Supporting occupational health and wellbeing professionals

Occupational health: the value proposition

Paul J Nicholson

23rd March 2022

Scope

- Why update now?
- What has and hasn't changed?
- Myths, naivety and noble lies
- Wellbeing and health promotion
- Key points
- Suggested next steps

Supporting occupational health and wellbeing professionals

Why update now?

Good practice	Timeliness
	HMG response to Health is Everyone's Business ANZSOM value proposition SEQOHS update
Ongoing challenges	**Emerging trends**
Ageing workforces Burden of disease Access to OH	Gig work Home/hybrid working Public health risks

som
Supporting occupational health and wellbeing professionals

What has and hasn't changed?

The same	New
General messages	Chapters rearranged & Foreword by Lord Blunkett
Primary research is generally of low quality	Creative Commons License
Still difficulty monetising intangible benefits & presenteeism	Old reports added to bust myths
Employers provide OH for legal, moral & financial reasons	New evidence added to 28th Feb 2022 130/224 references & 64/106 systematic reviews
Key message - OH services improve employee health, workforce productivity, organisational performance & the economy	Updated text and key points 7,142/15,601 new words

som
Supporting occupational health and wellbeing professionals

Busting myths

- Access to OH
- Workplace health promotion ROI

"All ~~organizations~~ studies are perfectly designed to get the results they get"

Adapted from Arthur Jones

Supporting occupational health and wellbeing professionals

Employee access to OHS

Telephone surveys for DWP	
2010	**38%** of 2,019 employees said they could access an OHS[1]
2014	**51%** of 2,013 employees said they could access an OHS[2] However, only **37%** of 358 employees off sick > 2 weeks wouldn't use FtW because they had access to an OHS[2]

Supporting occupational health and wellbeing professionals

1. Health and wellbeing at work: a survey of employees. DWP. 2011.
2. Health and wellbeing at work: a survey of employees. DWP. 2015.

Employee access to OHS

Telephone surveys for DWP	
2010	**38%** of 2,019 employees said they could access an OHS[1] OH not defined
2014	**51%** of 2,013 employees said they could access an OHS[2] OH "provides advice and practical support about how to stay healthy in the workplace and how to manage health conditions"[2] However, only **37%** of 358 employees off sick > 2 weeks wouldn't use FtW because they had access to an OHS[2]

som
Supporting occupational health and wellbeing professionals

1. Health and wellbeing at work: a survey of employees. DWP. 2011.
2. Health and wellbeing at work: a survey of employees. DWP. 2015.

Definitions and understanding – known problems

Companies providing OHS

- **Broad definition – 19%**

(hazard identification, risk management, provision of information)

- **Stringent definition – 3.3%**

(previous + modifying work activities, providing OH-related training, measuring workplace hazards and monitoring health trends)

Employers reported OH was provided by:

- employees with H&S training (48%)
- employees without H&S training (23%)
- first aiders (7%)

Supporting occupational health and wellbeing professionals

Survey of Use of Occupational Health Support. CRR 445. HSE. 2002

Capacity and capability gaps

Among private occupational health providers:

- 44% were unable to fill OH nurse or OH physician vacancies due to lack of suitably-trained candidates
- 53% had been forced to decline work

Tindle A, et al. DWP. 2020

The problem is bigger than employers:

- Being unwilling to pay for OHS or
- Wanting proof of ROI

Supporting occupational health and wellbeing professionals

Lessons

- We need reliable and reproducible data about access to OHS
- Overestimating access diminishes the sense of urgency
- We need to communicate more widely what OH does
- We need to close the capability and capacity gaps

Supporting occupational health and wellbeing professionals

Wellbeing and health promotion – apples and oranges?

- Wellbeing is associated with diverse outcomes i.e., job satisfaction, employee engagement, retention, productivity, etc
- Wellbeing is a people and performance strategy [*not an OH programme*]
- Wellbeing is multi-factorial; determinants at work include:
  - Career satisfaction, development, reward
  - Characteristics of the job - autonomy, clarity, variety
  - Working environment - environmental hazards, job insecurity
  - Work organisation - working hours, effective supervision
  - Social determinants - culture, values, support

Supporting occupational health and wellbeing professionals

Global Wellbeing Survey. London. AON 2021.
Walters D, et al. EU-OSHA. 2021.
Chari R, et al. *J Occup Environ Med* 2018.
A global survey of workforce wellbeing strategies. Buck Global. 2018.

OH role in wellbeing - health promotion

- The popularity and commercial interest in workplace health promotion is not backed by good quality evidence for efficacy, effectiveness or cost-effectiveness
- Systematic reviews report that only around 1 in 4 primary studies are of high quality
- ROI inversely related to study quality (null or negative in controlled studies)
- Only between around 20-40% of systematic reviews are of high quality
- Systematic reviews often reach different conclusions depending on methodologies
- Meta-analyses produce mixed results for benefits relative to costs

Supporting occupational health and wellbeing professionals

Crane MM, et al. *J Epidemiol Community Health* 2021. Cuello-Garcia CA, et al. *J Clin Epidemiol* 2021. Grimani A, et al. *BMC Public Health* 2019. Jones D, et al. *Q J Econ* 2019. Lutz N, et al. *Eur J Public Health* 2019. MacMillan F, et al. *Occup Environ Med* 2020. Payne J, et al. *Am J Health Promot*. 2018. Pieper C, et al. *Int J Environ Res Public Health* 2019. Reif J, et al. *JAMA Intern Med* 2020. Song Z, et al. *JAMA* 2019.

Workplace health promotion – myths

Building the Case for Wellness PwC 2008

- 7/55 heterogenous case studies estimated ROI (range 1:1 to 34:1)

MYTH

- *"A review of seven wellbeing programmes suggested the average benefit-cost ratio was £4.17 for every £1 spent"*

FACTS

- Not an average, but one of seven examples
- Non-peer reviewed study
- Used '*perceived costs and benefits*'
- Related to revised *manual handling training*

Baicker K, et al. *Health Aff* 2010

MYTH

- *"For every $1 spent on wellness programs medical costs fall by about $3.27 and absenteeism costs fall by about $2.73"*

FACTS

- Meta-analysis of only 1 study / intervention
- Some old studies (to the 1980s)
- Uncontrolled studies 13/22 (low-quality)
- Assumed costs in 7/22 studies
- Selection bias (motivated volunteers)
- Low cost interventions (self-help & HRAs)
- Medical costs shared by employees
- Authors cautioned against generalizing results
- Authors have since found no such ROI

som
Supporting occupational health and wellbeing professionals

Workplace health promotion – myths

Building the Case for Wellness PwC 2008

- 7/55 heterogenous case studies estimated ROI (range 1:1 to 34:1)

MYTH

- *"A review of seven wellbeing programmes suggested the average benefit-cost ratio was £4.17 for every £1 spent"*

FACTS

- Not an average, but one of seven examples
- Non-peer reviewed study
- Used '*perceived costs and benefits*'
- Related to revised *manual handling training*

Supporting occupational health and wellbeing professionals

Baicker K, et al. *Health Aff* 2010

MYTH

- *"For every $1 spent on wellness programs medical costs fall by about $3.27 and absenteeism costs fall by about $2.73"*

FACTS

- Meta-analysis of only 1 study / intervention
- Some old studies (to the 1980s)
- Uncontrolled studies 13/22 (low-quality)
- Assumed costs in 7/22 studies
- Selection bias (motivated volunteers)
- Low cost interventions (self-help & HRAs)
- Medical costs shared by employees
- Authors cautioned against generalizing results
- Authors have since found no such ROI

Workplace health promotion – large cluster randomised trials

Illinois Workplace Wellness Study

- Null effects on medical expenditures, employee productivity and self-reported health status after more than two years
- Employees who participated already had healthier behaviours and lower healthcare spending than non-participants
- 84% of medical expenditure and absenteeism estimates in earlier studies were unreliable (mostly selection bias)

Harvard II

- No significant differences in health care spending or absenteeism at either18 months and 3 years follow-up
- These findings may temper expectations about the financial ROI that wellness programmes can deliver in the short term
- Most prior studies were based on observational designs that had methodological shortcomings i.e., selection bias

Supporting occupational health and wellbeing professionals

Jones D, Quart J Economics 2019

Song Z, et al. JAMA 2019

Song Z, et al. Health Aff 2021

Workplace health promotion – large cluster randomised trials

Illinois Workplace Wellness Study

- Null effects on medical expenditures, employee productivity and self-reported health status af
- Employees who participated already had healthier behaviours and lower healthc
- 84% of medical expenditure and absenteeism estimates in earlier st

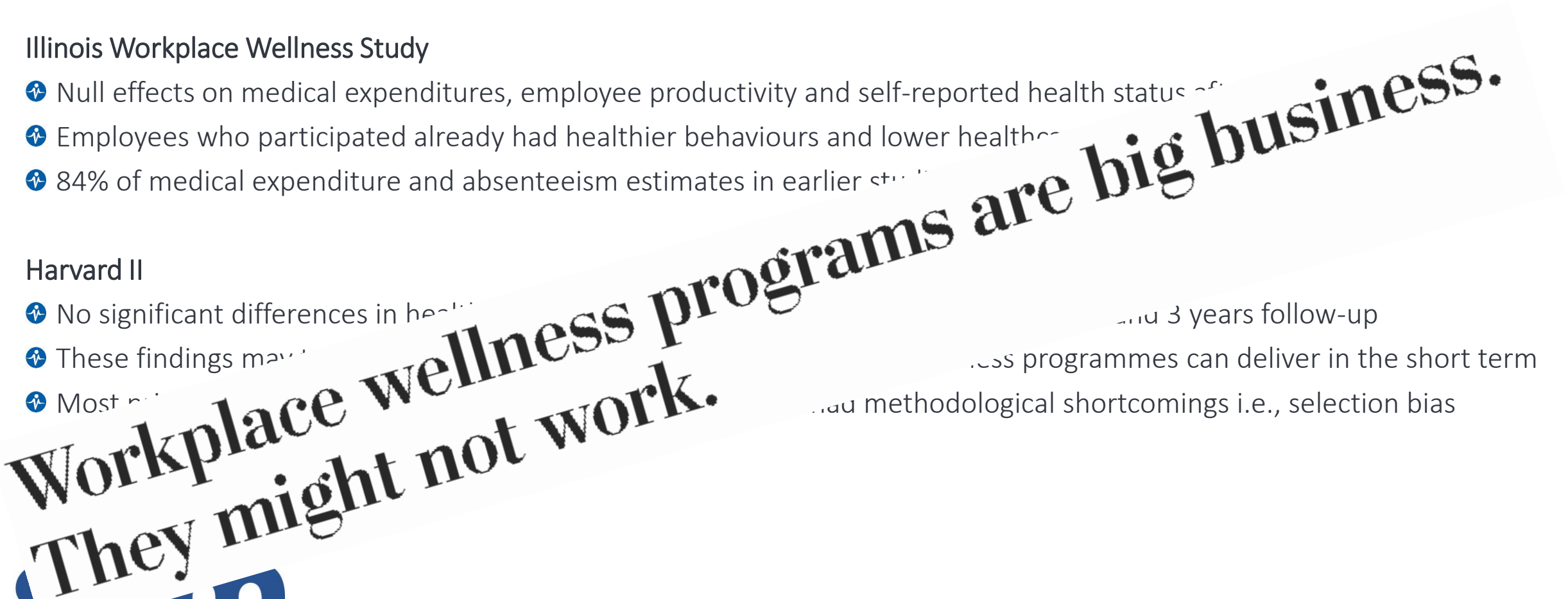
Harvard II

- No significant differences in hea
- These findings ma
- Most

and 3 years follow-up

ess programmes can deliver in the short term

had methodological shortcomings i.e., selection bias



Supporting occupational health and wellbeing professionals

Jones D, Quart J Economics 2019

Song Z, et al. JAMA 2019

Song Z, et al. Health Aff 2021

Employee surveys

- Some employers measure the success of their WHP programmes by comparing employee survey scores for those who do and those who do not participate
- An *association* is not uncommon but it isn't *causation*
- In a retrospective study of >10,000 employees followed up for 3 years:
  - Most participants had better scores for job satisfaction and intention to stay
  - These effects disappeared when controlling for pre-intervention scores

Supporting occupational health and wellbeing professionals

Ott-Holland CJ, et al. *J Occup Health Psychol* 2019

What does this mean?

- It depends on what employers are trying to achieve
- If employers are seeking to add benefits that workers value—or to attract the type of workers who value those benefits—the programmes may be worth it
- If the goal is to save money by reducing health care costs and absenteeism or to improve long-term health conditions, there is little evidence of effectiveness

Baicker K. *JAMA Health Forum.* 2021

- OH professionals must critically appraise studies before naively incorporating low-quality evidence into practice
- Organisations must avoid ‘noble lies’ - myths that advance their agenda

som
Supporting occupational health and wellbeing professionals

Occupational health interventions

- Strongest evidence for economic return is for RTW interventions
- Cross-sectional studies evidence benefit of earlier referral for LTSA
- Evidence supports restricting post-offer health assessments to job-specific examinations, but tests must have positive predictive validity
- Legally mandated interventions are rarely evaluated for effectiveness or cost-effectiveness

Supporting occupational health and wellbeing professionals

Pre-placement health assessments

- Previous systematic reviews found little or no or inconsistent evidence that pre-placement health questions were effective in determining future health or occupational outcomes

New evidence

- Systematic review - pre-employment or post-offer personality assessments are of low utility in predicting common mental disorder among emergency workers
- Prospective study - no association between validated pre-employment measures of personality and psychopathology with mental health outcomes among Australian police officers in their first seven years of employment

Supporting occupational health and wellbeing professionals

Marshall RE, et al. *Psychiatry Res* 2017
Marshall RE, et al. *Occup Med (Lond)* 2020

Long-term sickness absence management

- Previous intervention studies in English and Scottish hospitals demonstrated that earlier referrals to OH + intensive case management and a bio-psychosocial approach) reduced sickness absences and were cost-effective; one study estimating ROI to be 1.56:1

New evidence

- A large Canadian healthcare employer (29 hospitals) strengthened its disability management programme (emphasis on early contact, supervisor training and involving union representatives in return-to-work planning)
- Over 6 years it achieved larger reductions in disability durations in the intervention group (mean 8.5 days) compared to the comparison group (mean 3 days)

Supporting occupational health and wellbeing professionals

Mustard CA, et al. *BMJ Open* 2017

Caveat - not all OHS are equal

Company fined after several workers contracted occupational disease

19th August 2021

"…….. the Health and Safety Executive (HSE) found that ….. the company contracted a new occupational health provider to replace their existing one. The diagnosis of the workers' conditions resulted from these changes. Prior to the new company taking over the contract, there was no suitable health surveillance in place to identify HAVS."

Supporting occupational health and wellbeing professionals

https://press.hse.gov.uk/2021/08/19/company-fined-after-several-workers-contracted-occupational-disease/

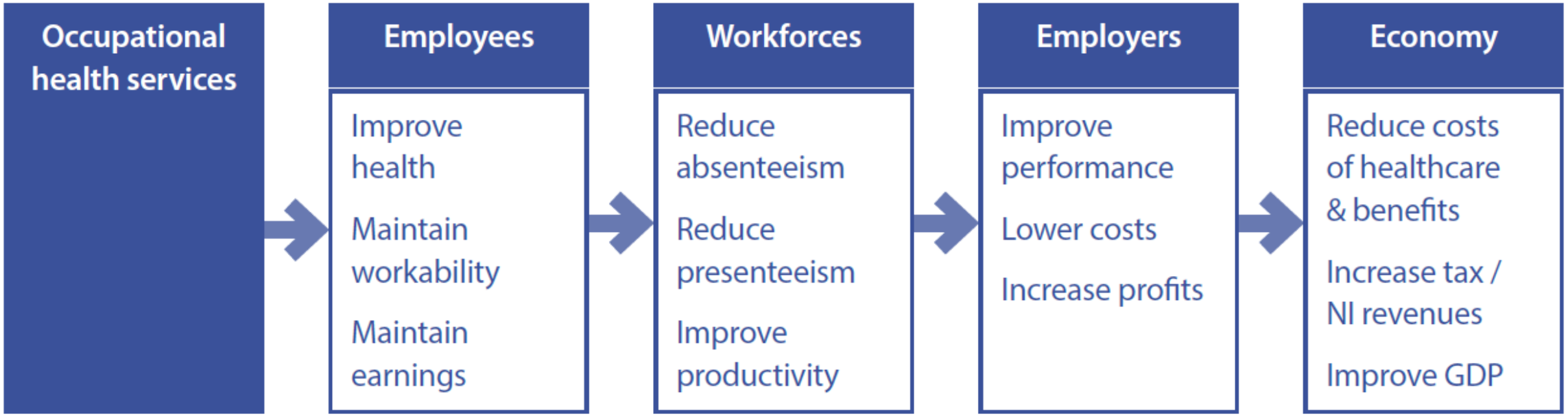
OHS should demonstrate their own value

- Data should not be generalised to all OH services
- Increasingly OH professionals have to demonstrate value and make the business case for their services
- In the USA, all OH nurses who responded to a survey considered this essential to the profession and for ensuring the quality of OH services
- In the UK,
  - OH professionals consider cost benefit analyses to be a very important area for future research
  - About 2/3 of OH providers capture outcome data and most of those found it useful to demonstrate effectiveness

som
Supporting occupational health and wellbeing professionals

Mastroianni K. *Workplace Health Saf* 2018.
Lalloo D, et al.. *Occup Environ Med* 2018.
Tindle A, et al. DWP. 2020.

Key benefits of occupational health



som
Supporting occupational health and wellbeing professionals

Key points

- *Moral reasons* (right thing to do) outweigh legal and financial reasons to provide OHS
- Employers should accept that most health interventions come at a *cost*
- Expectations for *ROI* may be unrealistic
- OH business cases should reflect *value* and intangible benefits rather than ROI
- What matters is to determine the most *cost-effective* ways to deliver care - *value for money*

Supporting occupational health and wellbeing professionals

Requested next steps

- Integrate the evidence into practice
- Help share the evidence
- Complete the one minute survey
- https://survey.sogosurvey.com/r/PtyfCm