Discussion of: The Total Burden of Work-Related Injuries and Illnesses: A Draft White Paper Developed for the Workshop on the Use of Workers' Compensation Data

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Abstract

The total burden of work-related injuries and illness is their broad impact on society. This impact extends beyond the number of reported work-related injuries and illnesses and the cost of workers' compensation claims for medical treatment and wage replacement. To operationalize this definition, we would need to assess the total burden accurately but currently there is no one preferred and standardized burden estimation approach.

Estimates of burdens inform decisions that aim to reduce these burdens by comparing them to each other and to strategies to prevent them. It is increasingly important to improve our understanding of the total burden of work-related injuries and illnesses because the pressure continues to build for providing evidence that it pays –at any level, worker's, employer's, or society's– to invest in the safety and health of workers. To articulate this evidence, we need to understand the true magnitude and distribution of the total burden, and as a result, by how much and for whom prevention efforts may reduce it. Currently available burden estimates are being used to make decisions that affect everyone's health-related and economic well-being; improved information is likely to lead to improved decisions.

Despite past efforts to accurately assess the total burden of work-related injuries and illnesses, some of which we mention throughout the paper, gaps remain both at the conceptual and the application levels. Understanding if and how two different burden estimation approaches complement each other is an example of addressing a conceptual gap. Consistently following standardized methods is an example of addressing an application gap.

The primary goal of this paper is to help researchers and consumers of research improve their understanding of the total burden of work-related injuries and illnesses. First, we mention examples of notable studies and present some conceptual relationships among broad estimation approaches and categories of the burden. Then, we elaborate on the difficulties in developing burden estimates that are common in multiple approaches, present criteria for the assessment of the quality of burden estimates derived by different approaches, and briefly describe these approaches, their limitations, and if and how they can utilize workers' compensation data. Finally, we provide recommendations for improving our understanding of the total burden.

Discussion

The total economic and social burden of occupational injuries and illnesses remains uncertain. Many components of the burden are not readily monetized and yet others are spread across society and social support networks. Estimates of total burden would be useful to a number of stakeholders including employers, workers, family members, insurance companies, government organizations, and society as a whole. Various portions of the occupational injuries and illnesses burden are borne by these stakeholders and the costs for each stakeholder are important in the context of the total burden.

Workers and their families often bear many costs that are not recovered from workers'

compensation insurance following occupational injuries and illnesses. Governments pay through Social Security and Medicare as well as tax subsidies to workers' compensation insurance programs. Workers' compensation insurance companies may incur costs but these are typically recovered through premiums. Other health insurance coverage may be used for occupational injuries and illnesses and the costs not directly related to the occupational risks. Losses to society occur when, for example, human capital is diminished when workers have to leave their jobs or their occupation following an injury or illness.

Questions and discussions included the following. What kinds of burden estimates are needed for regulatory analysis or for employers? Employers are focused on WC, and are interested in the level of WC costs in comparison with competitors. (However, particularly when all competitors have similar levels of WC costs, these costs can be added by employers to the price of products so that they are borne by consumers). Given the focus on WC costs, it is important to know how WC costs compare to the total burden. Costs for turnover and return-to-work processes may not be directly recognized by employers. Employers may also not recognize the cost savings associated with prevention investments if the impact is on group health insurance and not workers' compensation.

Public health needs to connect with policymakers and employers to show usefulness of WC data and burden estimates, with an emphasis on teaching them how they might use the data. Data systems are generally not integrated. Human Resources and Risk Management don't often share data, so we cannot tell if injury and illness costs are being shifted between WC and group health. Large employers are advocating data integration. Third Party Administrators (TPAs), who need to integrate WC and other data, may be important partners.

There is a need to examine and describe inefficiencies of the WC system. Can we come up with a more complete no-fault system? Can we avoid costs of fighting (litigation)? More broadly, there are important differences between the Canadian and US systems. One could focus on comparison of Canadian and US burdens to see effects of system on burden.

Estimation

Which portions of the overall burden are small enough to ignore? Where does one draw the line and stop counting indirect costs? For example, if a worker dies on the job, leaving only one parent for their children, the effects on the children could last a lifetime or even be multigenerational. There is a need to define the bounds of an 'episode' which would not likely include impacts on later generations. When there are multiple underlying causes of an illness or injury, assign only part of the cost to the occupational portion.

It is policy at OSHA to use willingness-to-pay measures. (There is current work on a Department of Labor policy paper.) Yet, willingness-to-pay excludes costs to families and employers as well as medical costs since workers do not pay most of them or know what they are. Although popular in the 1980s and 1990s, willingness-to-pay is not used in courts any more. It was hard to understand and apply.

What should we exclude from cost estimates? For example, people may be more at risk from injury or illness at home than at work. Query: Does work injury and illness represent a burden in the relative sense? One answer: Even if the workplace is safer than home, this does not negate the burden of workplace injury and illness, and burden studies inside and outside the occupational health and safety arena do not incorporate these kinds of considerations in their estimates. A fair comparison of burden estimates is therefore facilitated by leaving aside the relative safety of home and workplace.

Data Utilization

Workers' compensation data are useful for identification of cases of occupational injury (although it leaves out claims that are not

filed), some medical costs and legal and administrative costs. Workers' compensation data cannot be used to estimate productivity, human capital, or pain and suffering. Payments to workers are a component of employer costs, but in an economic sense, they are just transfers.

Examination of the linkage between employers' workers' compensation and group health data is important since workers may select to use available group health insurance instead of workers' compensation for compensable occupational injuries and illnesses. Yet, injured worker may not have group health insurance policy through their own employer and may get insurance through a spouse, for example. This leads to a selection bias in the use of group health data.

Medicare and Medicaid have worked aggressively to link their data with WC data in order to avoid covering the costs of cases that should be covered by WC. Some might piggyback on these efforts.

Uncertainties

When using workers' compensation data for burden estimates, one needs to assess the magnitude of the undercounted cases in WC data for claims that are not filed as well as the underestimate of costs per case.

Some health conditions and medical treatments may be partly caused by a workers' compensation injury that occurred many years prior. There is no 'set aside' to cover these costs in the WC system. On the other hand, many age-related decrements are natural or, at least, not occupational. Knees and shoulders, for example, wear out with age, and it is hard to know how much is due to previous occupational injury or work exposure. Longitudinal population studies could be done to see if, generally, WC injuries lead to other conditions down the road, even though it is hard to make the connection between individual WC injuries and later health conditions.

Need to incorporate or build in estimates of indirect costs. Should measures of burden in terms of health-related quality of life be combined with monetary measures?

Summary

Burden estimates need to be designed for a variety of decision makers especially employers and policymakers. Workers' comp data would be most useful for burden estimates when it can be linked to other kinds of data, particularly group health data. An important goal of burden estimates is to identify how and where costs are shifted, as between government and the private sector, and between workers' compensation and group health. Need to focus on how data and burden estimates can be used by employers. Employers need to learn how to integrate WC data with their other data relating to worker health and productivity, and to benchmark their performance against other employers. There are issues related to under and over-estimation of burdens. Some costs may be over-estimated if injuries and illnesses due to both occupational and non-occupational causes are attributed in full to occupational exposures. But we know that most methods of calculating burden , including those based on WC data, represent a systematic underestimate of burden, due to undercounting of cases and due to the omission of some parts of the burden. We need to know the general magnitude of this underestimate in order to make corrections to our burden estimates and make them more useful.

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