Journal of Health Economics 51 (2017) 13–25

Contents lists available at ScienceDirect

Journal of Health Economics

journal homepage: www.elsevier.com/locate/econbase

Claims-shifting: The problem of parallel reimbursement regimes☆

Olesya Fomenko[a], Jonathan Gruber[b,*]

[a] MIT Department of Economics, United States
[b] Workers Compensation Research Institute, United States

ARTICLE INFO

Article history:
Received 30 May 2016
Received in revised form
29 November 2016
Accepted 4 December 2016
Available online 9 December 2016

ABSTRACT

Parallel reimbursement regimes, under which providers have some discretion over which payer gets billed for patient treatment, are a common feature of health care markets. In the U.S., the largest such system is under Workers' Compensation (WC), where the treatment workers with injuries that are not definitively tied to a work accident may be billed either under group health insurance plans or under WC. We document that there is significant reclassification of injuries from group health plans into WC, or "claims shifting", when the financial incentives to do so are strongest. In particular, we find that injuries to workers enrolled in capitated group health plans (such as HMOs) see a higher incidence of their claims for soft-tissue injuries (which are hard to classify specifically as work related) under WC than under group health, relative to those in non-capitated plans. Such a pattern is not evident for workers with traumatic injuries. Moreover, we find that such reclassification is more common in states with higher WC fees, once again for soft tissue but not traumatic injuries. Our results imply that a significant shift towards capitated reimbursement, or reimbursement reductions, under GH could lead to a large rise in the cost of WC plans.

1. Introduction

A common feature of health care systems around the world is parallel reimbursement structures, under which providers can to some extent choose who will reimburse them for patient care. As a result, changes in reimbursement through one system can affect not only the care of patients in that system, but the allocation of patients across systems. We label such a phenomenon "claims-shifting".

An important source of fragmentation in how providers are reimbursed for the same patient in the United States is the Workers' Compensation program, which reimburses the medical care of those who are injured at work. Most workers are covered for their non-work related injury through a group health insurance plan, while work-related injuries are covered through their employers' workers' compensation insurance plans. The Workers' Compensation systems rely heavily on the treating provider to determine whether or not an injury is work related or not. The physicians who make this determination are compensated differentially by the two systems. As a result, when a provider has discretion in categorizing a given injury as work-related or not, the relative compensation across the two systems can impact that categorization.

This issue is not unique to Workers' Compensation or to the United States. In nations with large government run health care systems, parallel reimbursement arises from the fact that many providers deliver care both under the government system and to patients who pay (or are insured) privately. In such a situation, physicians can steer episodes of care towards their private practices or to the government financed care, depending on the relative rewards of each system and patient preferences. In the United States, this issue arises not only with claims shifting from Workers' Compensation, but also from auto insurance, which covers the medical costs associated with auto accidents. Taken together, WC and Auto insurance account for over $33 billion in health care spending.[1]

In addition, a number of U.S. physicians may not "accept assignment" for patients in the nation's largest insurance program, Medicare, allowing the provider to move back and forth between

☆ Gruber acknowledges funding from WCRI. We are extremely grateful to Rick Victor for his guidance throughout this project, and to John Ruser, a set of WCRI external reviewers, the editor and referees for helpful comments.

* Corresponding author.
E-mail addresses: ofomenko@wcrinet.org (O. Fomenko), gruberj@mit.edu (J. Gruber).

[1] WC data from National Academy of Social Insurance estimates based on data received from state agencies, the U.S. Department of Labor, A.M. Best, and the National Council on Compensation Insurance; auto data from http://www.naic.org/documents/prod_serv_statistical_aut_pb.pdf, page 126

http://dx.doi.org/10.1016/j.jhealeco.2016.12.002
0167-6296/

Medicare rates and potentially higher rates that can be charged to self-paying elderly patients. Currently, 5% of Medicare providers either do not accept assignment or do not accept Medicare for some of their patients, and there is sufficient concern about growth in this figure that Congress recently mandated ongoing tracking of such opting out of Medicare payments.[2]

In this paper, we explore whether the relative reimbursement of physicians under the group health care (GH) and workers' compensation (WC) systems impacts the way in which injuries are classified by providers. In particular, we consider two important differences between the reimbursement of GH and WC systems.

The first is the capitation of GH payments. Under a capitated system, providers are not reimbursed on the margin for their care to patients. This contrasts with the fee-for-service (FFS) system under which providers are reimbursed in the WC system. On the margin, therefore, some providers may prefer to classify patients as WC than as GH in order to be marginally reimbursed for their care.

The second is variation in the fees paid under the WC system. Providers reimbursed for GH under a FFS system may compare the fees that they can get paid under GH to those under WC. As a result, higher fees often paid in WC will lead to an incentive to shift cases to the WC system.

Of course, a concern with both of these comparisons is that patients who are covered by capitated plans, or those in states with higher WC fees, may differ from patients who are covered by FFS or in lower-fee states. To address that concern, we exploit the fact (long-used in the workers' compensation research literature) that it is much more difficult to classify some injuries as work related than others. In particular, traumatic injuries such as contusions or fractures are hard to label as work-related when they didn't actually occur at work. On the other hand, sprains and strains are more readily shifted across the work to non-work margin in terms of labeling. Our empirical approach is therefore to use traumatic injuries as a control group to pick up any omitted factors that bias the comparison for sprains and strains.

To carry out this analysis, we draw on a several databases. The base data for our analysis is the MarketScan® Commercial Claims and Health and Productivity Management databases from Truven. These data sets contain information on both workers' compensation and group health claims for a large geographically diverse set of workers. We use these data to model the classification of medical claims into GH and WC.

Our results suggest that, on average, cases are shifted to WC when it is more profitable to do so. In particular, we find that a sprain or strain for a worker in a capitated GH system is 9% more likely to be classified as WC, while there is no corresponding effect for traumatic injuries. Among those in FFS GH systems, we also find that a one standard deviation rise in WC reimbursement leads to 2.5% more cases being classified as WC. These findings have important implications for the interaction of health care systems as the U.S. transitions more fully to a capitated health care system or value-based reimbursements.

Our paper proceeds as follows. In part I, we describe relevant aspects of the parallel GH and WC systems and how relative incentives might impact classification across them. In Part II, we discuss the unique data that we bring to bear on this question, and Part III focuses on the empirical strategy that we employ. Part IV presents the results for how capitation of GH impacts the classification decision, and the impact of WC fees on classification of fee-for-service patients. Part V concludes with a discussion of policy implications.

2. Part I: group health and workers' compensation: parallel health care reimbursement

2.1. Reimbursement structure under workers' compensation relative to group health

Most workers in the United States, particularly those at large firms, obtain health insurance on their jobs through Group Health programs. Among workers in larger firms, there is often a choice of several insurance options, while in smaller firms there is typically little choice.[3]

GH insurance plans can differ along a wide variety of dimensions. One is the freedom of patients to choose their providers; there is a growing use of "limited network" plans that restrict the ability of patients to choose their provider. Another is patient cost-sharing; plans can vary widely in their use of deductibles, copayments, coinsurance or other forms of cost-sharing. Yet another, largely invisible to the patient, is how plans reimburse their providers.

Broadly speaking, under a pure Fee-for-Service system, providers are reimbursed restrospectively for the costs of their care. The level of reimbursement can vary widely, however, depending on the negotiated rates between insurers and providers. Alternatively, providers may be paid under some form of capitated system. While such systems vary widely, the key distinction is that providers are to some extent paid prospectively rather than retrospectively, so that on the margin they are not fully compensated for the care that they deliver to patients. Under the traditional Health Maintenance Organization (HMO) model, for example, providers receive a salary or capitated payment that does not depend on the level of care that they deliver; modern HMOs can vary in the extent to which providers are capitated.

At the same time, almost all workers are covered for work injuries through the Workers' Compensation system. The WC system in all states pays providers under a FFS system. In 43 states, workers' compensation prices are regulated by statutory regulations (i.e., fee schedules). In states with specified workers' compensation fee schedule rates, workers' compensation prices are either paid at the statutory fee schedule rate or at a negotiated rate where the fee schedule is often used as a benchmark.[4] In the remaining states, workers' compensation prices for out-of-network services are often paid at what the provider charges or some notion of usual and customary charges in the area, while in-network providers are paid at a negotiated rate.

This fee schedule differs substantially across the states. Fig. 1 shows that a number of states (California, Massachusetts, Florida, North Carolina, New York, and Hawaii) established their workers' compensation fee schedule rates, on average across all types of professional services, to be within 15 percent of Medicare rates as of July 2011. On the other hand, five states (Alaska, Illinois, Idaho, Delaware, and Oregon) set their workers' compensation fee schedule rates at levels more than double Medicare at the state level. The overall level of prices paid in the highest-price study state, Wisconsin, was more than three times the level in Florida, the lowest-price study state (Yang and Fomenko, 2015),

[2] 2014 data on physicians from http://kff.org/medicare/issue-brief/paying-a-visit-to-the-doctor-current-financial-protections-for-medicare-patients-when-receiving-physician-services/. For a discussion of ongoing concerns and recent legislation, see http://fivethirtyeight.com/datalab/data-transparency-gets-a-win-in-houses-medicare-bill/

[3] In 2010, the endpoint of our sample, 44% of firms with more than 200 employees offer more than one plan, compared to only 15% of firms with fewer than 200 employees (Kaiser Family Foundation, 2010).

[4] The negotiated rates are often discounted prices below the fee schedule rates; sometimes they can be above the fee schedule rates (if the regulation allows), especially when the workers' compensation fee schedule rates in a state are substantially lower than the prices paid by other large payors (such as group health and Medicare).