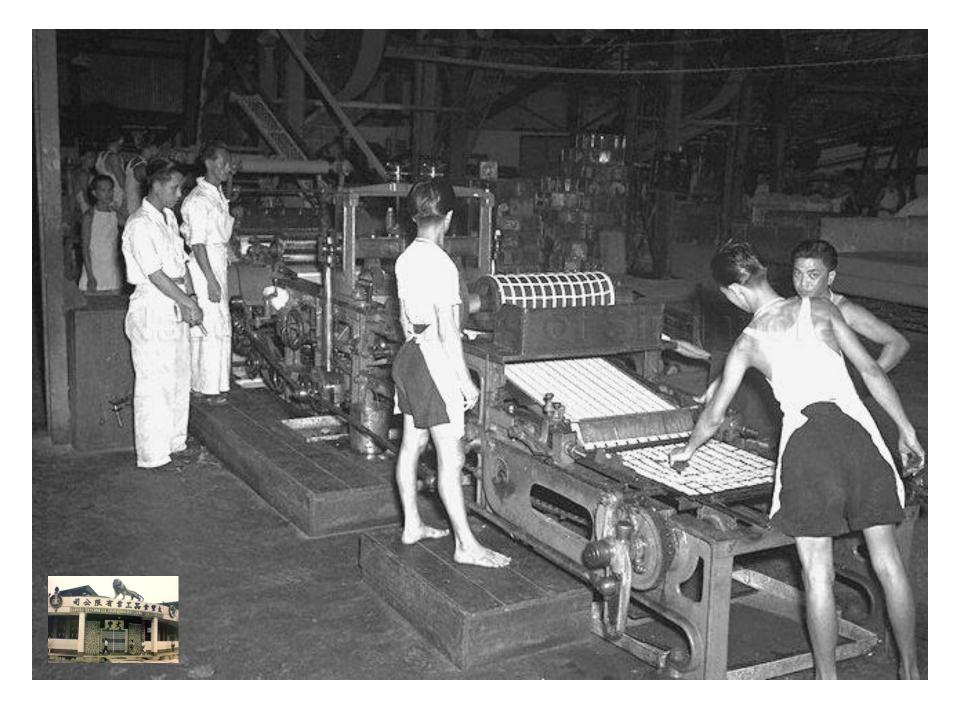


Center for Economic and Social Research



A/Prof Joanne Yoong University of Southern California, NUS and Research for Impact







The new old age

The new youth

Opportunities and challenges due to population aging require job and benefits redesign

Al and robotics increase productivity and reduce reliance on physical inputs

Millennial and Centennial values shape management styles and employee engagement

Hybrid work models built on new digital platforms for contracting, teamwork and finance

Cultural shift

Technological shift

Workplace transformation



## Technology

- Digital and mHealth tools
- Data science
- Interoperability

# Behavioral science

- Incentive design
- Gamification



# Broader definition of health

- Chronic illness
- Mental health
- Social health

# Changing employee values

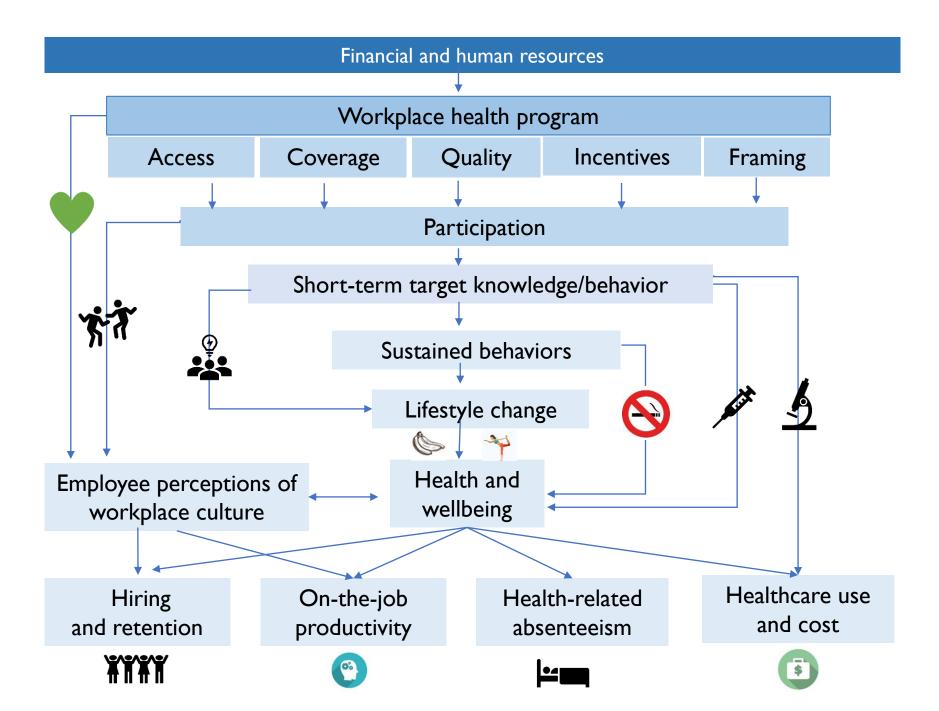
- Sophisticated consumers
- Emphasis on personalization
- Desire for authenticity

## Transforming environment

- Faster, more costly turnover
- Less physical placemaking
- New models of corporate leadership

## Broader understanding of value

- Well being beyond work
- Prevention before cure
- Health beyond healthcare



RESEARCH ARTICLE HEALTH AFFAIRS > VOL. 29, NO. 2: E-HEALTH IN THE DEVELOPING WORLD			Sample size		Health care costs (\$), treatment group (T)		Health care costs (\$), control group (C)		Change in health care costs (\$), T-C	
Workplace Wellness Programs Can Generate Savings	Study number	Years	Treat	Control	Pre	Post	Pre	Post	Change, pre	Change, post
Katherine Baicker, David Cutler, and Zirui Song AFFILIATIONS V	3roup A									
PUBLISHED: FEBRUARY 2010	0626	4.0	1,890	1,890	1,531	2,907	1,427	3,429	-522	-626
	2	2.0	340	340	1,739	1,459	1,198	1,107	351	-189
	3	3.2	11,194	11,644	2,736	3,411	2,896	4,136	-724	-563
The average program savings reported		5.0	8,451	2,955	247	655	253	1,234	-579	-573
in these studies was \$394 per employee	5	1.0	919	867	2,171	1,695	1,881	1,995	-300	-590
per year, and the average program cost was \$159 per employee per year. The	6	1.0	21,170	719	2,336	2,937	2,048	2,905	32	-255
average calculated return on investment	7	1.5	301	412	1,891	1,621	1,970	1,710	-89	-11
for this group was 3.36.	8	1.5	180	412	2,036	1,283	1,970	1,710	-427	-493

9 1.5 295 412 1,986 1,485 1,970 1,710 -225

-242



## **Effect of a Workplace Wellness Program on Employee Health and Economic Outcomes** A Randomized Clinical Trial

Zirui Song, MD, PhD<sup>1</sup>; Katherine Baicker, PhD<sup>2,3</sup> » Author Affiliations

JAMA. 2019;321(15):1491-1501. doi:10.1001/jama.2019.3307

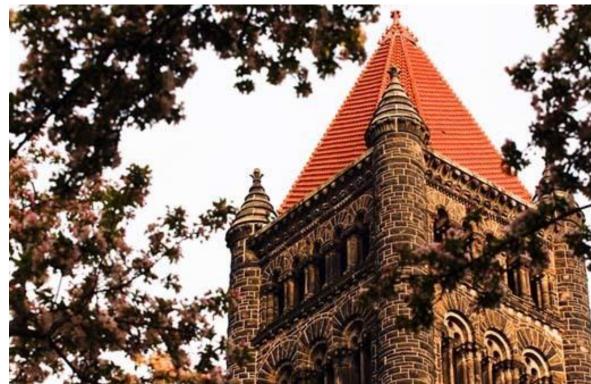
Editorial Comment P Related

#### Key Points

Question What is the effect of a multicomponent workplace wellness program on health and economic outcomes?

Findings In this cluster randomized trial involving 32.974 employees at a large US warehouse retail company, worksites with the wellness program had an 8.3-percentage point higher rate of employees who reported engaging in regular exercise and a 13.6-percentage point higher rate of employees who reported actively managing their weight, but there were no significant differences in other self-reported health and behaviors; clinical markers of health; health care spending or utilization; or absenteeism, tenure, or job performance after 18 months.

Meaning Employees exposed to a workplace wellness program reported significantly greater rates of some positive health behaviors compared with those who were not exposed, but there were no significant effects on clinical measures of health, health care spending and utilization, or employment outcomes after 18 months.



## What do Workplace Wellness Programs do? Evidence from the Illinois Workplace Wellness Study\* @

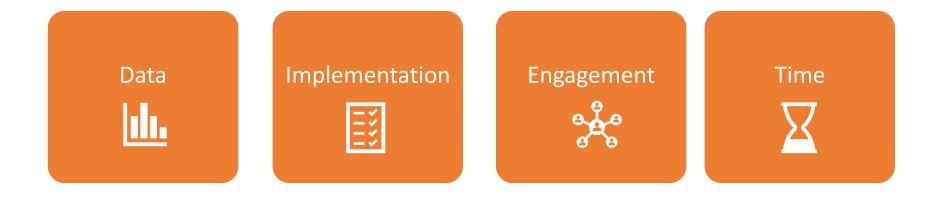
#### Damon Jones, David Molitor, Julian Reif

The Quarterly Journal of Economics, Volume 134, Issue 4, November 2019, Pages 1747–1791, https://doi.org/10.1093/qje/qjz023 Published: 16 August 2019

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#### Abstract

Workplace wellness programs cover over 50 million U.S. workers and are intended to reduce medical spending, increase productivity, and improve wellbeing. Yet limited evidence exists to support these claims. We designed and implemented a comprehensive workplace wellness program for a large employer and randomly assigned program eligibility and financial incentives at the individual level for nearly 5,000 employees. We find strong patterns of selection: during the year prior to the intervention, program participants had lower medical expenditures and healthier behaviors than nonparticipants. The program persistently increased health screening rates, but we do not find significant causal effects of treatment on total medical expenditures, other health behaviors, employee productivity, or self-reported health status after more than two years. Our 95% confidence intervals rule out 84% of previous estimates on medical spending and absenteeism.



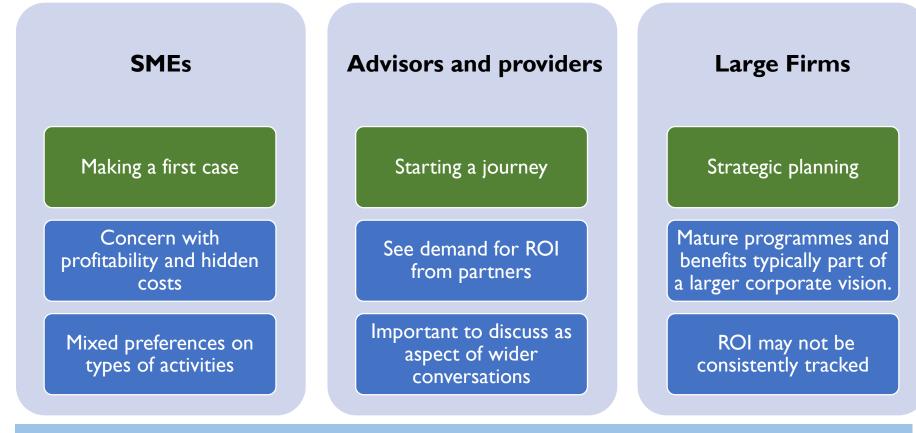
## Workplace Well-being Tool

## Welcome

The Workplace Well-being Tool is designed to help you work out the costs of poor health and well-being to your business. It can also help you build a business cation to reduce your costs and improve the health and well-being of people in your business.

The Tool is divided into two key sections:

1a 1b 1c	What are my costs? Summary of costs Example of costs	Enter your business' details to work out the costs of poor health and well-being (sickness absence, presenteeism, labour turnover and workplace injury and ill-health) View a summary of poor health and well-being costs to your business View a completed example
2a 2b 2c	Why invest? Business case summary Example of business case	Estimate the costs and benefits of investing in a health and well-being project and create a business case for action View a summary of your business case View a completed example business case
Click on	one of the boxes below to get	
	What are my costs	
		Workplace Health Savings Calculator
		ABSENTEEISM STAFF TURNOVER TOTAL ANNUAL SAVINGS
		Step 1: Determine the annual cost of sick leave
		<ul> <li>Total Annual Sick Day(s)</li> <li>Average hours (per day)</li> <li>Average hourly wage (\$)</li> <li>Total annual cost of sick leave</li> <li>O</li> </ul>
		Step 2: Estimate potential savings from a successful workplace health program
		Total annual cost of staff sick leave 0 X 30 % Total annual savings in reducing sick leave



# Common Wishlist For an ROI Estimation Tool

- Ease of use
- Capture breakdown of
  - estimated employer share of medical expenses
  - direct and indirect productivity costs
  - indirect as well as direct effects from employee engagement
- Allow different firm-specific profiles but default values from Singapore-relevant data
- Straightforward results \$X dollars return from \$1 of investment





## **RETURN-ON-INVESTMENT CALCULATOR**

The Return-on-Investment (ROI) tool is based on health economic models with several pre-set values obtained from existing literature and localised public health data. Depending on factors such as the industry, workforce size and health profile of the company as well as staff turnover costs, companies will be able to estimate returns that could result from their proposed workplace health promotion initiatives. The returns may derive from an improvement in productivity losses associated with reduced staff absenteeism and presenteeism, a decrease in staff turnover or a decline in medical claims. Click here for assumptions and citations used for this tool.



 Help HR managers advocate health promotion efforts within the company by visually demonstrating the value of investing in workplace health promotion to the senior management or other stakeholders, not just from long-term savings from productivity but also more immediate gains from a more engaged workforce.



Support value-for-money investments in health promotion by helping companies to understand (i) what types of workplace
health programme might be more appropriate for the company based on its employees' demographic profile and (ii) the various
cost drivers contributing to the programme. For example, we have included prompts within the ROI calculator to provide companies
with resources on HPB's co-funding programmes when we notice companies input a high programme cost. This could provide
companies with more cost-effective screening and intervention options that would better suit their needs.



Strengthen the implementation of health promotion programmes by supporting companies to evaluate how factors such as increasing levels of programme participation and employee turnover could affect the eventual gains from health promotion efforts.

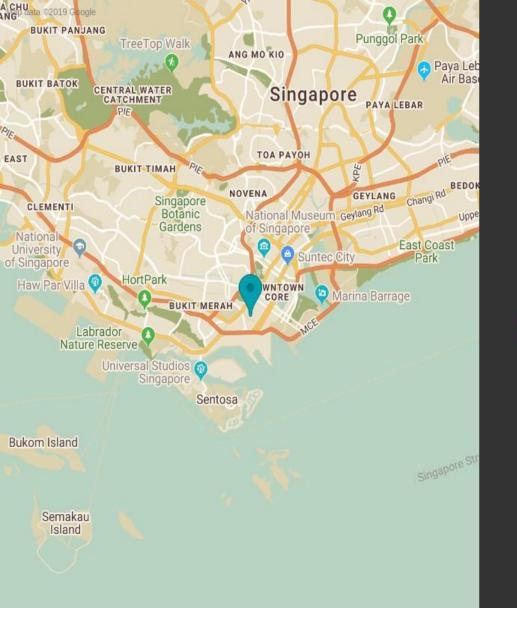
Thank you for being a beta user for this tool. Your feedback would be valuable as we further refine this calculator and develop subsequent versions.

HRON	IIC DISEASE M	Download PDF	
imated scree	enings: 70 pax		
Back to Ca	alculator		
		Annual cost savings : Chronic disease manage	ment
		3631	
			3242
	3305		
		2751	
			2293
	489		
		3384	29%
	204	.751	-670
	-008		
	Year 1	Year 2	Year 3
M	ledical expenses from inpatient claima	ole 📕 Medical expenses from outpatient claimable 📗	Absenteeism Presentism Turnover Cost

Cost-benefit Analysis	Y	Year 1		Year 2		Year 3	
Medical expenses from inpatient claimable	s	4089	s	3381	s	2795	
Medical expenses from outpatient claimable	s	-864	s	-761	s	-670	
Absenteeism 😗	s	180	s	138	s	104	
Presenteeism 🔋	s	3305	s	2751	s	2293	
Turnover costs 👔	s		s	3631	s	3242	
Total	s	6710	s	9140	s	7764	
Programme costs - subsidies	s	6700	s	6700	s	6700	
Total accumulated cost savings (in today's dollars)	s	6710	s	15584	s	22902	
For every dollar spent, cumulative return-on-investment:		1.00				3.42	

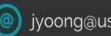
#### How do you interpret an ROI?

An R0 greater than 1 shows that the benefits second the costs when measured at that time
 An R0 liss that I means that there are herefits but they do not yet exceed the total cost
 A negative RO typically means that the intervention actually results in more new costs than savings (e.g. just screening workers but having law participation rates for discreening workers but having have participation rates for discreening workers much mean that cost have been incurred but workers have not received sufficient help to manage the discreening. Less spinority, it can also mean that the intervention had positive benefits and negative next meteried and ficient help to manage the discreening. Less spinority, it can also mean that the intervention had positive benefits and negative next meteries and the spinority benefits and negative help to the spinority of the spinority benefits and negative next meteries and the spinority benefits and negative help to the spinority benefits and negative help to the discretion spinority benefits and negative help to the spinority benefits and negative help to the spinority of the spinority of the spinority benefits and negative help to the spinority of the spinority of the discretion spinority of the spinority



# Thank you!

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