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Out-of-Pocket Costs for Advanced Imaging Across the US Private Insurance Marketplace

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Abstract

Purpose: The aim of this study was to characterize out-of-pocket patient costs for advanced imaging across the US private insurance marketplace.

Methods: Using the 2017 CMS Health Insurance Marketplace Benefits and Cost Sharing Public Use File, which details coverage policies for qualified health plans on federally facilitated marketplaces, measures of out-of-pocket costs for advanced imaging and other essential health benefits were analyzed for all 18,429 plans.

Results: Independent of deductibles, 48.0% of plans required coinsurance (percentage fees) for advanced imaging, 9.7% required copayments (flat fees), and 8.0% required both; 34.3% required neither. For out-of-network services, 91.5% required coinsurance, 0.1% copayments, and 1.0% both; only 7.4% required neither. In the presence of deductibles, patient coinsurance burdens for advanced imaging in and out of network were 27.7% and 47.7%, respectively, and average in- and out-of-network copayments were $319 and $630, respectively. In the presence of deductibles, patients' average coinsurance ranged from 10.0% to 40.9% in network and from 29.1% to 75.0% out of network by state; these tended to be higher in lower income states ($r = -0.332$). For no-deductible policies, patients' average out-of-network coinsurance burden for advanced imaging was 99.9%. Among assessed benefits, advanced imaging had the highest in-network and second highest out-of-network copayments.

Conclusions: In the US private insurance marketplace, patients very commonly pay coinsurance when undergoing advanced imaging, both in and out of network. But out-of-network services usually involve drastically higher patient financial responsibilities (potentially 100% of examination cost). To more effectively engage patients in shared decision making and mitigate the hardships of surprise balance billing, radiologists should facilitate transparent communication of advanced imaging costs with patients.

Key Words: Private insurance, costs, access to care, health policy

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INTRODUCTION

To serve as good stewards and meaningfully participate in shared decision making, radiologists are encouraged to assume greater responsibility in ensuring the appropriate use of finite imaging resources [1,2]. With policymakers targeting medical imaging as a driver of runaway health care spending [3-5], an increased focus on the costs of imaging is warranted. Recent work, however, indicates that radiologists' and nonradiologists' understanding of the costs of common examinations is frequently erroneous [6,7]. Additionally, cost itself entails a number of components. Health services researchers typically focus on Medicare fees [4,8,9], which are readily available online and tightly linked to relative value units. Typically more important to patients, however, is what they personally pay out of pocket [1].

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Such amounts are influenced by a variety of factors specific to their individual insurance plans, including the size of the network as well as the presence and amount of deductibles (ie, their "first dollar" health care financial responsibilities, regardless of type of service). Particularly important for imaging services, though, are the coinsurance (percentage of total fee) and copayment (flat per-service fee) obligations for particular examinations. In contrast to Medicare, for which payments and patient responsibilities are reasonably uniform across the country, there is a far lesser understanding of both total costs and patients' out-of-pocket costs for imaging services in the private insurance setting given the marked variability in policies among individual insurance plans.

The issue of patients' cost responsibility for imaging examinations in the private setting is receiving increasing public attention [10-12]. Narrow networks, featuring smaller panels of in-network providers, help lower patients' premiums and out-of-pocket expenses for in-network care and are thus becoming increasingly popular among insurance companies and patients alike [13-15]. However, such narrow plans entail potentially very high out-of-pocket expenses for patients who choose or, because of travel or other reasons, are forced to seek out-of-network care. This concern has been identified as particularly pressing for radiology [16]. First, advanced imaging represents an overall high-cost category of medical services [2,3]. In addition, patients are apt to undergo imaging examinations at a hospital or multispecialty practice at which they are already seeking care and from which the request for the imaging examination originates [17]. However, a facility's contracted radiology department and consulting radiologists may be out of network for the patient's insurance, even if the referring nonradiologist in the same health system is in network, hence leading to the so-called surprise billing phenomenon that is receiving a high degree of public scrutiny [16].

All of these issues highlight a need for greater insight into private insurance policies regarding patients' out-of-pocket payment responsibilities for their imaging services. We therefore conducted this study to summarize patients' in-network and out-of-network out-of-pocket cost responsibilities for imaging examinations on the private insurance marketplace.

METHODS

The dataset used did not pertain to individual plan beneficiaries. As such, this study did not represent human subjects research and consequently did not require local institutional review board oversight.

The CMS Center for Consumer Information and Insurance Oversight provides a series of Health Insurance Marketplace public-use files (PUFs) with comprehensive information regarding qualified health plans [18]. These are insurance plans that meet specific Patient Protection and Affordable Care Act requirements regarding coverage of essential health benefits and limits on patient cost-sharing responsibilities [19]. Such plans are certified by the Health Insurance Marketplace to participate in federally facilitated marketplaces (including those through state partnership marketplaces), multistate plans, federally facilitated small business health option programs, and state-based marketplaces that use the federal IT platform [18,19]. One of the marketplace PUFs is the Benefits and Cost Sharing PUF. This file provides information regarding a variety of health benefits and patient cost sharing for individual plans [20]. The information is either obtained directly from plan issuers or created by the Center for Consumer Information and Insurance Oversight for data-processing purposes [20].

We obtained the 2017 Health Insurance Marketplace Benefits and Cost Sharing PUF for 2017 [21]. This file contains a total of 1,315,204 rows, each providing information regarding an individual plan's policies for an individual benefit. The complete file contains information for 281 different benefits and 21,238 different plan variants (hereafter referred to simply as plans). Two benefits in the file relating to radiologic imaging are for advanced imaging (eg, CT, MRI, and PET) and for basic imaging (eg, radiography). These two benefits served as the focus of this analysis. An additional eight benefits described in the file representing a spectrum of common services that could serve as useful comparisons for imaging services were also assessed (Table 1), giving a total of 10 included benefits (such as radiation therapy and surgical services relevant to interventional radiology) in the analysis. These 10 benefits were all identified in the file as essential health benefits and had coverage information provided for a total of 18,429 plans (only dental benefits were listed for all 21,238 plans).

The following attributes were extracted for each assessed benefit for each plan, in terms of both in-network and out-of-network coverage policies: presence and amount of any coinsurance, presence and amount of any copayment, and presence of a deductible. In-network data were based on plans' "tier 1" policies, which typically offer the lowest out-of-pocket patient costs. In addition, plans' "metal category" was identified by cross-referencing plan identifiers to the 2017 Health Insurance Marketplace Plan