The current issue and full text archive of this journal is available at
www.emeraldinsight.com/1750-6123.htm

Physician Medicare fraud: characteristics and consequences

Vivek Pande and Will Maas
Business Law, University of Wisconsin – La Crosse, La Crosse, Wisconsin, USA

Abstract

Purpose – Criminal Medicare and/or Medicaid fraud costs taxpayers $60-250 billion annually. This paper aims to outline the characteristics of physicians who have been convicted of such fraud.

Design/methodology/approach – The names of convicted physicians were first gathered from public databases (primarily, the OIG exclusion list). The names were further cross-checked and verified with other public records. Details regarding demographics and the particulars of the fraud were obtained by searching court documents, media reports, the internet, and records maintained by the American Medical Association and state medical licensing boards. The paper categorizes these doctors by: age, gender, geographic location, medical school attended, and medical specialty, and compares these demographics to those of the medical profession as a whole. The paper then identifies: the specific Medicare fraud these physicians were charged with; length of prison sentence and/or probation imposed; amount of fines assessed and/or restitution ordered; and professional sanctions imposed.

Findings – Physicians convicted of criminal Medicare and/or Medicaid fraud tend to be male (87 percent), older (average age of 58), and international medical graduates (59 percent). Family practitioners and psychiatrists are overrepresented. The amount of fraud averaged $1.4 million per convicted physician. Surprisingly, despite the fact that 40 percent of such fraud compromised patient care and safety, 37 percent of physicians convicted of felony fraud served no jail time, 38 percent of physicians with fraud convictions continue to practice medicine, and 21 percent were not suspended from medical practice for a single day despite their fraud convictions.

Practical implications – The paper makes several practical recommendations including: running as many claims as possible through predictive modeling software to detect fraud before claims are paid; developing metrics on the average rate of diagnoses and procedures by specialty to be used in the predictive modeling software; incorporating the basics of ethical billing and the consequences of fraud convictions into the medical school curriculum and testing this knowledge on the USMLE; and encouraging and/or pressuring state medical boards to hold physicians more accountable for fraud.

Originality/value – The paper categorizes doctors convicted of Medicare and/or Medicaid fraud and makes specific recommendations regarding physician training, licensing and discipline, to reduce the amount of Medicare fraud perpetrated by doctors in the future.

Keywords Physician, Fraud, Conviction, Medicare, Medicaid, United States of America, Doctors, Crime research

Paper type Research paper

International Journal of Pharmaceutical and Healthcare Marketing
Vol. 7 No. 1, 2013
pp. 8-33

1750-6123
DOI 10.1108/17506121311315391

The authors would like to thank the University of Wisconsin - La Crosse for providing a Faculty Research Grant to partially fund this research; Brandon Harris, Software Deployment Specialist at the University of Wisconsin - La Crosse for his help in downloading and formatting the OIG Exclusion List, and Marcus Buchholz, a graduate student at the University of Wisconsin - La Crosse for his assistance in formatting the references and notes.

Introduction and background

Healthcare fraud is a national epidemic wreaking havoc on public finances and government health entitlement programs. Though the exact amount of fraud committed cannot be determined with any certainty because much of this fraud is never detected, estimates of the amount of healthcare fraud range from 3 percent to 10 percent of all healthcare spending, i.e. $68 billion – $226 billion per year (NHCAA, 2008; FBI, 2009). Even the mean amount of these estimates would be almost enough to provide health insurance coverage to every single uninsured American (Hadley and Holahan, 2004)[1].

The problem of healthcare fraud is particularly acute when it comes to public health entitlement programs such as Medicare and Medicaid. Unlike private insurers which use sophisticated databases and algorithms to detect fraud and reject fraudulent claims before they are paid, Medicare and state Medicaid programs generally pay all claims and attempt to recover fraudulent payments only after the alleged fraud has been uncovered (this approach, derisively termed "pay and chase," has been much criticized). Accordingly, in 2009, President Obama made the elimination of healthcare fraud, waste and abuse a top priority of his administration. The Affordable Care Act provided new tools and resources (such as the Health Care Fraud Prevention and Enforcement Action Team ("HEAT")) to crack down on the perpetrators of such fraud. Since then, despite the fact that rarely a week goes by without the announcement of a new wave of investigations, arrests, convictions, and the recovery of millions of dollars of stolen money, the fraud stubbornly persists.

Not surprisingly, the largest number of convicted Medicare fraudsters are healthcare professionals who submit fraudulent bills. There are numerous ways to inflate bills to recover more money than the provider is legitimately entitled to, which provides ample opportunity for fraudsters to game the system. Moreover, Medicare receives thousands of requests for new provider numbers every day, so even after various frauds and scams are exposed, the perpetrators often disappear and pop up again, frequently hiding behind murky legal entities. In an effort to tackle these problems, on July 31, 2011, the Federal government announced that it would add predictive data modeling analysis to its arsenal of tools to combat healthcare fraud. Using this technology, the government will run Medicare claims through a computerized "risk prediction model" in an attempt to identify aberrant billing patterns and detect fraud before claims are paid.

This paper sheds light on two related issues with respect to physicians:

(1) Who are the physician perpetrators of Medicare fraud?

(2) What happens to them after they get caught?

The answer to the first question would help the designers of predictive data modeling software. Is there a particular profile of a physician who is more likely to engage in Medicare and Medicaid fraud, and if so, what is it? There have been a few academic papers published which have tried to address this issue but none have used data after 1999, which is long before the current explosion of Medicare fraud prosecution. The answer to the second question is equally, if not more important. If current fraud prevention efforts are not working, it is perhaps partly because prior fraud enforcement is not providing enough of a deterrent to those who contemplate engaging in such fraud in the future. This issue has never been addressed by researchers.

Literature review

Three previous papers have attempted to outline the demographics of physicians who have engaged in criminal activity including fraud. The most detailed such analysis surveyed all physicians disciplined for any type of criminal activity, ranging from tax evasion to homicide, between 1990 and 1999 (Jung *et al.*, 2006). It found that physicians disciplined for criminal activity tended to be older than the general physician population, and certain practice specialties (such as general practice, family practice and psychiatry) were overrepresented (Jung *et al.*, 2006). It also concluded that with respect to the 730 fraud related convictions included among the physician crimes studied, not a single one involved patients – they all "involved health system only" (Jung *et al.*, 2006).

Another paper studied the exclusion of physicians who were international medical graduates (IMGs) from federal healthcare programs as of 1999 (Dow and Harris, 2002). This study found that 35 percent of excluded physicians were IMGs who otherwise constituted only 24 percent of the US physician population, i.e. IMGs were overrepresented among excluded physicians (Dow and Harris, 2002).

Last, the previous paper most similar to this one, studied the demographics of physicians excluded from federal healthcare programs as of 1985, but did not compare these demographics to the physician population as a whole (Pontell *et al.*, 1985). There were only 147 excluded physicians at that time. And despite the title of the paper, it apparently analyzed the list of all excluded physicians ("under Section 1128 of the Social Security Act"), not those excluded for "fraud and abuse against Medicare and Medicaid" alone (which does not encompass the entirety of Section 1128 exclusions, as discussed in more detail later). The paper determined that 36 percent of excluded physicians were IMGs; family practitioners and psychiatrists were overrepresented; physicians from New York and California predominated (55 percent of the total); and certain medical schools had greater numbers of its graduates on the list (e.g. schools from the Philippines and Cuba with respect to IMGs; and Meharry Medical College for US medical graduates) (Pontell *et al.*, 1985). A related paper by the same authors published six years later (but citing the same 1985 statistics) also found that physicians who violated Medicaid laws were almost ten years older than a comparison group of non-sanctioned physicians (Jesilow *et al.*, 1991).

There has been no prior research whatsoever regarding the judicial punishment imposed on physicians for Medicare and Medicaid fraud, i.e. prison sentences, probation, and fines/restitution. One earlier paper examined whether physicians convicted of crimes in general have been disciplined by state medical boards. The results concerning insurance fraud in particular found that from 1990-1999, 26.1 percent of physicians convicted of Medicare, Medicaid and insurance fraud either surrendered their medical licenses or had them revoked or suspended as a result of the conviction (Jung *et al.*, 2006)[2]. Three other papers have examined the demographics of physicians who have been subject to state medical board discipline (in California, Ohio and Canada). They found that the percentage of physicians disciplined for fraud represented 9 percent, 8 percent and 10 percent of the disciplined physician population in California, Ohio and Canada respectively (Morrison and Wickersham, 1998; Clay and Conatser, 2003; Alam *et al.*, 2011).

Methodology

The primary database we used to identify physicians convicted of Medicare and Medicaid fraud is the list maintained by the Office of the Inspector General ("OIG") of the US Department of Health and Human Services ("HHS") of those healthcare providers who are excluded from participating in federally funded healthcare programs (the "OIG Exclusion List")[3]. Under Section 1128 of the Social Security Act (42 USC § 1320a-7), the Secretary of Health and Human Services is either required or permissively allowed to exclude certain individuals and entities from participation in Federal healthcare programs, i.e. most importantly, by denying them right to be reimbursed under Medicare and Medicaid for covered services provided. As of October 6, 2011, there were 50,388 excluded healthcare providers on the OIG Exclusion List.

Physicians can easily be identified on the OIG Exclusion List because they have UPINs (unique physician identification numbers). However, for the purposes of this paper, we define "physician" as anyone with an MD degree. Accordingly, "physician" does not include DOs (osteopaths), audiologists, chiropractors, dentists, nurses and nurses aides, optometrists, pharmacists, physician assistants, podiatrists, psychologists and social workers. There were 3,734 physicians on the OIG Exclusion List as of October 6, 2011.

Table I indicates the specific wrongdoing, which resulted in placement on the list (by subsection) for healthcare providers in general and physicians in particular:

As can be seen, compared to the list of healthcare providers as a whole, physicians have more substance abuse problems (9.2 percent v. 4.3 percent)[4] but commit much less patient abuse (3.7 percent v. 10.4 percent), and are more diligent in paying back their educational loans (2.3 percent v. 4.6 percent). In other categories, the lists are not

Section number	Excluded providers *n*	Excluded providers %	Excluded physicians *n*	Excluded physicians %
1128(a)(1) Medicare/Medicaid fraud conviction	12,825	25.5	795	21.3
1128(a)(2) Patient abuse conviction	5,240	10.4	137	3.7
1128(a)(3) Felony health fraud conviction other than (a)(1)	2,270	4.5	118	3.2
1128(a)(4) Felony controlled substance conviction	1,867	3.7	258	6.9
1128(b)(1) Fraud conviction after HIPAA other than (a)(1)	573	1.1	28	0.75
1128(b)(2) Obstruction of investigation/audit conviction	39	0.08	4	0.11
1128(b)(3) Misdemeanor controlled substance conviction	292	0.58	85	2.3
1128(b)(4) License revocation/suspension	22,404	44.5	2050	54.9
1128(b)(5) Exclusion under other Federal program	542	1.1	107	2.9
1128(b)(6) Claims for excessive charges	73	0.15	24	0.64
1128(b)(7) Fraud, kickbacks etc. as determined by HHS	470	0.93	36	0.96
1128(b)(8) Entities controlled by sanctioned individual	1,449	2.9	1	0.03
1128(b)(11) Failure to supply payment information	10	0.02	2	0.05
1128(b)(12) Failure to grant immediate access	1	0.001	0	0
1128(b)(14) Default on health educational loans	2,300	4.6	86	2.3
1128(b)(15) Individuals controlling sanctioned entity	33	0.07	3	0.08
Total	50,388	100	3,734	100

Note: Figures as of October 6, 2011

Table I.
OIG provider exclusion list by section number

widely divergent (though 10 percent more physicians are on the list because of license suspension or revocation).

There were two minor problems with using the OIG Exclusion List as our primary source for the names of physicians convicted of Medicare/Medicaid fraud. First, placement on the OIG Exclusion List is not permanent. For less serious infractions, physicians are often removed from the list after five years. Second, physicians could fit on the list in several different categories for a single wrongful act and its consequences. For example, a physician could write medically unnecessary prescriptions for controlled substances and bill Medicare for the services, and then have his or her medical license revoked upon discovery and prosecution. Therefore, the physician could be listed as an excluded provider under either subsections 1128(a)(1), 1128(a)(4) or 1128(b)(4). For reasons described later, this research was extraordinarily time consuming, and we had to focus our attention on those physicians excluded under subsection 1128(a)(1), i.e. conviction for Medicare and Medicaid fraud. But this means we did not include every single physician who has ever been convicted of Medicare and Medicaid fraud because they may have either been placed on the list in another category, or since removed from the list, and this remains a minor shortcoming of our data analysis.

As outlined above, we were left with 795 physicians who are on the OIG Exclusion List under subsection 1128(a)(1) on account of conviction for Medicare or Medicaid fraud. Since a few earlier studies examined the list up to 1999, we decided to focus on names placed on the list since then, i.e. from 2000-2011. This left us with 387 physicians. During the course of our research, we winnowed this down from 387 to 318 for the following reasons.

27 physicians were on the list under subsection 1128(a)(1) but their primary crimes involved controlled substances, i.e. in most cases running "pill mills" dispensing prescriptions for oxycodone. The Medicare/Medicaid fraud charges were not the primary crime. This paper focuses on Medicare and Medicaid fraud and that demographic is different from doctors with substance abuse problems (doctors unlawfully prescribing controlled substances often have their own substance abuse problems) (Merlo and Gold, 2008)[5]. To put it more plainly, we are conducting research about doctors who are thieves, not doctors who are drug addicts.

A total of 13 physicians were from Puerto Rico. Quite amazingly, the Puerto Rico medical board refuses to provide any information about doctors online. Any information about doctors licensed to practice in Puerto Rico can only be obtained upon written request of the board. We did not feel that excluding 13 doctors from Puerto Rico would be statistically significant enough to be worth the trouble of requesting this information.

In total, 11 physicians were on the list under subsection 1128(a)(1) erroneously, i.e. their exclusion was for reasons unrelated to Medicare or Medicaid fraud. This is probably not a bad error rate given the workload at the HHS OIG's office and the fact that it is probably more important for them that a physician be placed on the list, not that the exact category always be flawlessly accurate.

A total of 11 physicians (mostly from the year 2000) have completely disappeared since their exclusion and not an iota of information can be gleaned regarding their crimes. They practiced in states with boards that only provide records for active physicians.

A total of five "physicians" were not physicians at all. Their crimes involved posing as physicians and billing Medicare. We excluded them from the study because it is unfair to attribute characteristics to physicians based on data pertaining to non-physicians posing as physicians.

Last, two physicians were mistakenly placed on the list twice, i.e. were double counted. That left us with 318 physicians for our study, all placed on the OIG Exclusion List between January 1, 2000 and October 6, 2011 on account of convictions for Medicare and Medicaid fraud.

When we commenced this research, we did not anticipate the difficulty we would have obtaining information about these doctors and their crimes. Some data were available directly from the OIG Exclusion List itself (e.g. age), but other information we gathered (medical school, details of the fraud, judicial disposition, punishment, license consequences) required considerable additional research, the painstakingness of which depended on the quality of the physician's state medical board. For example, in certain states such as California and New York, most of this information can be gathered relatively easily from the state medical board's website (though New York requires perusal of two different websites). Other states are maddeningly opaque – they provide no data on some permutation or combination of the information we were seeking, especially with respect to the details of physician misconduct. When we were stymied by state medical board websites, we gathered information online from other sources. These included websites that specialize in providing information about doctors to consumers such as vitals.com and healthgrades.com. Details regarding the fraud and punishment imposed were also often found on media websites or the websites of the US Department of Justice, HHS, US Attorney's offices, or private anti-fraud organizations. However, not all information could be obtained about every single convicted physician, which is the reason why not all numbers in every table of our results add up to 318 (the number of doctors we studied in total).

Results

We gathered data and are reporting them in the following tables. We will explain the significance of the results following each table.

Gender

The gender disparity is remarkable. Even taking the gender gap in the medical profession as a whole into account, female physicians are more than half as likely to commit Medicare/Medicaid fraud than their male counterparts. These results may initially not be too surprising to those familiar with the statistics of crime in general. It has been statistically established that men commit more than three times the amount of crime than women do (FBI, 2010a, b). However, men commit far more violent crime than women (FBI, 2010ab). With respect to non-violent crime, the numbers are more balanced. For example, for all forms of fraud, the ratio is roughly 1.3:1 (FBI, 2010ab). So our findings are certainly unusual, i.e. compared to all fraud, the gender imbalance is more than four times greater when it comes to physicians and Medicare/Medicaid fraud (Table II).

There are no clear reasons for this gender disparity other than perhaps the obvious, i.e. female physicians are more law abiding than male physicians. This can be confirmed by the two previous papers, which studied physician discipline in general. In

both California and Ohio, male physicians were nine times more likely to be disciplined by state medical boards than their female counterparts (Morrison and Wickersham, 1998; Clay and Conatser, 2003).

Age

The age distribution is as striking as the gender distribution. Medicare/Medicaid fraud is clearly a crime committed by older physicians – almost 80 percent of convicted physicians were 50 or older. The average age of convicted physicians is almost ten years older than the average age of all physicians. Again, this is similar to the results found 27 years ago using data as of 1985 with respect to excluded physicians, and the results found six years ago using data from 1990-1999 with respect to physicians convicted of all crimes (Jung *et al.*, 2006; Jesilow *et al.*, 1991; Table III). However, we think the explanations for this age disparity outlined in earlier papers are inadequate. Previous researchers surmised:

> The finding was unexpected because we presumed that money demands, in terms of such matters as child support and house payments, would be less pressing for the relatively settled older physicians. Based on our interviews, we suspect that, with their entry into the practice of medicine predating the government benefit programs, elderly sanctioned physicians may have become too strongly attached to the ways that they had always done things to abandon them readily. Such physicians also sometimes fail to stay adequately abreast of current medical developments and in some instances begin to adopt idiosyncratic methods of treatment. Nobody within the profession is likely to challenge them, but Medicaid will deny payment for "unacceptable" procedures. Once these physicians are challenged by the

Medicare fraud (2000-2011)				All physicians (2010)[a]			
Male		Female		Male		Female	
n	%	*n*	%	*n*	%	*n*	%
276	86.8	42	13.2	688,468	69.8	296,907	30.2

Note: [a]All general demographic statistics for physicians throughout this paper were obtained from Physician Characteristics and Distribution (AMA, 2012). We understand that there is a slight mismatch because we are examining fraud from 2000-2011 and using physician statistics from 2010 (reported in 2012) but these are only being used in broad categories so the statistical variance is relatively insignificant

Table II.
Physician Medicare fraud by gender

	Medicare fraud (2000-2011)		All physicians (2010)	
Age	*n*	%	*n*	%
<35	0	0	165,544	16.8
35-44	26	8.2	214,468	21.8
45-54	95	29.9	220,858	22.4
55-64	109	34.2	189,648	19.2
≥65	88	27.7	194,857	19.8
Average age	58		49[a]	

Note: [a]The AMA does not provide an average age for all physicians. This number for all physicians was obtained from the Sermo Survey (2009)

Table III.
Physician Medicare fraud by age

> authorities, they often find it advantageous to admit guilt rather than fight the case, since they tend to be near retirement anyway (Jesilow *et al.*, 1991).

With the exception of the last sentence, this explanation cannot be correct. This observation was based on an analysis of 1985 data, whereas 27 years later, nothing has changed. If anything, the finances of younger doctors are even more precarious because of staggering student loans, and there are no more active doctors whose "entry into the practice of medicine predates government benefit programs." The last sentence is partially correct, i.e. our review of court proceedings and the terms of plea bargains confirm that very elderly doctors often plead guilty and retire. However, this only applies to very elderly doctors, i.e. those 75 and older. For doctors any younger than this, we noticed no difference in the ferocity with which they defended themselves against fraud charges, or any greater rate of acceptance of plea bargains.

We believe one of the two probable causes for the age disparity was fleetingly mentioned in a different previous paper:

> With regard to our finding that criminal activity is related to age, younger physicians may not have practiced long enough to develop a tendency toward criminal behavior or to find opportunities to engage in criminal behavior. The older age of disciplined physicians likely also reflects the time to investigate and conclude such a case as well as a tendency for [state medical] Boards to act against repeat offenders (Jung *et al.*, 2006).

There are two excellent points here. First of all, age at conviction and placement on the OIG Exclusion List is not the same as age at the time the fraud commenced. So the average age is artificially skewed upwards, i.e. in many cases the fraud commenced years before it was detected and prosecuted. But we feel the more important point has to do with the "opportunities to engage in criminal behavior." Medicare/Medicaid fraud is almost exclusively perpetrated by doctors engaged in solo or small group practices. It seems unlikely that younger physicians have the experience and/or client base to work in these types of practices and they more often practice medicine affiliated with large institutions and group health plans. This type of employment provides no incentive for fraud, i.e. fraudulent reimbursement goes to the institution, not the individual physician[6], and far more stringent institutional controls and monitoring of billing which reduces the prospects for fraud. We suspect this accounts for much of the age disparity.

The second possible reason is related to the "tendency toward criminal behavior" observation. Though this was unexplained in the paper, we have a hunch that could flesh this out based on lifelong conversations with physicians. Younger doctors tend to be more idealistic. Though their motivations for entering medicine are varied, one common theme is often a desire to do good, and help others. These impulses are incompatible with fraud, which involves stealing from others. So younger physicians commit less fraud. However, older physicians can be more jaded and cynical. Often they have spent their entire careers unhappily interacting with the healthcare bureaucracy and battling to get their bills paid. Perhaps this makes them more prone to ignore ethical concerns, shrug their shoulders, and perpetrate fraud with an eye to fattening their retirement accounts and getting revenge on the bureaucracy. Again, this is an unsupported hypothesis, which cannot be confirmed without further interviews with convicted doctors who are unlikely to admit their true motivations (Jesilow *et al.*, 1991)[7].

Education (US v. IMG)

The discrepancy between the fraud perpetrated by US medical graduates and IMGs is perhaps even more surprising than the disparities by gender and age. Unfortunately, this is not a new development either, but the gap appears to be growing ever wider. IMGs constitute a little more than one quarter of the physicians in this country (AMA, 2012)[8] but commit three-fifths of the Medicare and Medicaid fraud (Table IV).

Previous studies have reported similar findings, albeit at a lesser rate. Up to 1985, IMGs were responsible for one-third of the fraud (Pontell *et al.*, 1985). Between 1989 and 1999, this crept up to one-half (Dow and Harris, 2002). Now, for physicians convicted between 2000 and 2011, it is three-fifths. However, this does not automatically imply that IMGs are inherently more dishonest than US trained physicians. There are several possible exculpatory reasons for this disparity.

First of all, as outlined later in this paper, fraud enforcement has been strongest in four states: California, New York, Florida and Texas. These states also coincidentally have the highest population of immigrants in the US (MPI Data Hub, 2010). So when fraud enforcement is concentrated in states with the highest proportion of immigrants (and IMGs)[9] it is only logical that more IMGs get caught in the net.

Second, it is quite probable that IMGs treat many more Medicare and Medicaid patients than US-trained doctors. IMGs (who often received state-sponsored medical education and have fewer if any educational loans) can probably afford to take greater numbers of Medicare and Medicaid patients along with their lower reimbursement rates. However, US-trained doctors who have larger loans to repay and often have positions with more prestigious institutions and practices, probably treat less Medicare and Medicaid patients, and thus commit less program fraud. This second theory is unsupported without further data, but could be proven if there were statistics on the percentage of government entitlement program recipients treated by IMGs (we could not find any such statistics).

Even if there is some rational explanation for the greater amount of fraud committed by IMGs, it should be addressed and measures should be taken to lessen it. The simplest way to accomplish this would be to include subject matter related to Medicare, Medicaid and insurance fraud in general on the ethics portion of the US Medical Licensing Examination (USMLE). Currently, this section of the exam only covers medical ethics and should be expanded to include billing ethics as well. It is surprising that physicians often do not understand the serious consequences of Medicare fraud. During our research, it became very clear that many IMGs did not initially comprehend that paying back the money they were convicted of stealing would not make the matter go away – they seemed stunned and almost resentful that incarceration was also a possibility. This could be avoided if all US physicians (or at least IMGs) were required to learn the basics of ethical billing and the legal

Medicare fraud (2000-2011)				All physicians (2010)			
US		IMG[a]		US		IMG	
n	%	*n*	%	*n*	%	*n*	%
126	41	181	59	708,896	72	275,878	28

Note: [a]We are including medical schools in Canada and Puerto Rico in the IMG category

Table IV.
Physician Medicare fraud by education

consequences (fines, jail terms, adverse licensure actions etc.) of fraud. We believe this would lessen the amount of fraud perpetrated by IMGs, especially those coming from countries with looser ethical standards (more below on this topic).

Education (IMGs by country)

As a continuation of the discussion above, it seems evident that the amount of IMG Medicare/Medicaid fraud is also dependent on the country where the IMG received their basic medical training. Though it is true that the number of fraud perpetrators from the top five countries is not wildly out of line with their proportional representation among IMGs in general, the above chart does not indicate the countries that educate many US physicians who do not commit much fraud. For example, there are 23,054 physicians from Canada, the UK, Ireland and Germany practicing in the US, who account for only three fraud convictions between them. But the top countries on the list all do have one thing in common. They are countries where corruption is rife. For example, India, Mexico, the Philippines and the Dominican Republic were ranked the 95th, 100th and 129th (tied) least corrupt countries in the world (the higher the number, the more corrupt the country) (Transparency International, 2011). As research in other fields has concluded, one's attitude towards corruption and ethics is closely correlated with the corruption level of one's country of origin (Fisman and Miguel, 2007; Cuervo-Cazurra, 2006; Table V).

Put another way, it is not that physicians from countries like India, Mexico and the Philippines are inherently more dishonest or avaricious. It is that they have been raised and educated in societies where corruption is a tolerated fact of life. For example, in India, 54 percent of people report having paid a bribe in connection with receipt of public services over the past year (Hardoon and Heinrich, 2011). So when IMGs from these countries move to practice medicine in the US, they may be unaware that customs here are vastly different. Activity that is technically illegal but routinely overlooked in their home country is also illegal but actively prosecuted in America.

Country	IMG Medicare fraud (2000-2011)		All IMGs (2007)[a]	
	n	%	*n*	%
India	36	19.9	51,447	20.7
Mexico	18	9.9	13,834	5.6
Philippines	18	9.9	20,601	8.3
Dominican Republic	14	7.7	7,979	3.2
Former USSR	11	6.1	6,450	2.6
Caribbean[b]	10	5.5	16,172	6.5
Egypt	6	3.3	5,266	2.1
Cuba	5	2.8	N/A[c]	N/A
Pakistan	5	2.8	12,111	4.9
South Korea	5	2.8	4,845	2.0
Spain	5	2.8	4,343	1.8

Note: [a]Unfortunately, the AMA Physician Characteristics and Distribution publications do not break down IMG data by country of origin. The latest such data we could get was from the 2009 AMA Masterfile (reflecting 2007 statistics); [b]Excluding Cuba, the Dominican Republic and Haiti. It is important to note that many graduates of Caribbean medical schools are US citizens; [c]The AMA only provided data for the top 20 countries and Cuba was not on the list

Table V.
Physician Medicare fraud by country (< 4 physicians)

Nevertheless, as discussed in the preceding section, though there may be logical reasons why IMGs from certain countries commit more fraud, it is more important that the fraud be eliminated. Hence, it is vital for IMGs to receive proper education and training regarding the legal and ethical norms of the US.

Education (by medical school)

There is nothing to add here with respect to the education of IMGs that we did not already discuss earlier. With its particularly poor showing, Guadalajara School of Medicine would be well advised to add instruction on proper billing and fraud prevention to its curriculum for graduates who intend to practice in the US (see Table VI)

With respect to US medical schools, Meharry Medical College once again tops the list as it did in 1985 (Pontell *et al.*, 1985). But now another predominantly Black institution, Howard University College of Medicine, joins it atop the list (technically SUNY is second but this is misleading because four medical schools fall under the SUNY umbrella – we had to lump them together because our sources of data often did not identify them in more detail). In 1985, the authors felt that there could be two reasons for this initial finding (now reinforced by our research). First, more Black doctors probably work in inner cities where there is a greater concentration of Medicare/Medicaid patients (Pontell *et al.*, 1985). Second, law enforcement can be racially discriminatory (as statistics related to all crime and punishment clearly indicate) (Pontell *et al.*, 1985). We agree with this analysis and cannot think of any other explanations.

Nevertheless, as with respect to our findings regarding IMGs, the reason for these disparities is not important when it comes to devising means to prevent future fraud. Predominantly Black medical schools, such as Meharry and Howard, should provide training to students regarding ethical billing practices and the consequences of fraud.

Table VI.
Physician Medicare fraud by education

US medical schools		International medical schools	
Name	*n*	Name	*n*
Meharry Medical College	8	Guadalajara School of Medicine (Mexico)	13
SUNY (all campuses)	7	University of Santo Domingo (Dom. Rep.)	8
Howard University	6	University of Santo Tomas (Philippines)	7
Yeshiva University (Albert Einstein)	6	Baroda Medical College (India)	6
Rosalind Franklin University	5	Cairo University (Egypt)	5
UCLA	5	University of Havana (Cuba)	5
University of Texas – Galveston	4	B. J. Medical College (India)	4
George Washington University	3	Manila Central University (Philippines)	4
Loma Linda University	3	Santiago University (Dom. Rep.)	4
St. Louis University	3	Seoul National University (Korea)	4
University of Arkansas	3	First Leningrad Medical Institute (Russia)	3
University of Kansas	3	Central University of the Caribbean (PR)	3
University of Louisville	3	Grant Medical College (India)	3
University of Miami	3	State University of Haiti (Haiti)	3
University of Oklahoma	3	Tehran University (Iran)	3

Geographic location of the fraud by state

These statistics may be misleading so some explanation is necessary. The top four states are also the four most populous states in the country (US Census, 2012). Additionally, as we mentioned earlier, the top two states, California and New York, have made Medicare and Medicaid fraud enforcement a high priority. This is apparent because these are the two states where state authorities have taken the lead in prosecuting offenders – these two states alone account for 66 percent (71 out of 107) of the state criminal convictions obtained against physicians (Table VII).

Florida also ranks highly because the Federal government has taken the initiative in prosecuting cases there. South Florida, with its enormous population of retirees, is a natural hotbed for health entitlement fraud. The very first Medicare Fraud Strike Force was launched in 2007 as part of the South Florida Initiative, a joint investigative and prosecutorial effort against Medicare fraud and abuse among providers in South Florida (Department of Health and Human Services & Department of Justice, 2010).

The unexpected aspect of these geographic statistics is the number of states in which there has been under-enforcement. It is unlikely that physicians in these states are mysteriously more ethical than physicians in other states. States with lower rates of physician convictions (relative to the size of their physician population) include Pennsylvania, North Carolina, Virginia, Washington and Massachusetts. Arizona, which like Florida has a large population of retirees, is also clearly a laggard in fraud enforcement.

If Medicare and Medicaid fraud are to be lessened considerably, fraud enforcement has to be more uniform. Otherwise, putting the HEAT (literally) on only a few places like South Florida will just cause the fraudsters to relocate and continue on as usual.

Medical specialty

No surprises here. The only medical specialty wildly overrepresented in the ranks of Medicare fraudsters is psychiatry. This is not a new finding. There are numerous papers that have identified psychiatrists as the leading offenders with respect to all crime in general, and sexual offenses and fraud in particular (Jung *et al.*, 2006; Pontell

State	Medicare fraud (2000-2011)		All physicians (2010)	
	n	%	*n*	%
California	64	20.1	118,110	12
New York	64	20.1	86,293	8.8
Florida	45	14.2	58,026	5.9
Texas	20	6.3	60,991	6.2
Illinois	14	4.4	41,724	4.2
Tennessee	12	3.8	19,035	1.9
Ohio	11	3.5	35,925	3.6
Michigan	9	2.8	29,331	3
Kentucky	6	1.9	11,417	1.2
Maryland	6	1.9	27,334	2.8
Connecticut	5	1.6	15,270	1.5
Georgia	5	1.6	24,496	2.5
Louisiana	5	1.6	13,587	1.4

Table VII.
Physician Medicare fraud by state (>4 Physicians)

et al., 1985; Morrison and Morrison, 2001; Dehlendorf and Wolfe, 1998; Table VIII). We agree with the probable reasons for this as outlined in earlier findings:

> [Psychiatrists'] bills are based on their time with patients. It is difficult for them to bill for extra services or interventions, but it is very easy to inflate the amount of time they claim to have devoted to a case. Such exaggeration proves to be irresistible to some psychiatrists, and the relative ease with which they can be caught doing so appears to induce enforcement authorities to focus on Medicaid fraud by psychiatrists (Jesilow *et al.*, 1991).

At least 19 of the 41 psychiatrists whose convictions we studied were convicted of Medicare/Medicaid fraud for precisely these reasons, i.e. inflating the time they claimed to have spent with patients. Another curious observation with respect to psychiatrists is the amount of fraud that emanated from their billing for services outside their specialty. When psychiatrists suddenly start writing thousands of letters of medical necessity for wheelchairs or billing for cardiac surgery, this should raise red flags somewhere.

Family practitioners are also overrepresented but there are no obvious reasons for this other than perhaps they are more likely to have solo or small group practices, which are more conducive for perpetrating fraud.

Amount of fraud

No statistic better illustrates the gravity of the Medicare/Medicaid fraud problem in the US. These are not small dollar crimes. Though most accused doctors contested the amounts and claim they stole less, if anything at all, these figures represent the final adjudication in court based on restitution ordered (excluding all fines, court costs, costs of prosecution etc; Table IX). Put another way, the average convicted physician stole 185 times the amount of money the average bank robber did (FBI, 2010ab)[10].

Type of fraud

Physicians are generally considered intelligent, high achieving individuals, and when they turn to crime, their crimes are often ingenious. It was very difficult to categorize the fraud at times. In particular, the first and most numerous category, billing for services not provided, runs the gamut from simple psychiatrist over-billing of time, to dermatologists putting chewing gum on slides to make false cancer diagnoses. And as the last category in the chart indicates, many physicians committed fraud that spans several different categories (Table X).

Table VIII.
Physician Medicare fraud by specialty (>10 Physicians)

	Medicare fraud (2000-2011)		All physicians (2010)	
Specialty	*n*	%	*n*	%
Family practice	64	20.7	87,618	8.9
Internal medicine	47	15.2	161,276	16.4
Psychiatry	41	13.3	39,738	4
Ob/Gyn	18	5.8	42,797	4.3
Pediatrics	17	5.5	76,401	7.8
General practice	13	4.2	8,591	0.9
General surgery	12	3.9	37,100	3.8
Anesthesiology	11	3.6	43,359	4.4
Cardiology	10	3.2	22,888	2.3

Amount of fraud	*n*
$0-$25,000	33
$25,000-$50,000	18
$50,000-$100,000	21
$100,000-$250,000	39
$250,000-$500,000	35
$500,000-$750,000	18
$750,000-$1,000,000	14
$1,000,000-$2,500,000	27
$2,500,000-$5,000,000	15
$5,000,000-$7,500,000	4
$7,500,000-$10,000,000	4
$10,000,000-$15,000,000	5
$15,000,000-$20,000,000	0
> $20,000,000	3
Average amount of fraud per physician	$1,414,000

Table IX.
Physician Medicare fraud by amount of fraud (based on restitution ordered)

Type of fraud	*n*
Billing for services not provided (or provided by non-physicians)	87
Kickbacks	43
Up-coding	24
Billing for medically unnecessary services	20
False statements	15
More than one of the above	65

Table X.
Physician Medicare fraud by type of fraud

For purposes of predictive fraud data modeling, it is very important that each and every particular type of fraud (there are hundreds of sub-strategies) be examined carefully to close billing loopholes. But there is one key fraud counterstrategy, heavily dependent on data analysis, that would have invariably detected most fraud much earlier – a comparison of the bills of convicted doctors to those of their honest peer physicians. In almost every case, the rate at which they ordered unneeded tests, provided non-existent medical justification for wheelchairs, claimed reimbursement for longer and more complicated procedures, was far in excess of their peers and should have rung alarm bells within the billing bureaucracy had anyone (or a computer program) been auditing these bills before payment. It should not be overly technologically complex to develop metrics on the "average" rates of certain diagnoses and procedures by specialty, and then have an automated system to flag the bills of doctors who exceed these averages by a certain margin, and subject their bills to greater human scrutiny.

Type of criminal conviction and criminal penalties imposed

If anyone is looking for reasons why Medicare/Medicaid fraud by physicians persists, these statistics provide part of the explanation. As outlined above, 67 percent of physicians who were convicted of state felony fraud charges, served not a single day in jail, despite stealing an average of almost $200,000. And even when doctors did serve prison time for state felony fraud charges, they were sentenced to an average of

18 months in prison. This is uncommon kindness by state court judges. In contrast, in 2006 (the latest figures available), an average of 59 percent of people convicted of state felony fraud charges were sentenced to time in jail, which averaged 37 months (Rosenmerkel *et al.*, 2009). So doctors were almost half as likely to serve time in jail, than other state felony fraud offenders, and any time served was again half as much. There is no logical explanation for these disparities, other than the fact that state court judges are more lenient towards doctors (see Table XI and XII).

Criminal law theorists often ascribe three purposes for imposing incarceration: punishment, deterrence and rehabilitation. Though perhaps doctors convicted of fraud can be more easily rehabilitated, we do not understand how fraud is either adequately punished, or more importantly, deterred, by these lenient sentences.

On the federal level, punishment was more in line with the averages. Though 25 percent of physician felony offenders still received no jail time, physicians sentenced to prison received sentences that were stiffer than those imposed on the average federal felony fraud offender (49 months v. 32 months) (Motivans, 2012). Since the average amount of fraud perpetrated by physician federal felony offenders was almost $2 million dollars each, these sentences were justified and, one could argue for purposes of deterrence, barely adequate. But at least they were more in line with the gravity of the offenses than their state counterparts.

In addition to the inadequacy of many of these sentences, we were also struck by their unevenness. Doctors guilty of similar malfeasance often received wildly different

Table XI.
Physician Medicare fraud by type of criminal conviction and sentence imposed

Type of criminal conviction	Number of physicians	Average prison sentence (months)	Average probation (yrs)	Average fine and restitution ($)
State misdemeanor	33	0	1.65	47,340
Federal misdemeanor	6	2	1	475,880
State felony	74	6.07	3.65	466,195
Federal felony	193	36.85	2.94	1,925,300

Table XII.
Physician Felony Medicare fraud by prison sentence imposed

Prison sentence	State felony *n*	Federal felony *n*
0 Days[a]	46	44
1 Day-6 months	9	6
6 months-1 year	3	7
1 year-2 years	4	33
2 years-3 years	5	28
3 years-4 years	1	16
4 years-5 years	1	14
5 years-10 years	0	18
10 years-15 years	0	4
15 years-20 years	0	3
> 20 years	0	2

Note: [a]This includes stayed sentences and sentences of home confinement only

sentences for no apparent reason. For example, a common fraud involves the payment of kickbacks to physicians in return for their providing fraudulent letters of medical necessity for durable medical equipment, mostly wheelchairs. Physicians were sentenced to anywhere from 12 months to 11 years in prison for this identical fraud scheme. Sometimes the length of the sentence was understandably dependent on the dollar amount of fraud that resulted from the kickbacks, but often it was randomly dependent on the vagaries of the prosecutor and judge. One physician received 16 months in prison for $6 million worth of such fraud whereas another received 78 months in prison for an identical amount. Another physician received 13 months in prison for $1 million worth of wheelchair fraud but an unluckier physician in the same state went to prison for 41 months for $121,000 of comparable fraud. Such disparities are especially surprising in light of federal sentencing guidelines, which are supposed to lend some uniformity to the process.

Last, it seems that the length of sentence is also dependent on the geographic location of the court. Federal judges in Florida and Texas were the most severe, imposing all but two of the 11 sentences of ten years or more of prison time, whereas judges in other states were more lenient, even in cases involving greater wrongdoing.

State medical board discipline imposed

As Table XIII indicates, most state medical boards are holding doctors somewhat accountable for the fraud they commit. However, the leniency of certain states' medical boards is disturbing. For example, by way of comparison, attorneys who commit felonies involving moral turpitude (such as fraud) during the course of the practice of law, are usually permanently disbarred in all 50 states. This is not meant to imply that attorneys are paragons of virtue compared to doctors – it is meant to illustrate how other professional boards take a very dim view of serious wrongdoing by their members. Accountants are subject to similar discipline under the Sarbanes-Oxley Act. However, physician discipline appears to be lagging, and this could be a reason why it is so difficult to eradicate Medicare and Medicaid fraud. As described earlier, leniency by state courts, when combined with inconsistent sanctions by state medical boards, contributes to non-deterrence. If a physician can steal several million dollars, rarely get caught, even if caught, serve a short prison sentence, almost invariably in a minimum security prison, and then resume practicing medicine shortly thereafter, this could explain the continuing prevalence of physician program fraud (Table XIII).

A closer examination of the statistics summarized in Table XIII reveals the following. No less than 36 physicians, who were convicted of either state or federal felonies, received a single day of actual suspension from the practice of medicine. Several of these physicians served time in prison while their medical licenses remained active. Many received other adverse license actions short of actual suspension, such as

Discipline	*n*
No actual suspension	67
Indefinite suspension or revocation	195
Limited suspension	54
Average length of limited suspension (months)	19.1

Table XIII.
Physician Medicare fraud by state board discipline

probation etc. but many did not, i.e. they suffered no professional sanctions despite their felony convictions. This is not adequate deterrence.

Additionally, many other physicians voluntarily surrendered their licenses, or had their licenses "revoked," as a consequence of fraud convictions. However, these actions were not necessarily permanent in any state we looked at, i.e. physicians often had their licenses reinstated after some period of time. In total, 40 physicians convicted of state or federal felonies resumed practicing medicine less than three years following their conviction.

The same conclusion was reached by researchers examining physician discipline in New Jersey:

> A significant factor contributing to the perception of leniency in physician discipline is that no sanctions are "permanent." As already stated, whereas disbarment of attorneys is *always* permanent, revocation of doctors' licenses is not. Indeed, most doctors who do reapply get their licenses reinstated. . . [W]e should stress that our research indicates that there is as of yet no "fatal" offense that might be committed by doctors that is comparable to the knowing misappropriation of client funds which necessarily leads attorneys to be disbarred. However, we are told [by the New Jersey Attorney General's office] that insurance fraud is increasingly assuming that position (Heumann *et al.*, 2007; Heumann *et al.*, 2009).

As our research indicates, that is certainly not the case, nor is it even the case in New Jersey – we found three physicians who had their licenses restored in New Jersey following felony fraud convictions.

Moreover, these numbers are undoubtedly skewed for three reasons:

(1) Since we looked at convictions from 2000-2011, there are many more doctors who will resume practice shortly, i.e. their licenses may have been surrendered or revoked between 2000-2011, but they will resume practice in 2012 or thereafter.

(2) As we mentioned in the methodology section, if a state medical board did not provide information on past discipline, we had to leave these doctors out of our tables and calculations – it was not a coincidence that the states that do not provide this information happen to be the states that are most lenient (judging by the few statistics on recent discipline that they do provide).

(3) We did not count doctors (mostly IMGs) whose licenses were surrendered and/or revoked in the US and who then moved abroad and continued practicing medicine in other countries.

Now we will turn to the issue of disparity in discipline among state medical boards. We will only focus on states with ten or more convictions since it is unfair to ascribe patterns of discipline to a handful of actions. Some boards were uniformly appropriately severe. Not a single physician who was convicted of felony healthcare fraud in Florida has ever practiced medicine in Florida since. Revocation or surrender for fraud in Florida appears to be permanent.

New York is also reasonably strict. Though a few physicians have escaped serious sanctions, most have lost their licenses for good. Physicians who have had their licenses restored after felony fraud convictions have had to wait an average of almost four years. Moreover, the New York medical board is admirably transparent. The full record of all physician disciplinary actions is posted online, as are the deliberations of

the board when it determines whether or not to restore a physician's license. Applications for license reinstatement are reviewed by two committees, the Peer Committee and the Committee on the Professions. For a license to be reinstated, the offending physician must clearly demonstrate remorse, rehabilitation, further ethical training since the conviction etc. All these are public records posted on the board's website. The only problem with New York appears to be the occasional inexplicable delay in imposing discipline – one doctor was finally disciplined six years after his conviction. Another doctor was convicted almost a year ago and yet the state medical board website has no record of his conviction or the commencement of any subsequent disciplinary action[11].

Other states are distressingly lenient. California, which is in so many other ways an almost model state regarding physician discipline (excellent board site, full record of disciplinary actions, active fraud enforcement by state authorities), appears to believe in giving more physicians a second chance relatively earlier. Though this may be based on a desire to rehabilitate physicians who have offended, it weakens the deterrent effect of enforcement. Though many physicians are stripped of their licenses permanently, those who are suspended from the practice of medicine following a conviction are only suspended for an average of three months. Here are a few particularly egregious examples.

- One physician stole $10 million from Medi-Cal – the money was supposed to be paid to a network of doctors to provide Medi-Cal services, but the physician pocketed the money instead. Over 100,000 needy people lost medical coverage as a result of the fraud. Yet this physician (who pled guilty to a felony) only served 13 days in jail and did not lose the right to practice medicine in California for a single day.
- Another physician was previously disciplined twice and served nine years in federal prison for 21 felony healthcare fraud convictions. Yet, upon his release, he was inexplicably given his California medical license back, which he promptly used to commit a further $12 million worth of Medicare fraud.
- A physician and his co-conspirator filed 25,876 fraudulent Medi-Cal claims, which netted them $1,205,000. These were not exaggerations of services provided or up-coding. The fraud involved the theft of valid Medi-Cal beneficiary numbers, the creation of false patient charts and treatment records, and the submission of completely fictitious claims. The doctor pleaded guilty to a felony and served two years in state prison. Yet as soon as he was released from prison, his medical license in California was restored (though subject to probation).

Yet California pales in comparison to Illinois, which undoubtedly takes top spot in the hall of shame when it comes to disciplining doctors who are convicted of felony Medicare fraud. Illinois does not automatically suspend the licenses of physicians until they have been convicted of a second felony (unless the first felony involved a violent crime) (*St Louis Today*, 2010). Illinois apparently does not even commence any proceedings against the licenses of doctors when their licenses are revoked in other states (*Chicago Tribune*, 2012). Another graphic example of the toothlessness of Illinois' physician discipline – in the late 1990s, an entire hospital in Chicago became a criminal enterprise devoted to bilking Medicare. "Corruption rooted itself deep into [the hospital's] staff. [The hospital owner] orchestrated a complex system of kickbacks for

doctors and staff complicit with committing fraud against Medicare, Medicaid and private insurance companies .... One [hospital] physician, [name redacted], billed the government for seemingly impossible human feats. According to [this doctor's] billing records, on November 12, 1997 he saw 187 patients all of whom coincidently had congestive heart failure. Thirty-two of [this doctor's] patients also managed to incur new medical costs long after their deaths (American Urbex, 2011). Two patients died as a result of this $188 million fraud. Five physicians were ultimately prosecuted, convicted of various felonies, and sentenced to jail terms. Astonishingly, not one of them had their medical license revoked in Illinois, and three of them are currently listed as active physicians in Illinois even though one is still in prison. The licenses of two are listed as "suspended." How will Medicare fraud by physicians ever be curtailed if such wide-scale fraud results in such lax discipline?

The last issue regarding physician discipline has to do with physicians licensed in multiple states. For physician discipline to be effective, it necessarily requires disciplinary action taken in one jurisdiction to be acknowledged in other jurisdictions. Otherwise, physicians will just evade discipline by moving to another state. Though we cannot say that "state hopping" is an extensive problem, we did find 12 physicians whose licenses had been suspended or revoked in one state but had active licenses in other states. There should be zero. Moreover, there were numerous other instances where discipline short of revocation and suspension (such as probation, reproval, etc.) in one state was not noted in the physician's disciplinary record in other states where they were licensed to practice, i.e. a patient checking up on their doctor in that state would have no idea that their doctor did not have a "clean" disciplinary record (more on this later).

Last, many state medical boards' doctor "lookup" function provides a section where doctors are required to "self-report" criminal convictions. Despite this, we noticed that not one single doctor self-reported their criminal convictions, even when clicking the discipline record on the same page would reveal that the doctor had multiple felony criminal convictions. This again demonstrates state medical board neglect in policing doctors. What is the point of having this entry on the online record if doctors are free to blithely ignore it? It indicates disrespect for both the board and the general public. Many members of the public would probably not notice that this function is "self-reporting" and erroneously conclude that their doctor had no criminal record when in fact they do.

Harm to patients caused by Medicare/Medicaid fraud

The last, and probably most important section of this paper deals with the harm caused by physician Medicare/Medicaid fraud. We found it interesting that convicted physicians were invariably remorseful and contrite when being sentenced for their crimes by judges, but often defiant and belligerent when facing state medical board discipline after their convictions. One of the common themes proffered in defense by physicians was, in effect, "Yes I may have committed fraud but this did not hurt any patients." This is self-servingly (a) beside the point, and (b) often wrong. First of all, public health entitlement fraud is by no means a "victimless crime" *per se*. Its victims are every single taxpayer in this country, whose money is being stolen. Its victims include every Medicare/Medicaid beneficiary whose medical care is being curtailed because of lack of funds. Its victims include every honest physician and healthcare

provider who would otherwise receive higher reimbursement if so much money were not being stolen.

But most importantly, it is also simply not true that patients are not being directly hurt by the fraud (Table XIV). As our statistics indicate, almost 40 percent of Medicare fraud involved some direct potential or actual harm to patients. When we say "potential harm" we are including the 40 cases where medically unnecessary testing, treatment and medications were fraudulently administered. Yes, a patient may suffer no lasting harm from something as simple as an unnecessary blood test, but this causes needless pain and inconvenience to the patient. And many patients suffered far worse. Here are some examples from among the 29 cases where serious harm was caused to patients (in addition to the aforementioned deaths in Illinois).

- An ophthalmologist in New York preyed upon severely mentally ill patients. He would visit poorly supervised group homes and round up delusional and barely functional residents and perform unnecessary eye surgery on them. He blinded several of his patients.
- A neurosurgeon in Arkansas accepted illegal kickbacks from medical device manufacturers and performed unnecessary spinal implant surgery on numerous patients. This doctor served no jail time and moved to Canada, where he now practices freely.
- A dermatologist in Florida falsely and fraudulently diagnosed skin cancer in dozens of his patients and subjected them to numerous unnecessary and extremely painful surgeries to remove the "cancerous" skin.
- A cardiologist in Louisiana performed hundreds of invasive heart procedures to install medically unnecessary stents.
- A doctor in New York administered radiation to the wrong side of a patient's head for six weeks, then destroyed and falsified records when she discovered her mistake. She never informed the patient and also submitted 165 fraudulent Medicare claims. This doctor served no jail time and her medical license was not suspended for a single day.
- A Tennessee oncologist gave her patients only partial doses of their expensive chemotherapy medication and then stole the rest to sell on the side while billing Medicare for the full amounts.

Yet often the disciplinary authorities focus on the financial harm caused by the fraud and neglect to consider the potential for harm to patients. For example, when a previous paper correctly pointed out that physicians convicted of fraud were only receiving a "slap on the wrist" from state medical boards, it gained wide publicity (Jung *et al.*, 2006). *USA Today* published a news story summarizing the paper's

Total number of physicians whose Medicare fraud compromised patient care/health/safety	101/254	39.8%
Medically unnecessary testing, treatment or medications	40/101	
Actual documented harm suffered by patients	29/101	
Physician services provided by unqualified non-physicians	23/101	
Substandard/unlicensed drugs or medical devices provided	9/101	

Table XIV.
Physician Medicare fraud causing harm to patients

conclusions. In response, the AMA justified the "slap on the wrist" treatment by noting that state disciplinary boards only impose harsher discipline on doctors whose conduct causes patient harm, thereby implying that fraud does not (*Oregon Tribune*, 2006). It is baffling that even an organization such as the AMA does not recognize that Medicare fraud does directly affect patient care as the examples above graphically illustrate.

Numerous papers have also criticized state medical boards for being more concerned with shielding and protecting doctors than holding them accountable for their crimes due to the fact that state medical boards are composed mostly of other doctors (NHCAA, 2010; Insurancefraud, 1998; Jung *et al.*, 2006; Heumann *et al.*, 2007; Heumann *et al.*, 2009). That certainly may be true (and explains our earlier conclusions) but that alone does not tell the full story. In this regard, we must briefly address the role of state medical board websites. The primary function of state medical boards' websites' "Doctor Lookup" function is to allow members of the general public to check the qualifications, training and antecedents of their current or future physicians. The sites themselves say this. Yet, as we explained in our methodology section, numerous states do not post disciplinary information on these websites or only have recent disciplinary information.

Given the egregious harm to patients that many physicians have caused while committing Medicare fraud, it is remiss for state medical boards to not post this type of conviction and disciplinary information on their websites. It is only a matter of time before a clever plaintiff's attorney brings a multimillion dollar action for negligent misrepresentation against a state medical board for not warning patients about physicians with felony fraud convictions. In this regard, we should note that physician recidivism is not uncommon. In our study we noted at least 51 physicians whose Medicare fraud convictions were either preceded or followed by further discipline and other crimes. One could argue that state medical boards have a duty of reasonable care to warn the public about dishonest physicians who have a record of discipline and/or criminal convictions (as corresponding sites for attorneys and other professionals properly do).

Recommendations

Based on the results of this paper, we have the following recommendations for policy changes to help reduce the amount of public health program fraud committed by physicians in the future:

- *Predictive fraud data modeling*: HHS should run as many claims as possible through its new computerized predictive data modeling to attempt to detect fraud before claims are paid. The predictive fraud data modeling software should develop metrics on the "average" rates of certain diagnoses and procedures by specialty, and then have an automated system to flag the bills of doctors who exceed these averages by a certain margin, and subject their bills to greater scrutiny.
- *Comprehensive fraud database*: HHS should develop and maintain a comprehensive fraud database on all healthcare providers who have ever been convicted of healthcare fraud. This would address the limitations of the OIG Exclusion List, the most important of which is the fact that placement on the list is not permanent. Given the rate of recidivism, it would be useful to keep track of all prior wrongdoers and take this into account in predictive fraud data modeling software. Of course, physicians and other providers can and should be

considered "rehabilitated" at some point, but there should be further monitoring to confirm that the rehabilitation is genuine.

- *Billing ethics incorporated into the USMLE*: Ethics questions concerning billing and the consequences of healthcare fraud should be incorporated into the ethics section of the US Medical Licensing Examination. We think this would be very useful to curtail fraud committed by IMGs in particular, who may not understand the serious ramifications of fraud in the US. Medical schools in the US should also provide some minimal training in ethical billing practices and the career consequences of fraud convictions. This would probably happen as a matter of course if questions related to fraud appeared on the USMLE as suggested.
- *Geographically uniform fraud enforcement*: Fraud enforcement must be geographically more uniform. States must increase their enforcement efforts at the state level. The federal government cannot be the sole enforcer in every state other than California and New York. Perhaps federal allocation of Medicaid dollars to states should be conditioned upon a robust state enforcement record.
- *More uniform prison sentences*: Prison sentences should be imposed more uniformly across states and the entire federal system. While of course judges must retain discretion, the current gross disparities among sentences for identical crimes are unfair both ways, i.e. some doctors are getting the proverbial "slap on the wrist" for serious crimes whereas other physicians are being imprisoned for lengthy periods of time for the same crimes. Perhaps the US Sentencing Commission can draft advisory (but more specific) sentencing guidelines for government health entitlement fraud. The current system also leads to unnecessarily lengthy and repeated rounds of appeals because convicted physicians have every incentive to continuously contest the calculation of the amount of fraud upon which sentencing enhancers are mostly based.
- *State medical board action*: State medical boards must change the way they function to more adequately hold physicians accountable for serious crimes. The current system is untenable. It resembles the problems of the accounting profession prior to the enactment of Sarbanes-Oxley, i.e. where peer controlled boards were more concerned about protecting their own than safeguarding the interests of the public. If the medical profession cannot adequately police itself then the federal government should step in (as it did with accountants). Any state whose medical board does not provide for mandatory and permanent revocation or surrender (or at least the lengthy actual suspension of a medical license) on account of a felony conviction for healthcare fraud, should automatically be ineligible for federal Medicaid funds. And state medical boards must be required to provide current and adequate information on all physician crimes and related discipline on their websites for at least a minimum of ten years to allow the public to choose to avoid physicians with dubious ethics.
- *Changes benefiting all physicians*: Finally, it is important to note that stronger medical board action against physicians convicted of fraud and other serious felonies benefits all other physicians. As the AMA correctly noted in defense of physicians, the number of "bad apples" is very small. The total number of physicians on the OIG Exclusion List (which covers the entire range of physician malfeasance) is 3,734, which is only 0.38 percent of all 985,375 active physicians

in the US. It is in the profession's best interest to properly discipline the few unscrupulous felons in their midst so as to not let them tarnish the overall excellent reputation physicians continue to hold among the public[12].

Notes

1. It is estimated that it would cost $173 billion per year to provide full health insurance coverage to all uninsured Americans (Hadley and Holahan, 2004).
2. Two other studies were conducted with respect to physicians in New Jersey and New York alone which resulted in much higher numbers – 69 percent and 54 percent of physicians in New Jersey and New York convicted of Medicare, Medicaid and insurance fraud either surrendered their medical licenses or had them revoked or suspended as a result of the conviction (Heumann *et al.*, 2007, 2009).
3. Available at: http://oig.hhs.gov/exclusions/exclusions_list.asp (accessed 8 April 2012).
4. Including exclusions for both felony and misdemeanor controlled substance convictions, i.e. under both subsections 1128(a)(4) and 1128(b)(3).
5. Physicians have a prescription drug abuse rate five times higher than the general population (Merlo and Gold, 2008).
6. We recognize that "pay for productivity" schemes may provide some incentive for physicians affiliated with larger institutions to pad their Medicare billings.
7. Their paper describes their 42 interviews with doctors convicted of Medicaid fraud. Not a single doctor was willing to admit that greed was the reason why they stole money (Jesilow *et al.*, 1991).
8. The percentage of US physicians who are IMGs has stayed relatively stable over the years. It was 25 percent in 1985. It was 24 percent in 2000. In 2010 it was 28 percent (Pontell *et al.*, 1985; Dow and Harris, 2002).
9. These are also the top four states of practice for IMGs (and account for 36 percent of all IMGs) according to AMA statistics.
10. The average bank robbery netted $7,643 in 2010 (Federal Bureau, 2010), available at: www.fbi.gov/stats-services/publications/bank-crime-statistics-2010/bank-crime-statistics-2010 (accessed 8 April 2012).
11. These delays have nothing to do with criminal appeals. Physicians are not placed on the OIG Exclusion List until all appeals are exhausted.
12. Physicians rank as the 5th most respected profession according to Gallup's Annual Honesty and Ethics Survey (Gallup Organization, 2010), available at: www.gallup.com/poll/145043/Nurses-Top-Honesty-Ethics-List-11-Year.aspx (accessed 8 April 2012).

References

Alam, A., Klemensberg, J., Griesman, J. and Bell, C.M. (2011), "The characteristics of physicians disciplined by the professional colleges in Canada", *Open Medicine*, Vol. 5 No. 4.

AMA-IMG Section Governing Council (2010), "International medical graduates in American medicine: contemporary challenges and opportunities", available at: www.ama-assn.org/ama1/pub/upload/mm/18/img-workforce-paper.pdf (accessed 8 April 2012).

American Urbex (2011), "Exploring America's gritty history", available at: http://americanurbex.com/wordpress/?p=883 (accessed April 8, 2012).

Chicago Tribune (2012), "Illinois urged to investigate doctors with tainted records", 11 February, available at: http://articles.chicagotribune.com/2012-02-11/health/ct-met-undisciplined-doctors-20120211_1_medical-license-state-medical-boards-national-practitioner-data-bank (accessed 8 April 2012).

Clay, S.W. and Conatser, R.R. (2003), "Characteristics of physicians disciplined by the state medical board of Ohio", *JAOA*, Vol. 103 No. 2, pp. 82-8.

Cuervo-Cazurra, A. (2006), "Who cares about corruption?", *Journal of International Business Studies*, Vol. 37, pp. 607-22.

Dehlendorf, C.E. and Wolfe, S.M. (1998), "Physicians disciplined for sex-related offenses", *JAMA*, Vol. 279 No. 23, pp. 1883-8.

Department of Health and Human Services & Department of Justice (2010), "Health care fraud and abuse control program annual report for fiscal year 2010", available at: http://oig.hhs.gov/publications/docs/hcfac/hcfacreport2010.pdf (accessed 8 April 2012).

Dow, W.H. and Harris, D.M. (2002), "Exclusion of international medical graduates from federal health care programs", *Medical Care*, Vol. 40 No. 1, pp. 68-72.

Federal Bureau of Investigation (FBI) (2009), *2009 Financial Crimes Report*, available at: www.fbi.gov/stats-services/publications/financial-crimes-report-2009 (accessed 8 April 2012).

Federal Bureau of Investigation (FBI) (2010a), *2010 Uniform Crime Report*, available at: www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/tables/10tbl33.xls (accessed 8 April 2012).

Federal Bureau of Investigation (FBI) (2010b), *Bank Crime Statistics for 2010*, available at: www.fbi.gov/stats-services/publications/bank-crime-statistics-2010/bank-crime-statistics-2010 (accessed April 8, 2012).

Fisman, R. and Miguel, E. (2007), "Corruption, norms and legal enforcement: evidence from diplomatic parking tickets", *Journal of Political Economy*, Vol. 115 No. 6, pp. 1020-48.

Gallup Organization (2010), "Annual honesty and ethics survey", available at: www.gallup.com/poll/145043/Nurses-Top-Honesty-Ethics-List-11-Year.aspx (accessed April 8, 2012).

Hadley, J. and Holahan, J. (2004), "The cost of care for the uninsured: what do we spend, who pays, and what would full coverage add to medical spending?", available at: www.kff.org/uninsured/upload/the-cost-of-care-for-the-uninsured-what-do-we-spend-who-pays-and-what-would-full-coverage-add-to-medical-spending.pdf (accessed 8 April 2012).

Hardoon, D. and Heinrich, F. (2011), "Daily lives and corruption: public opinion in South Asia", *Transparency International*, available at: www.transparency.org/whatwedo/pub/daily_lives_and_corruption_public_opinion_in_south_asia (accessed 26 December 2012).

Heumann, M., Pinaire, B. and Burger, S. (2009), "Bad medicine: on disciplining physician felons", *The Cardozo Journal of Conflict Resolution*, Vol. 11 No. 1, pp. 501-47.

Heumann, M., Pinaire, B. and Lerman, J. (2007), "Prescribing justice: the law and politics of discipline for physician felony offenders", *Boston University Public International Law Journal*, Vol. 17 No. 1, pp. 1-38.

Insurancefraud (199), "Licensed to steal: action and inaction by state medical boards", *Coalition Against Insurance Fraud: Report of the Medical Provider Study Task Force*, available at: www.insurancefraud.org/med_providers_report.htm (accessed 8 April 2012).

Jesilow, P., Geis, G. and Pontell, H.N. (1991), "Fraud by physicians against Medicaid", *JAMA*, Vol. 266 No. 23, pp. 3318-22.

Jung, P., Lurie, P. and Wolfe, S.M.U.S. (2006), "Physicians disciplined for criminal activity", *Health Matrix: Journal of Law-Medicine*, Vol. 16 No. 2, p. 335.

Merlo, L.J. and Gold, M.S. (2008), "Prescription Opioid abuse and dependence among physicians: hypotheses and treatment", *Harvard Review of Psychiatry*, Vol. 16 No. 3, pp. 181-94.

Morrison, J. and Morrison, T. (2001), "Psychiatrists disciplined by a state medical board", *American Journal of Psychiatry*, Vol. 158 No. 3, pp. 474-8.

Morrison, J. and Wickersham, P. (1998), "Physicians discipline by a state medical board", *JAMA*, Vol. 279 No. 23, pp. 1889-93.

Motivans, M. (2012), "Federal justice statistics, 2009 statistical tables", available at: http://bjs.ojp.usdoj.gov/content/pub/pdf/fjs09st.pdf (accessed 8 April 2012).

MPI Data Hub (2010), "2010 American community survey and census data on the foreign born by state", available at: www.migrationinformation.org/datahub/acscensus.cfm (accessed 8 April 2012).

National Health Care Anti-Fraud Association (NHCAA) (2008), "The problem of health care fraud", available at: www.nhcaa.org/resources/health-care-anti-fraud-resources/the-problem-of-health-care-fraud.aspx (accessed 8 April 2012).

National Health Care Anti-Fraud Association (NHCAA) (2010), "Combating health care fraud in a post-reform world: seven guiding principles for policymakers", available at: www.nhcaa.org/media/5994/whitepaper_oct10.pdf (accessed 8 April 2012).

Oregon Tribune (2006), "Doctors get 'wrist slap' in fraud cases, study concludes", available at: www.oregon.gov/DHS/spd/pubs/effort/2006/winter.pdf?ga=t (accessed 8 April 2012).

Pontell, H.N., Jesilow, P., Geis, G. and O'Brien, J. (1985), "A demographic portrait of physicians sanctioned by the federal government for fraud and abuse against Medicare and Medicaid", *Medical Care*, Vol. 23 No. 8, pp. 1028-31.

Rosenmerkel, S., Durose, M. and Farole, D. (2009), "Felony sentences in state courts, 2006 statistical tables", available at: http://bjs.ojp.usdoj.gov/content/pub/pdf/fssc06st.pdf (accessed 8 April 2012).

Sermo Survey of US Physicians (2009), available at: www.sermo.com/about-us/pr/07/july/3/sermo-survey-us-physicians (accessed 10 March 2012).

St Louis Today (2010), "State licensing boards must get serious about felony convictions", 14 November, available at: www.stltoday.com/news/opinion/columns/the-platform/article_8322692c-eeb8-11df-bf8b-00127992bc8b.html (accessed 8 April 2012).

Transparency International (2011), *2011 Corruption Perceptions Index (CPI)*, available at: http://cpi.transparency.org/cpi2011/ (accessed 8 April 2012).

US Census (2012), "The 2012 statistical abstract", available at: www.census.gov/compendia/statab/rankings.html (accessed 8 April 2012).

Further reading

Division of Survey and Data Resources (2012), *Physician Characteristics and Distribution*, South Carolina.

Suderman, P. (2011), "Medicare thieves", available at: http://reason.com/archives/2011/09/13/medicare-thieves (accessed 26 December 2012).

About the authors

Vivek Pande, JD, is an Assistant Professor of Business Law in the College of Business Administration at the University of Wisconsin – La Crosse. He was previously a Senior Lecturer of Business Law at Koç University in Istanbul from 2004 – 2010. Prior to that, he practiced pension and healthcare law at O'Melveny and Myers in Los Angeles. He is a member of the State Bar of California and his research interests include healthcare law, policy and fraud. Vivek Pande is the corresponding author and can be contacted at: vpande@uwlax.edu

Will Maas, JD, CPA, is an Assistant Professor teaching Business Law and Tax in the College of Business Administration at the University of Wisconsin – La Crosse. His research interests include healthcare fraud, financial planning, and tax law. He has published in the *Journal of Finance Issues, The Tax Advisor,* and *Tax Notes.*