

## myHappymind

Cost-Benefit Analysis Results

**Eilidh Kumar** Economist Health Innovation Manchester May 2023





Children and adolescent mental health has been neglected for years and the Covid-19 pandemic significantly increased demand for services in this area. March 2021 saw a record high for referrals to child and adolescent mental health services. At 65,533, it is more than double the number in March 2020 and 68% higher than March 2019.

However, according to a GSS 2017 study, one in five children with a mental health disorder waited more than six months for contact with a mental health specialist and in a YoungMinds survey, 76% of parents said that their child's mental health had deteriorated while waiting for support from CAHMS.

There is evidence to say that if a child experiences mental health issues, it is likely to affect their wellbeing in adulthood and NHSE and NHSI have recognised the value of preventing not reacting to children's mental health issues.

myHappymind is an innovative curriculum which teaches preventative mental health strategies to children, teachers and parents. Using science-backed strategies, myHappymind supports the prevention of mental health issues and deals with low level mental health challenges or 'early help'. All of this supports a reduction in CAMHS referrals and reduces pressure on the NHS. It also supports all children to thrive so that they reach their full potential and have good wellbeing.



## Cost- benefit analysis

This analysis was conducted to provide an insight into the value for money of rolling out myHappymind to 5-11 year-old school children in Greater Manchester, in the form of a predictive cost-benefit analysis, using the results from the Da Silva (2021) study to estimate the impact of using myHappymind on GM patient outcomes.

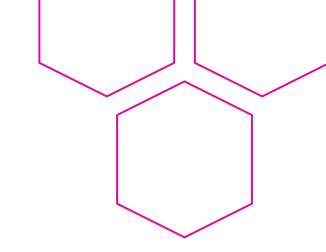
The analysis was completed in line with HM Treasury's Green Book methodology for undertaking national policy appraisal, including best practice regarding costing events, discounting activity, and determining an applicable counterfactual. The cost benefit approach assessed the five- year financial return on investment.

The analysis captures the immediate fiscal benefit arising from offering myHappymind to 5-11year-old school children in Greater Manchester and provides an indication of the likely longerterm impacts of reducing the number of CAMHS referrals made by education services and other instances of potential cost avoidance including the costs talking therapies. The model considers the following benefit.

Reduced long-term utilisation of healthcare resources derived from a reduction in CAMHS referrals.

All elements of the model are assigned an appropriate monetary value taken from recognised costing structures (NHS tariff and national cost collection)

Values are clinically validated and thoroughly referenced for a fully transparent calculation



#### THE GREEN BOOK

CENTRAL GOVERNMENT GUIDANCE ON APPRAISAL AND EVALUATION



# Benefits of using myHappymind...

myHappymind rolled out to 5-11 year old school children in Greater Manchester

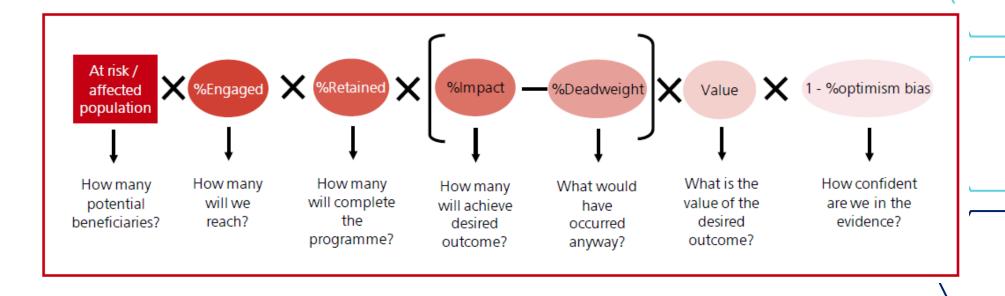
Children are taught how to manage their mental health and behaviours

Reduced CAMHS referrals made by education services

Reduced utilisation of mental health and care services



The maximum potential monetary benefit for each outcome is calculated using the following formula:

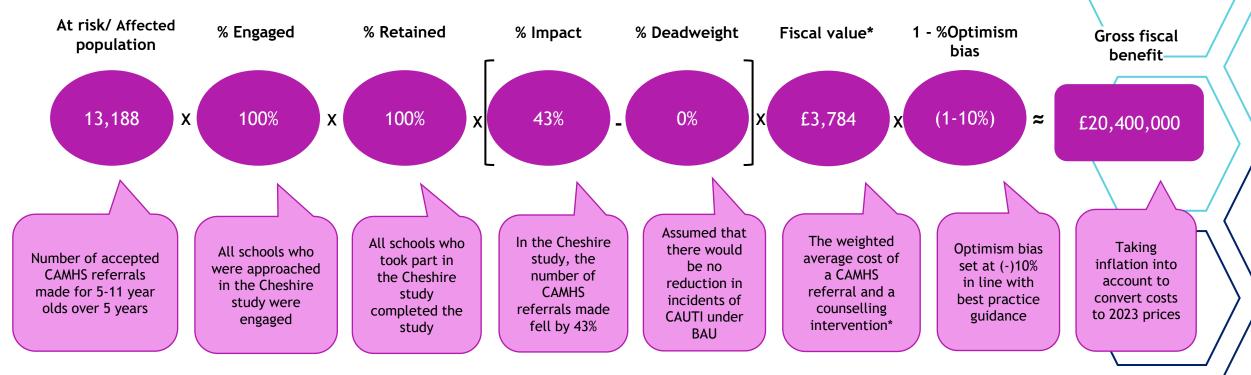




### Reduction in the number of CAMHS referrals over 5 years...

An estimated 13,188 CAMHS referrals for 5-11 year old school children will be accepted in GM over 5 years.

A study undertaken in schools in Cheshire was used to inform the cost-benefit analysis of rolling out myHappymind to all primary – schools in Greater Manchester. Below shows how the findings of the Cheshire study were used to inform the cost-benefit analysis – of rolling out myHappymind to 5-11 year old school children in GM.



\*There is limited data available on the treatment outcomes of an accepted CAMHS referral so it was assumed that all accepted referrals lead to a counselling intervention.



Cost components

Below shows the costs involved in the 5 year costs if myHappymind were to be rolled out to all 5-11 year old school children in Greater Manchester

Cost Component	Cost	5 Year Cost for 258,933 5-11 year old school children	Who pays?
myHappymind app	£8 per child per year	£10,357,320	NHS



10

 $\nabla^{\Delta}$ 



### Return on Investment

Based on 258,933 5-11 year old school children in GM over 5 years...





of roll out

# Yearly breakdown of costs and benefits (2023-2027)

Cumulative Fiscal Chart Benefits \_\_\_\_\_ Costs \_\_\_\_\_ Income & Efficiences ----- Cumulative Net Budget Impact E25,000,000 E20,000,000 E15,000,000 Benefits > Costs E10,000,000 £5,000,000 £-2024 2026 2023 2025 2027 Cumulative net budget impact becomes positive in the first year



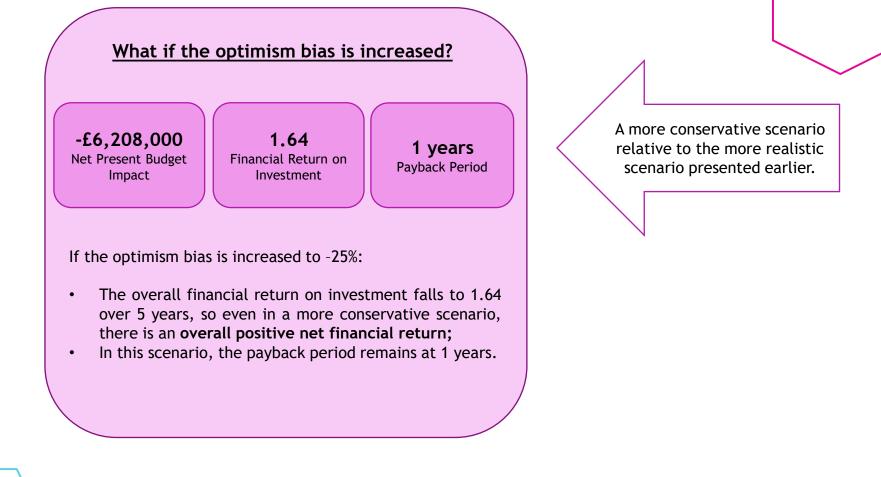
## Sensitivity Analysis

13

## Sensitivity Analysis

The optimism bias correction is used in the model to avoid the overvaluation of myHappymind by deflating the estimates of any benefits. The initial results of the model used a (-)10% optimism bias correction in line with "best practice" guidance.

Increasing the optimism bias to (-)25%:





 $\nabla^{\Delta}$ 

## Conclusion

15



### Findings

- Using the impacts of myHappymind on CAMHS referrals found in the Cheshire study, the roll out of myHappymind to 5-11 year old school children in Greater Manchester, at scale, is estimated to create a positive financial return on investment and achieves economic outcomes.
- myHappymind has the potential to create a considerable financial benefit over a 5- year period, and these benefits are estimated to outstrip the estimated costs.

### Caveats and Assumptions

- Assumed that an accepted CAMHS referral leads only to a talking therapy intervention due to a lack of available data on treatment outcomes
- Assumed that all eligible patients will be reached in the first two years of roll out
- The analysis does not include the impact of myHappymind on the wellbeing of teachers and parents
- The analysis does not include the impact of myHappymind on other children's services