

## Physician Profiling: Can Medicare Paint an Accurate Picture?

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**OVERVIEW** — *Physician profiling, that is, the comparison of the health care services used by a physician's patients to average service use or another benchmark, has been proposed as a way to improve Medicare. It has been used by private health plans and physician groups to identify both efficient practice patterns and the physicians who practice efficiently. The Medicare Payment Advisory Commission (MedPAC) and the Government Accountability Office (GAO) have recommended that Medicare adopt physician profiling to slow spending growth and improve efficiency. Recent legislation would mandate that Medicare employ profiling. This issue brief reviews MedPAC and GAO's analyses of profiling, concerns about using this type of information, and the obstacles in incorporating profiling in the Medicare program.*

# Physician Profiling: Can Medicare Paint an Accurate Picture?

Comparisons of physician practice styles often point out variations in prescribing and treatment regimens that translate into large cost differences in caring for apparently similar patients. Profiling is a methodology for compiling data on the health care services received by a physician's patients to compare an individual physician's practice with a standard or norm. This methodology has been used to identify physicians who have higher or lower than expected resource use given the identified needs of their patients. This information can then be used to inform efforts to steer patients to lower cost physicians. Profiling has also been used to encourage high resource-use physicians to adopt practice styles of their lower resource-use colleagues.

Profiling has captured the attention of federal health policymakers in their pursuit of ways to improve the quality of care provided to Medicare beneficiaries while slowing the unrelenting growth in spending. Recent proposed legislation, the Children's Health and Medicare Protection Act (H.R. 3162), would require the Secretary of Health and Human Services to "develop and implement a mechanism to measure resource use on a per capita and an episode basis in order to provide confidential feedback to physicians in the Medicare program on how their practice patterns compare to physicians generally, both in the same locality as well as nationally."<sup>1</sup> The Centers for Medicare & Medicaid Services (CMS) also has indicated that it will report on providing feedback to physicians with profiling data in the fall of 2007.<sup>2</sup>

The interest among Congress and the executive branch in the use of profiling in the Medicare program raises many questions.<sup>3</sup> What is the objective of the profiling effort, and what would indicate its success? What measures of resource use would be compiled? How would the standard or norm be established? Would it be a national or local standard? How would patient resource use be assigned to a particular physician? How would the data account for differences in the mix of patients treated by physicians and the differences in severity even across patients with the same conditions? What type of information would be fed back to physicians? How would physicians who do not treat many Medicare patients be assessed? How would physicians be expected to respond to this information? These and many more philosophical and technical questions need to be addressed in designing a profiling program for Medicare.

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## PROFILING TO ALTER PATIENT CHOICE OF PROVIDER OR PHYSICIAN PRACTICE PATTERNS

Some private health plans have tried to rein in the often large differences in practice patterns across physicians to hold down spending, either by influencing patient choice of provider or by affecting physicians' resource use. One approach has been to give patients financial incentives through reduced co-payments to choose lower cost physicians. Their choice of physician may also be influenced by public reports of provider quality and efficiency measures that health plans make available. Public reports as well as confidential feedback have also been used by health plans to influence physician resource use by highlighting lower cost practice styles and the resource use of other physicians for similar patients. This feedback may be reinforced through financial incentives. For example, in health plan networks, lower resource-use physicians have been given preferred status, higher fees, or differential salaries or bonuses based on efficiency measures.

Physician groups have used profiling as part of their internal clinical and quality management efforts. Profiling efforts have provided the information to control or reduce spending on a patient population, which can help them achieve a favorable position with payers or increase their margins from capitated contracts. Information about practice styles has been used to educate their physician members about more efficient or effective methods of care or patterns of service use. Comparisons of a physician's practice style to his or her peers have also been used to distribute group income or to reward more efficient providers. A physician group that can demonstrate its efficiency relative to other groups in an area may have an edge in negotiating favorable terms and fees with payers. They may also profit more from capitated contracts than less efficient groups.

To facilitate the adoption of profiling, the Massachusetts Group Insurance Commission (GIC), the public agency that provides insurance to the state's employees, retirees, and dependents, has begun a multi-year effort to develop physician-specific quality and efficiency data.<sup>4</sup> It has aggregated the claims data from all of the health plans that it contracts with. The health plans under contract to the GIC are required to use these data to develop tiered physician and hospital networks. A tiered network typically includes designated preferred providers; other providers may be non-preferred or even excluded from coverage in the health plan. The tiers associate lower patient co-payments with more efficient providers. The intention of the GIC is to have plans help patients become better consumers and encourage physicians to become more efficient. Although it is too soon to document any results, this effort has demonstrated that it is feasible to aggregate claims across plans to develop the data for profiling and that a large health care purchaser can require the use of profiling.

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## THE DESIGN WILL AFFECT THE RESULTS

The methods to identify efficient providers vary and the definitions of key concepts differ, which complicates the development of successful profiling efforts. Profiling requires aggregating health care claims data by patient and then associating patients with the physicians who care for them. The data for each physician are compiled so that the resource use profile of an individual physician's patients can be compared with a standard. The standard may be the average resource use of all physicians in a group or a benchmark.

The design of the profiling effort is likely to affect the results, that is, which physicians are identified as having efficient or inefficient practice patterns. Critical design questions include which services to include and how to assign patients to a physician. For example, should only physician-provided services be counted or should all services be included, such as hospitalizations and pharmaceuticals? While the physician may directly control the number of follow-up office visits for a patient, an individual physician has much less control over the resources used during a hospital stay. During a course of treatment or over a period of time, a patient is likely to see several physicians.<sup>5</sup> A profiling strategy may assign all claims for a patient to a primary care physician responsible for the majority of office visits to that patient. Alternative strategies may assign to a physician only those services that were provided or ordered directly by that doctor.

The manner of grouping claims, either over a period of time or for an episode of care related to a particular condition, may also influence the results or how the profiling information may be used. Aggregating claims for a patient over a period of time, called a per-capita approach, allows comparisons when data are limited and describes differences in per-person health care spending across geographic regions or populations. With a per-capita approach, the results are relatively easy to understand, most claims can be assigned to a physician, and analyses can identify areas or issues that may require further elucidation. The results, however, generally do not include information that is specific enough for individual physicians to identify practices that, if changed, could make them more efficient.

Profiling based on episodes of care produces information that may be more "actionable" for an individual physician. A patient's claims for services related to a particular condition are aggregated, and then the patient episode is assigned to a physician. For example, all services for a patient related to the treatment of diabetes and its complications would be grouped. The episodes for a physician would be aggregated so that the physician's treatment of patients with diabetes could be compared with the treatment of similar patients of other physicians. This method is likely to yield more information on the factors contributing to differences in physician efficiency. It can help tease out whether one physician's patients receive more diagnostic services or more expensive pharmaceuticals than the benchmark, for example. This is information that can be used by a physician to determine the behaviors that could be changed to bring the profile in line with the benchmark.

Per-capita and episode profiling approaches yield particularly useful information when used together. This is illustrated by the Medicare Payment Advisory Commission (MedPAC) in an analysis of seemingly contradictory findings.<sup>6</sup> MedPAC's per-capita analysis identified Miami as a high resource-use area and Minneapolis as a low resource-use area. Yet its analysis of coronary artery disease episodes in the two locations revealed that the average costs for an episode of care for coronary artery disease was \$2,691 in Miami compared with \$3,507 in Minneapolis. The episode analysis indicated a more expensive pattern of care in Minneapolis, with a higher hospitalization rate and more treatment-oriented services, which are costlier than the diagnostic services that were more prevalent in the Miami episodes. Even with lower episode costs, the Miami physicians had higher per capita spending, however, because they were more likely to identify patients as having coronary artery disease. That is, there were more episodes. In Miami, patients with coronary artery disease had an average of almost three episodes, compared with about two in Minneapolis. This indicates that physicians in Minneapolis focused their more intensive style on patients who were more likely to need treatment for coronary artery disease.

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### Accounting for Patient Differences

Differences in patient resource use are often dismissed with statements such as "my patients are sicker" or "I provide higher quality care." Clearly, some patients do need more medical services than others and some physicians do treat more complex patients. Without adequate adjustments for the complexity or health care needs of a physician's patients, physicians with sicker patients would appear to be less efficient than others, and physicians with fewer complex patients would seem more efficient. This could compromise access to care for needier patients if physicians selected less complex patients to help ensure that their profile showed high relative efficiency.

Accounting for differences in the mix and complexity of a physician's patients, sometimes called risk adjustment, is an important and difficult aspect of profiling. Although risk adjustment techniques have improved significantly in recent years, they may not be fully adequate and are often the subject of controversy. For instance, it is likely that a patient with a prior history of heart problems requires more resources to treat than one without this history, but how much more? Someone who has not followed a prescribed medical regimen may incur higher expenses than a more compliant patient, but is noncompliance a factor that the physician should be responsible for changing, or is it out of the physician's control?

Similarly, profiling information needs to account for differences in patient outcomes. A lower resource-use profile may not be desirable if it results in inadequate care. Providing less therapy after a joint replacement, for example,

could reduce the costs for an episode of care. This would not necessarily reflect a more efficient delivery pattern, however, unless patient outcomes were the same for those who received less therapy. A comparison without accounting for outcomes could falsely appear more efficient.

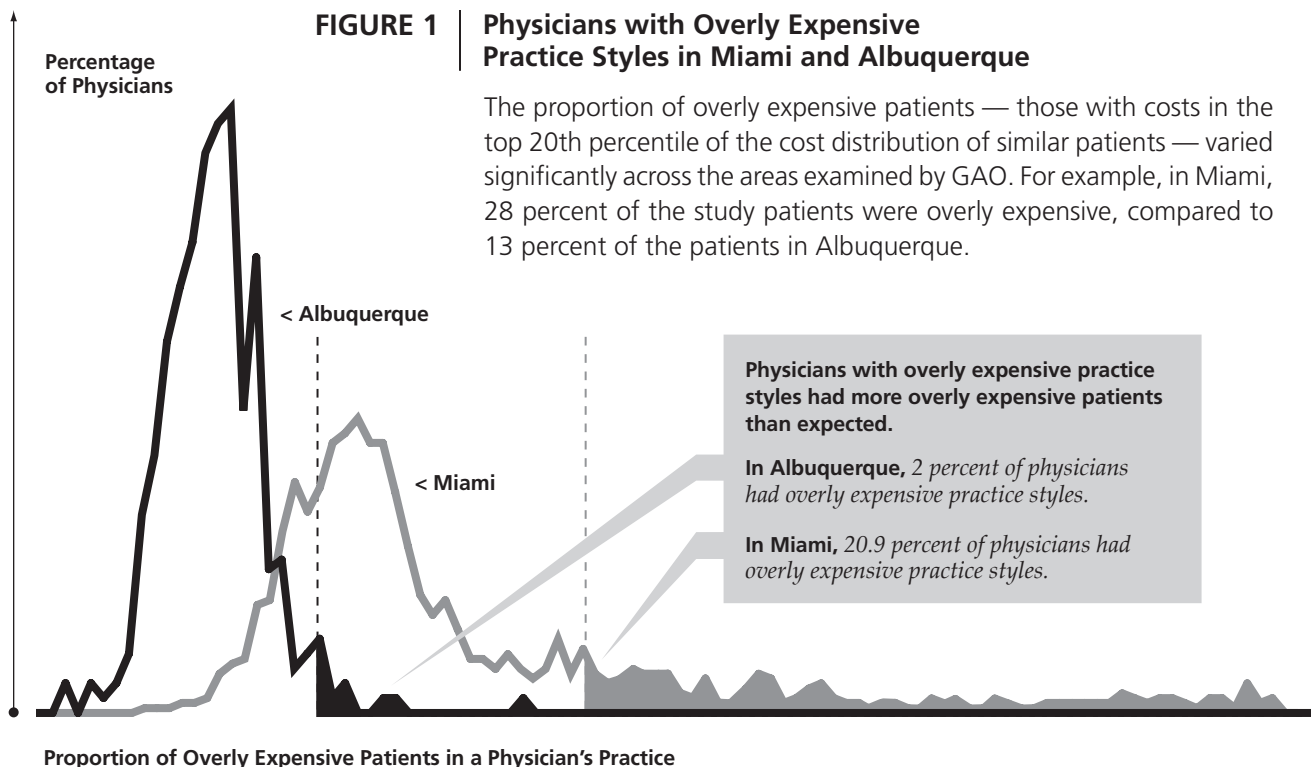
### Acceptance of Profiling

The accuracy of the data used to construct physician profiles will affect the results and the success of profiling efforts. A report on physician profiling indicated that “information perceived as inaccurate by physicians will not motivate them to seek cost and quality improvements in their practice patterns.”<sup>7</sup> Most profiling efforts rely exclusively on billing data or claims, which would include the services provided and possibly diagnostic information, as well as date of service and the demographic information needed to link claims by patient and provider. Some have argued that without more detailed clinical or demographic information, risk adjustment would not be adequate. Another critical issue is whether there is an adequate number of patients or episodes to accurately describe a physician’s practice. Various efforts are underway to define adequate sample sizes and to ensure the accuracy of data. Concerns remain, however, that a physician’s profile could be distorted by an aberrant case.

Acceptance of profiling by physicians will also depend on how profiling is to be used. Physicians may find private feedback—when a physician receives a report comparing that physician’s results and those of a reference group—to be the most acceptable use of profiling. Profiling techniques that involve the public release of results or that incorporate financial incentives may be quite a different matter. Plans may report profiling data to influence patients or other providers to choose the most efficient physicians. Plans may receive the strongest objections to profiling when financial incentives are involved, particularly from any physician who received less-than-optimal results. In the St. Louis area, for example, the largest local hospital system and the state medical society helped stop an effort by a large insurer to tier physicians in that region.<sup>8</sup> A similar effort in New York is being challenged by the state attorney general because of concerns about the adequacy of the data and potential conflict of interest due to the health plan’s interest in steering patients to the lowest cost providers.<sup>9</sup>

## PHYSICIAN PROFILING WITH MEDICARE DATA

The Government Accountability Office (GAO) demonstrated that Medicare claims data can be used to compare efficiency across physicians.<sup>10</sup> GAO indicated that the comparative physician information developed through profiling holds promise in slowing spending growth. In each of the 12 metropolitan areas GAO studied, there were generalist physicians who had overly expensive or inefficient practice styles in treating their Medicare patients, and some areas had much higher shares of inefficient physicians than others.<sup>11</sup> (See Figure 1, next page, for a comparison of two



of the areas studied.) Inefficient physicians were defined as physicians whose patients had extremely high resource use relative to their peers' patients. GAO found that patients treated by inefficient physicians were "15 percent more likely to have been hospitalized, 57 percent more likely to have been hospitalized multiple times, and 51 percent more likely to have used home health services" than similar patients seen by other physicians. They were also "10 percent less likely to have been admitted to a skilled nursing facility."<sup>12</sup>

MedPAC has conducted extensive analyses of profiling and the software used in determining episodes of care.<sup>13</sup> MedPAC's report on alternative mechanisms for controlling Medicare physician expenditures included an analysis of the use of profiling to identify physician outliers.<sup>14</sup> They noted that fewer than 2 percent of physicians accounted for 7.5 percent of Medicare's total physician payments for 2005. To conduct their analysis, MedPAC aggregated claims data across episodes of care to show how physician service use could be compared across patients with the same condition. As an example, they compared the costs and services of patients with stage 1 hypertension of one Boston cardiologist with the average cost and service use of similar patients of all Boston cardiologists. The analysis revealed that the selected cardiologist's cost of care was \$623, compared to the average of \$357, in part due to providing 14 office visits compared with the average of 11 visits for other cardiologists in the area.

Source: Adapted from GAO, "Medicare: Focus on Physician Practice Patterns Can Lead to Greater Program Efficiency," GAO-07-307, April 2007; available at [www.gao.gov/new.items/d07307.pdf](http://www.gao.gov/new.items/d07307.pdf).

CMS is pursuing physician profiling as a strategy for the Medicare program. In recent testimony before Congress, Acting Deputy Administrator Herb Kuhn said, “We are investigating ways to measure individual physician resource use that links quality in the provision of care to Medicare beneficiaries and encourages physicians to focus on efficiency. A goal of resource use measurement is to provide information that is meaningful, actionable, and fair to physicians in order to reduce inefficient practice patterns.”<sup>15</sup> In comments on the GAO report, CMS Acting Administrator Leslie Norwalk wrote, “...given the role of physicians in driving total Medicare spending, there is opportunity to increase the efficiency of the Medicare program by measuring and reporting on physician resource use.”<sup>16</sup>

## ISSUES WITH PROFILING IN THE MEDICARE PROGRAM

It would be possible for Medicare to distribute information on an individual physician’s practice patterns in comparison to others, much as CMS provides data on quality indicators for individual hospitals, skilled nursing facilities, dialysis facilities, and home health agencies. The measurement of physician efficiency and the methodological and risk adjustment issues it entails, however, are much more complex. These methodological issues would require difficult decisions about which claims data to aggregate, careful risk adjustment to ensure the accuracy of comparisons, and an understanding of clinical complexity and variation in practice. The generally smaller sample sizes of individual physician practices and lack of consensus of appropriate practice patterns complicate these efforts.

One approach that has been considered is to use profiling to refine Medicare’s sustainable growth rate (SGR), Medicare’s method for updating physician fees. Medicare’s SGR has been called a blunt instrument that fails to distinguish between fees paid to frugal physicians and fees to profligate ones. Physician profiles could be used to refine fee updates, with lower updates to “outlier” physicians who have high utilization profiles or physicians who have higher growth in resource use. As indicated by MedPAC, “The major advantage of measuring individual physician resource use is that it addresses the flaw in the SGR of treating all physicians equally. An outlier policy promotes individual physician accountability and will enable physicians to more readily see a link between their actions and their payment.”<sup>17</sup>

The wide geographic variation in practice styles means that defining the standard for comparison or the definition of an outlier physician would be especially difficult. Should national standards or local standards be incorporated into a Medicare profiling effort? A national standard would require physicians in higher use areas, such as Miami, to change more than physicians in lower use areas, such as Albuquerque. Local standards would reduce any disruption in service use or practice, but would also lessen any impact of the use of profiling.

Incorporating financial incentives would raise the stakes and introduce additional concerns to using physician profiling in Medicare. Changing Medicare so that it could tie financial incentives to the efficiency of care would also be a fundamental shift in how the program interacts with providers. Because Medicare is such a large, public payer, it exerts more influence over the health care market than any other payer. Thus, any actions that incorporate financial incentives could have substantial effects on the financial viability of a physician practice, particularly a small or Medicare-dependent practice. This could raise concerns about Medicare's special responsibility to maintain access. Because its 42 million beneficiaries are throughout the country and are likely to be more vulnerable than other insured populations, Medicare needs to ensure that enough providers are available and that their geographic distribution meets the needs of its beneficiaries.

**Changing Medicare to tie financial incentives to the efficiency of care would be a fundamental shift in how the program interacts with providers.**

Medicare also has a special responsibility to ensure freedom of choice for its beneficiaries. The Medicare fee-for-service program was originally based on the tenet that it would not interfere with the practice of medicine and that beneficiaries could maintain their choice of provider. Using profiling to give patients financial incentives to choose one physician over another could be perceived as limiting freedom of choice. Incorporating profiling in such a way that some providers could not or would not continue to participate in Medicare could also be viewed limiting a physician's ability to participate in the public program. Although provider participation is not guaranteed, exclusion in this way would be a major change to the Medicare program.

**Potential Financial Impact**

There is little evidence on whether profiling achieves savings, but there are indications that private payers believe that profiling has been financially worthwhile. GAO reported that one purchaser it interviewed said that the premium for its plan that had a network that included only the most efficient physicians was 3 to 7 percent lower than the premiums for its plans that included all physicians. In another example, GAO reported that spending growth fell for a purchaser that restructured its plan's network. The Greater Rochester Independent Practice Association (GRIPA) reported a drop in emergency department visits and cost growth below the community trend after they began providing feedback to their physicians about how their individual practices compared to the average GRIPA physician.<sup>18</sup>

Whether profiling would achieve savings or slow spending growth in Medicare is not known. The design features of CMS's planned efforts or the provision in H.R. 3162 have not been specified. The Congressional Budget Office, which is responsible for determining the budget effects of all legislation, did not attribute any savings to the profiling provision in H.R.

3162.<sup>19</sup> Nevertheless, either of these efforts—CMS’s efforts or the provisions in H.R. 3162—might lay the groundwork, particularly with respect to data collection and aggregation, needed for a successful profiling effort.

## CONCLUSION

CMS is moving forward with plans to engage in profiling, although the specifics of the initiative have not been released. The initial stage, however, is likely to involve providing private feedback to physicians. Even this step will require significant effort. Private payers and provider groups have attested to the difficulties inherent in compiling the data, ensuring its accuracy, appropriately adjusting the efficiency profiles, and enlisting physician acceptance of the results.

While few would disagree with the notion that providers should be efficient in the delivery of health care services, few would agree on what services should be cut out to improve efficiency. Unless a profiling effort adequately accounts for differences across patients and outcomes, it would be criticized as inappropriately targeting particular physicians or high cost patients. Unless the data were shown to accurately reflect a physician’s practice pattern, they would be discredited as unfair. Each of these methodological issues alone is a high hurdle. Given the Medicare program’s ongoing struggles to rein in spending growth and the evidence on inefficient practice, however, efforts to scale these hurdles may reap benefits in the long run. Medicare’s involvement will be an important catalyst for refined data tools and methods that could benefit everyone in the health care arena.

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## ENDNOTES

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