EPH266

An Economic Model to Assess the Costs and Benefits of Workplace Mental Wellbeing Interventions: A Flexible Tool for Employers and Decision Makers

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INTRODUCTION

- Poor mental wellbeing is one of the leading causes of long-term sickness absence from work despite conditions, such as stress and anxiety, being treatable and often preventable.[1]
- Since the COVID-19 pandemic, the mental health and wellbeing of employees has become particularly relevant due to social restrictions, financial stress, healthcare treatment disruptions, and new working patterns.[2]
- Some organisations may wish to introduce interventions that aim to prevent poor, promote positive, and improve mental wellbeing in the workplace.

Objectives:

- To conduct economic modelling and provide data on costs and benefits to employers who are considering implementing a mental wellbeing intervention in the workplace.
- To assess changes in employee outcomes through a cost-consequence analysis.

METHODS

- A cost-consequence model was developed to assess the impact of workplace mental wellbeing interventions from both the employer and a wider perspective (including employee outcomes).
- A one-year time horizon was used.
- A pragmatic search was conducted for baseline costs associated with absenteeism, presenteeism and staff turnover and effectiveness estimates. Costs were inflated to 2023 prices using the Office of National Statistics Consumer Price Index.[3]
- Because all workplaces are different, it is not useful to present one single base case. Instead, the model generates a hypothetical case study (50 employees, £100 intervention cost), with varying levels of absenteeism, presenteeism and staff turnover, as well as different levels of productivity and staff replacement costs.
- Scenario analyses were conducted for a range of hypothetical scenarios (Figure 1).
- Several mental wellbeing interventions were compared with 'no intervention' (current practice) to calculate the total incremental costs and incremental cost per employee.
- The hypothetical case study is provided for demonstrative purposes only. An interactive model is available online (**via the QR code**) for users to input their own values to generate bespoke results, specific to their workplace.

Table 1: Hypothetical scenarios in scenario analysis

Large company with high levels of absenteeism and presenteeism	▪ 600 employees ▪ £5,000 intervention cost
Medium company with low levels of absenteeism	▪ 250 employees ▪ £160 intervention cost per participant ▪ Opt-in approach (75 opted in)
Small company with medium levels of absenteeism and staff turnover	▪ 100 employees ▪ £300 intervention cost per participant
Small company with high levels of staff turnover	▪ 40 employees ▪ £52 intervention cost per employee
Micro company with low levels of absenteeism and medium presenteeism	▪ 5 employees ▪ £165 intervention cost per participant

RESULTS

- In the hypothetical case study with 50 employees and an intervention cost of £100, the intervention had a net cost saving of £4,071 per employee (Table 2). Savings were due to reductions in absenteeism and presenteeism.
- Sensitivity analysis assessed the impact of varying each input, to reflect that the inputs will vary substantially for each individual organisation and setting.
- The intervention is more likely to be cost saving when the baseline level of absenteeism and staff turnover are high, and the level of presenteeism and intervention cost are low.
- The results of the hypothetical scenario analyses are presented in Table 3.

Table 2: Hypothetical case study results

	Incremental costs*
Cost of absenteeism	-£39,536
Cost of presenteeism	-£168,999
Intervention cost	£5,000
Total costs	**-£203,536**
Costs per person	**-£4,071**

* These results cannot be generalised to all organisations because the inputs will vary by organisation and setting

Table 3: Hypothetical scenario analysis results

		Cost
Large company with high levels of absenteeism and presenteeism	Cost of absenteeism	-£162,841
	Cost of presenteeism	-£313,155
	Intervention cost	£110,000
	Total costs	**-£365,996**
	Net cost per person	**-£610**
Medium company with low levels of absenteeism	Cost of absenteeism	-£11,274
	Intervention cost	£12,000
	Total costs	**£726**
	Net cost per person	**£10**
Small company with medium levels of absenteeism and staff turnover	Cost of absenteeism	-£39,369
	Cost of staff turnover	-£11,035
	Intervention cost	£30,000
	Total costs	**-£20,404**
	Net cost per person	**-£204**
Small company with high levels of staff turnover	Cost of staff turnover	-£7,063
	Intervention cost	£2,080
	Total costs	**-£4,983**
	Net cost per person	**-£125**
Micro company with low levels of absenteeism and medium levels of presenteeism	Cost of absenteeism	£215
	Cost of presenteeism	-£1,288
	Intervention cost	£825
	Total costs	**-£249**
	Net cost per person	**-£50**

CONCLUSIONS

- Mental wellbeing interventions may influence a range of outcomes but outcomes demonstrating a mental wellbeing benefit to employees may be challenging to translate into monetary value.
- It is not possible to draw broad conclusions from the hypothetical case study and scenarios evaluated in this study because there is variability in the interventions available and heterogeneity in the employment sector.
- It is recommended that the model (**available online via the QR code at the bottom of the poster**) is used by decision makers and employers to understand the potential economic and wellbeing implications when considering the introduction of a new mental wellbeing intervention in the workplace.

REFERENCES

1. Gayed A. *et al.* Occup Environ Med 2018;75(6):462-470. **2.** Chandola T. *et al*. Psychol Med 2022;52(14):2997-3006. **3.** Office of National Statistics. Inflation and price indices. Available here: https://www.ons.gov.uk/economy/inflationandpriceindices

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