Physician Rating Websites: Do Radiologists Have an Online Presence?

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Abstract

Purpose: Given that patient satisfaction and provider transparency intersect on online physician-rating websites, we aimed to assess radiologist representation on these increasingly popular sites.

Methods: From a directory of all Medicare participating physicians, we randomly selected 1,000 self-designated diagnostic radiologists and manually extracted their rating information from five popular online physician-review websites (HealthGrades, Healthcare Reviews, RateMDs, Kudzu, and Yelp). Using automated web "data-scraping" techniques, we separately extracted all radiologist and nonradiologist rating information from a single amenable site (Healthcare Reviews). Rating characteristics were analyzed.

Results: Of 1,000 sampled self-designated diagnostic radiologists representing all 50 states, only 197 (19.7%) were profiled on any of the five online physician-review websites. Only 24 (2.4%) were rated on two of the sites, and none was profiled on ≥3 sites. Of all 6,775 physicians listed on a single electronically interrogated site, only 30 (0.4%) were radiologists. With 28,555 (5.2%) of all 547,849 Medicare-participating physicians identified as diagnostic radiologists, radiologists were thus significantly underrepresented online ($P < .0001$). Although reviewed radiologists and nonradiologists were rated online by similar numbers of patients (1.13 ± 0.43 versus 1.03 ± 0.22, $P = .22$), radiologists were rated (on a low to high score of 1 to 10) significantly higher than nonradiologists (median 8.5 versus 5, $P = .04$).

Conclusions: Most diagnostic radiologists are not profiled on common online physician-rating websites, and they are significantly underrepresented compared with nonradiologists. Reviewed radiologists, however, scored favorably. Given the potential for patient satisfaction scores and public domain information to affect referrals and future value-based payments, initiatives to enhance radiologists' online presence are advised.

Key Words: Health care social media, Internet, physician rating websites, public reporting, provider transparency

J Am Coll Radiol 2015;12:867-871. Copyright © 2015 American College of Radiology

INTRODUCTION

Patient satisfaction and provider transparency are increasingly heralded as health care policy goals, and they intersect in the emerging physician review website marketplace. These online rating sites are gaining popularity among patients seeking information about their physicians and other health care providers; but, to date, they have received relatively little attention in the peer-reviewed literature [1].

An early study focusing on a single physician-rating website indicated that the likelihood that an average physician would be rated online increased, from essentially zero in 2005 to approximately 16% in 2010, and the likelihood varied by specialty group [2]. In 2010, a total of 32.4% of all obstetrician-gynecologists had been reviewed online, in contrast to only 6.6% of radiologists, anesthesiologists, and pathologists (collectively grouped as "other specialists"). That trend toward more online physician ratings seems to be gaining momentum; recent multiwebsite studies indicate that most urologists [3] and internists [4] are now profiled on such sites.

Online ratings may become more important for all physicians, because patients may turn to these resources when choosing both primary care providers and specialists [5,6]. Practitioners who do not have online identities may therefore be disadvantaged when patients search for providers online. At the same time, CMS, through

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The authors have no conflicts of interest to disclose.

1546-1440/15/$36.00 ■ http://dx.doi.org/10.1016/j.jacr.2015.03.039

the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) program, is now using patient-survey information as a factor in determining hospital payments [7]. Given calls to abolish fee-for-service arrangements and instead pay doctors using value-based methodologies [8], an online HCAHPS-like methodology potentially could be extended to physicians, with patient reviews acting as a partial basis for payment levels.

Despite pleas from thought leaders for radiologists to become more relevant, meaningful, approachable, and accessible, many in the specialty continue to practice as "invisible radiologists" [9,10] and would thus likely be disadvantaged in a context of patient rating-driven delivery and payment systems. How would patients rate a radiologist they had never met? Given that a recent poll revealed that only 48% of Americans realize that radiologists are licensed physicians [11], how might they rate a practitioner who they did not know was a doctor? This lack of knowledge, coupled with the prospect of payment systems being influenced by patient ratings, could adversely affect physicians that have no online presence, or a negative one.

Our hypothesis is that radiologists, who have less patient interaction than other physicians, are underrepresented on physician-rating websites. If true, this information would set the stage for initiatives to improve radiologists' online visibility, as well as for policy changes to promote alternative rating tools for specialists whose clinical domains involve less face-to-face-patient interaction. We therefore aimed to assess radiologist representation on various online physician-rating websites.

METHODS

This project used federally designated public use files and public domain web-accessible data sources, and was deemed exempt from any institutional review board approval requirement. Our study population of diagnostic radiologists was selected from all physicians identified in the most recently available (year ending June 30, 2013) CMS National Claims History (NCH) Standard Analytic Files (SAFs) [12]. The NCH SAFs contain 100% of claims for all beneficiaries enrolled in the Medicare fee-for-service program. Given that approximately 90% of US physicians accept Medicare, and this percentage has been stable over recent years [13], this data source is believed to be reasonably representative of physicians nationwide.

The NCH SAFs include self-designated specialty and/or profession codes for all providers. Using those codes, physicians were distinguishable from nonphysician providers, such as dentists and chiropractors, and from that group, all self-designated diagnostic radiologists were identified. Of those, a random sample of 1,000 was selected for online rating analytics.

Using a modification of methodologies detailed by Ellimoottil et al [3] and Gray et al [4], we selected five "popular physician review websites" from which to collect information for each radiologist: HealthGrades.com, HealthcareReviews.com, RateMDs.com, Kudzu.com, and Yelp.com. Over a several-month period in 2014, we manually searched each site for all 1,000 selected radiologists that matched NCH SAF physician demographic information. For physicians identified on any ratings website, average scores and numbers of posted patient ratings were collected. When rating websites occasionally indicated a specialty other than diagnostic radiology for the selected physicians, we reviewed NCH SAF for the most-frequent service claims submitted by those physicians, to reconcile the inconsistency between the website reported specialty and that self-designated to Medicare.

Using a custom-built online "data-scraping" algorithm, similar to that used for other web data—extraction exercises [14], the content of all posted health care payer, facility, physician, and other nonphysician provider reviews was reconstructed, in early 2014, from a single health care ratings website (www.HealthcareReviews.com). That site was chosen because its data format was amenable to automated extraction, and it had no data-mining prohibition in its terms-of-service agreement. Semiautomated post-processing was used to isolate ratings of all identifiable US physicians, and merge duplicate entries.

We calculated the number and percentage of physicians from our random sample that appeared on each site, as well as the number and percentage designated as nonradiologists. Mean and standard deviation (represented here by "±") for the number of reviews for each rated physician were calculated. Chi-square analysis was performed to examine whether the Medicare NCH SAF Claims Files and the Healthcare Reviews website (the only website for which we had access to the full sample of physician data) had significantly different mean numbers of radiologists and nonradiologists.

In addition, χ^2 analysis was used to examine whether the mean numbers of online reviews for radiologists versus nonradiologists on the Healthcare Reviews website were statistically different. We used Mood's median test to examine whether the median ratings received by radiologists versus nonradiologists in the Healthcare Reviews data were statistically different. All data and statistical analyses were performed using Excel 2010 (Microsoft, Redmond, Washington) and the Real Statistics Resource Pack (Real Statistics, Oliva Gessi, Italy).