overview, an accurate representation of sources, and intelligibility across disciplines. Further references that could not be included because of reference limits are available in the supplementary reading list.

Contributors

JL conceived and oversaw the project, conducted the literature searches, drafted the original manuscript, selected the references, designed the original figures, compiled the supplementary material, and revised the final manuscript. PP, RS, and AH contributed to the manuscript's drafting, figure design, and revision. All authors approved this final version.

Declaration of interests

We declare no conflicts of interest.

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Panel. Scope of this health policy paper.

We discuss

- ✓ How economic evaluations in health measure and attribute value.
- ✓ Guidelines for (and practical applications of) economic evaluations in health and health technology assessments (HTAs).
- ✓ Cross-disciplinary evidence of the benefits and costs of mental health and comparisons to other forms of health where available.
- ✓ How the impacts of mental health may conflict with current guidelines and practices.

We do not discuss

- × Cost-benefit approaches, conceptual frameworks for examining cross-sectoral value for money, or developments in multicriteria decision analysis.
- × Behavioural considerations that influence the quality of economic evaluations e.g., the effects of mental health on engagement with healthcare services or item non-response and attrition in observational studies.

Figure 1. Social value judgements in economic evidence generation and decision-making.

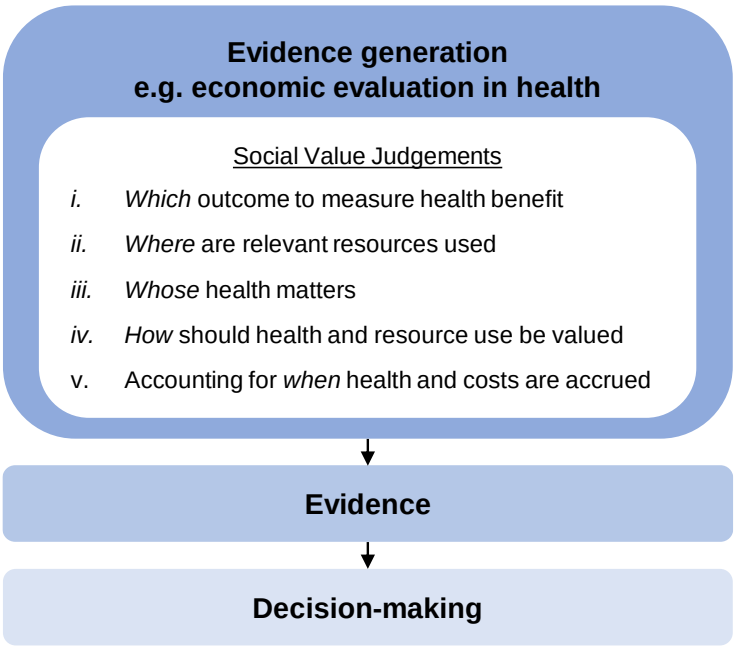

Figure 2. A summary of the evidence captured by economic evaluations in health. Dark blue boxes represent direct benefits and resource use. Boxes in lighter shades or white represent indirect effects or spillovers.

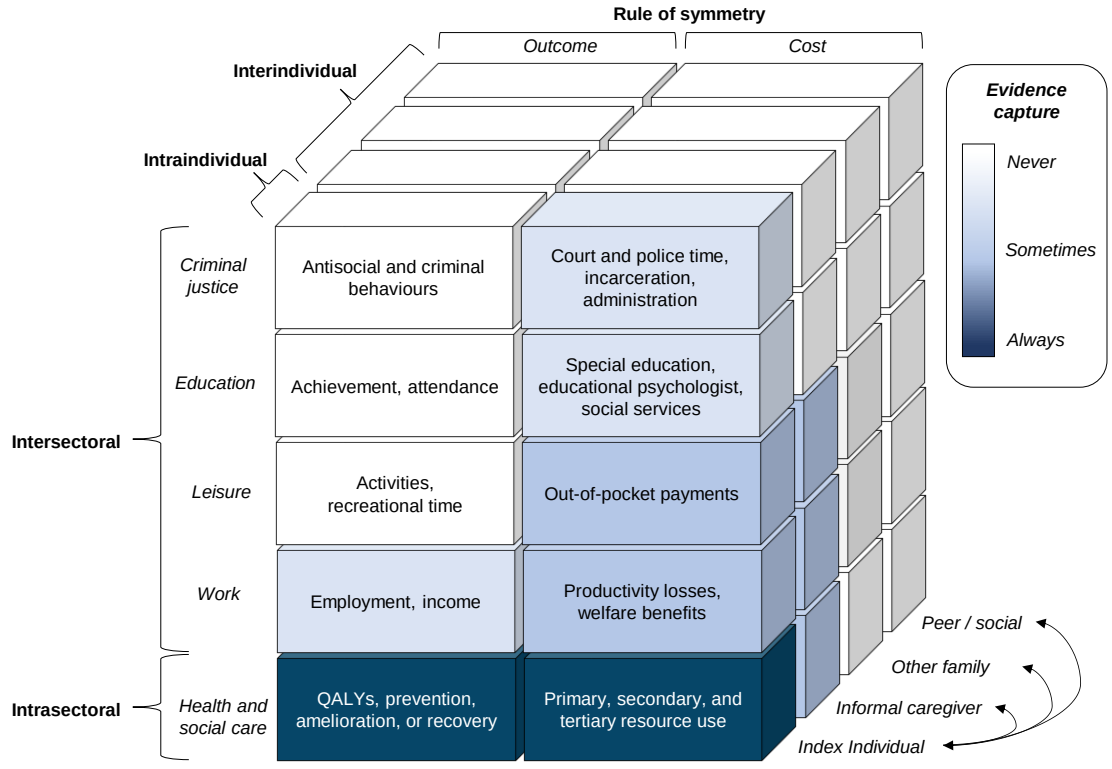

Figure 3. A summary of the extent to which social value judgements capture the value of mental health.