4-18-2016

Detecting Potential Overbilling in Medicare Reimbursement via Hours Worked

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Abstract
Almost 3% of physicians who serve Medicare Part B Fee-for-Service (FFS) patients bill Medicare for services that would take more than 100 hours per week to provide – an implausible number – in this novel and easy-to-implement approach to detect potential overbilling based on the hours implied by actual billing codes.

Keywords
medicare, physicians, payment & delivery, healthcare workforce

Disciplines
Health Services Administration | Health Services Research

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Hanming Fang and Qing Gong

National Bureau of Economic Research Working Paper No. 22084, March 2016

KEY FINDINGS: Almost 3% of physicians who serve Medicare Part B Fee-for-Service (FFS) patients bill Medicare for services that would take more than 100 hours per week to provide – an implausible number – in this novel and easy-to-implement approach to detect potential overbilling based on the hours implied by actual billing codes.

THE QUESTION

Overbilling for physician services under Medicare Part B has long been a concern, as some estimates show that fraudulent "upcoding" or "overcharging" might have cost the program tens of billions of dollars per year. Existing methods to detect the prevalence and financial cost of overbilling have various limitations, so the authors developed a novel approach: create estimates of actual hours worked as implied by the medical service codes that providers submit to Medicare. In an NBER working paper, LDI Senior Fellow Hanming Fang and co-author Qing Gong examine whether this method can generate a quicker and more robust estimation of overbilling across medical specialties and geographic areas.

THE FINDINGS

Though not definite evidence for overbilling, the study finds that of more than 600,000 physicians in the study, 2,300 submitted claims for service codes that would translate into more than 100 hours per week on services for Medicare Part B FFS beneficiaries alone, despite the deliberately conservative estimation procedure. Six hundred physicians submitted claims that translate into more than 168 hours per week – which implies working 24 hours per day, 7 days per week. In examining differences between medical specialties, the authors found that optometrists, dermatologists and

ophthalmologists tended to overbill the most for services. In terms of practice characteristics, the authors found that physicians in smaller provider groups and with fewer hospital affiliations tended to overbill. The coding patterns of these "flagged" physicians suggest a responsiveness to financial incentives: they tend to submit more higher-intensity service codes than their unflagged colleagues, especially when the marginal revenue gained from submitting mid- or high-intensity codes is relatively high.

Distribution of estimated hours per week
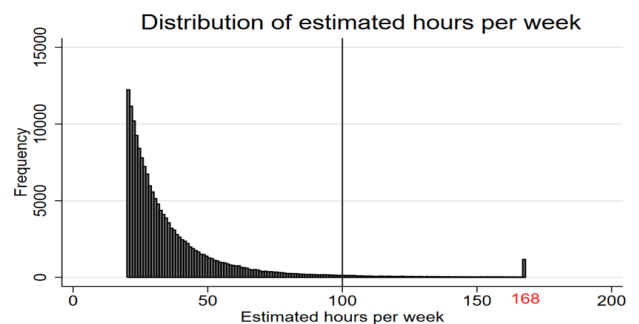
THE IMPLICATIONS

This quick and easy method to detect potential overbilling can complement existing methods of fraud detection, which involve comprehensive and time-consuming audit reviews. The authors' proposed approach could be used as a screening tool to identify individual physicians, specialties and service codes whose billing patterns are consistent with

overbilling that cannot be explained by observable characteristics. By identifying certain physicians, specialties and services that are more or less likely to have excess billing, the tool can help regulators focus their limited time and resources. One important limitation is that the tool can only flag potential overbilling for services that explicitly require the physician to spend time with the patient. Some services, such as drug infusions or medical device utilization, are unable to be examined for potential overbilling using the available data and would instead require a detailed, practice-level audit.

THE STUDY

The authors used Medicare Part B Fee-For-Service Physician Utilization and Payment data, which have been released to the public annually since April 2014. Each report has 9 million records showing medical claims at the physician-service level, meaning that the data show how much a physician billed for a particular service for the entire year. The authors limited their sample to individual providers and used the CMS Physician Compare database to find more detailed information, such as group practice affiliation. To estimate the amount of time required for different medical services, the authors used the National Physician Fee Schedule's listing of Relative Value Units (RVUs) as well as an on-site survey conducted by CMS to learn about the real amount of time required for 112 common medical services. The estimation procedure allows service time needed per RVU to vary by specialty, and is deliberately conservative in many ways to counteract the known issues of RVUs. The final sample had 7.9 million observations on 623,959 physicians across 4,480 medical service codes.

Fang H, Gong Q. Detecting Potential Overbilling in Medicare Reimbursement via Hours Worked. DOI: 10.3386/w22084. NBER March 2016, Working Paper No. 22084.

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