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Review of compensation plans for surgery residency and fellowship graduates seeking employment

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Abstract

Surgery residency and fellowship graduates face a new healthcare landscape in which they are increasingly employed by health systems and large groups. The most common compensation structure for surgeons employed by health systems and surgeon groups is a base salary with productivity and sometimes quality bonuses tied to performance. The productivity bonus is frequently based upon billings, collections, total relative value units (RVUs) or work relative value units (WRVUs). In order to competitively recruit and retain the best talent, academic medical centers are recognizing the importance and need to compensate surgeons for non-clinical activities, which contribute in advancing the mission of medical education and research. All compensation structures have positive and negative features and surgery residency and fellowship graduates should receive the appropriate education that enables them to be fully informed before negotiating terms of employment.

Introduction

Although supply and demand in the healthcare market influence surgeon compensation levels, methods of compensation continue to evolve alongside changes in employment trends, incentives and implementation of the Affordable Care Act (ACA), which is said to emphasize value based payment rather than volume based payment. While there is pressure on hospitals to report quality metrics, surgeon participation in a value based payment modifier system has been less than 30% due to ambiguity in the measures of quality and limited incentive to participate [1].

With increasing employment of surgeons by hospitals, health systems and large surgeon groups, there is regulatory pressure to ensure that surgeon compensation is both commercially reasonable and at fair market value (FMV). As a consequence of the shift to value based payments, emphasis on cost containment and pressure to coordinate care and align surgeon-hospital incentives, current compensation models are extremely fluid. It is important that graduating surgery trainees receive education on the various compensation plans offered so that they can make an informed decision before negotiating terms of employment.

This paper describes the various types of compensation plans for surgeons seeking employment, their pros and cons, the unique aspects of academic practices, various methods to account for expenses, legal constraints on compensation plans and discusses how future compensation plans may be designed. Specific compensation levels related to various benchmarks are outside the scope of this publication.

Types of compensation plans

A compensation plan is a "method of allocating revenues and expenses in a medical practice and determining payment to the practice's surgeons for their services" [2]. Ideally, a compensation plan is simple, fair, transparent, predictable, fiscally viable, market competitive, legally compliant, easy to implement and with incentives that are acceptable to all parties. There are a myriad of compensation plans in place with various pros and cons (Table 1). Certain basic questions should be answered before selecting a compensation plan that suits the philosophy and culture of a surgical practice (Table 2). From an employer's perspective, an ideal compensation plan would yield a satisfied surgeon who performs at maximal productivity and delivers high quality care [3]. According to a recent survey, salary plus incentive and productivity based compensation models are the most common compensation structures with a prevalence of 40% and 34% respectively [4].

Guaranteed salary and pure productivity based compensation represent clearly defined compensation methods at two opposite ends of a spectrum with most existing compensation methods falling in between these two extremes. The existing hybrid models represent a fine balance between independence, earning potential and income security. Surgeons who have been in practice for a longer period of time may be willing to compromise on income security in favor of greater independence and earning potential. On the other hand, surgeons at the beginning of their careers may prefer income security.

Guaranteed salary compensation is commonly offered to new surgeons. In the formative years of a surgical career, surgeons are

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Table 1. Pros and cons of various compensation plans.

Type of plan	Feature	Pros	Cons
Pure productivity	Basis	Incentive; Can be legally compliant in regards to productivity bonuses	May cause friction in multi-specialty groups with overhead attribution
	Financial	Incentive to work harder: Can be adjusted for payer	May cause internal competition and increases risk of over treatment
	Administrative	Easy to understand and execute	Overhead attribution has to be agreed upon
	Perception	Seen as fair as long as pay between members is comparable	Seen as unfair if significant pay differences exist between members
	Common goals	May satisfy individual and group	May cause unhappiness if production is significantly higher or lower for some individuals
Straight salary	Basis	"Socialistic" model; All together; Less legal risk (Stark); Adjustment to payer mix easier; No incentive to over treat	No incentive to work harder; May encourage low productivity by some
	Financial		May not focus members on financial efficiency
	Administrative	Easy to understand and simple accounting	
	Perception	Good model if productivity is equal amongst members	Turmoil due to inequality in work effort, payers, and referrals
	Common goals	Enhances group unity and team effort	Individual performance is mostly ignored; Difficulty instituting incentives
Base guaranteed salary and incentive	Basis	Base salary creates socialistic component; Stark violations uncommon; Also requires some team effort	May allow laziness by some members
	Financial	Guaranteed portion allows stability of income	Incentive part may not be large enough to significantly motivate members
	Administrative	Understandable and easy to implement	Base pay benchmark may cause disagreement; Incentive portion may create differences
	Perception	Base salary seen as team effort	High producers may slack off and see no need to work harder
	Common goals	Likely to be successful in single specialty setting with equal production amongst members	Hard workers may be unhappy if differences in productivity exist which may lead to organizational disunity
Combination equal share salary and production incentive	Basis	Group effort allows for measuring both production and other incentive measures; Can incorporate quality/patient satisfaction and other measures as incentives	The equal share part may be disputed and require adjudication; Multispecialty practices may reduce the "equal" portion of the compensation formula
	Financial	Half guaranteed, half productivity based	Financial acumen required to monitor expenses and finances; Disputes may occur on definition of overhead
	Administrative	Understandable and easy to implement	Benchmark for formula must be agreed upon
	Perception	Promotes some unity; Works well in single specialties or some multi-specialty practices	May cause friction if unequal work effort, payers and collections exist
	Common goals	Likely to work in single specialty. Keeps all sides happy with base and incentive pay	Large percentage of the equal portion in a multispecialty practice may create problems if work effort/collections is vastly different between members

Source: Johnson BA, Keegan DW. Physician Compensation Plans. MGMA Englewood, CO. 2006.

Table 2. Questions to answer before designing a physician compensation plan.

Question to be resolved	Emphasis	Details
How should work be compensated?	Type of activity	Clinical, teaching, research, service (combination)
What behavior/performance should be rewarded?	Incentives rewarded	Productivity, outcomes, patient satisfaction, quality of care, teaching, research, leadership
What level should be rewarded?	Who to incentivize	Individual, division, department, specialty, practice node, institution
What portion of compensation should be based upon incentive?	Consistent with values and strategic plan	Guaranteed, percentage at risk varies by institution
How is compensation linked to funds flow	Only in AMC's	Degree of financial support (clinical, teaching, research, service); expenses (individual, specialty, practice)
Which measure is used to gauge productivity?	Metric	Work RVU, total RVU, collections, gross charges, patient encounters, pay for performance or a hybrid plan
How do we arrive at a comparable compensation structure?	Benchmarking	If AMC, use faculty Practice Solutions Center, jointly administered by University HealthSystem Consortium and Association of American Medical Colleges. Another choice is MGMA; If private practice, use AMGA, MGMA, Sullivan Cotter or similar organization

Legend: AMC's: Academic Medical Centers, RVU: Relative Value Units, WRVU: Work Relative Value Units, MGMA: Medical Group Management Association, AMGA: American Medical Group Association

largely focused on developing a successful practice, honing their surgical skills and establishing themselves as safe surgeons. At this early stage of career, guaranteed salary positions offer many benefits. Such a compensation model mitigates the burden of marketing ones practice, paying for overhead expenses and allows the surgeon to focus on establishing him or herself as a reliable doctor. Some disadvantages of a guaranteed salary compensation model includes less autonomy, a bureaucratic structure, reduced control over patient care practices and a lack of financial incentives to increase productivity.

Pure productivity based compensation is another compensation model which is in use by numerous health care organizations. Medical Group Management Association (MGMA), a popular benchmarking organization for non-academic practices, has observed that relative value unit (RVU) based productivity plans were used by almost twice as many practices in 2010 than in 2007 (61% versus 35%) [5]. In a recent survey of surgeons, almost 70% of those responding stated that productivity metrics were a part of their compensation plan [6]. An advantage of such a compensation model is that it provides surgeons a financial incentive to increase productivity. This compensation model is favorable for established surgeons who feel comfortable that they will have enough patient volume to ensure steady productivity for their practice. It is also favorable for hospitals as it increases the number of clinical visits and procedures.

Although guaranteed salary and pure productivity models appear straight forward, most revenue distribution methods are hybrid in nature: "fixed salary minus expenses", "productivity minus expenses" and "salary plus productivity". The "fixed salary minus expense" model may reduce utilization for the institution, as there is no financial incentive for the surgeons to perform extra services. This method is simple and institutions can predict their budget and utilization but this design doesn't provide a strong incentive to increase productivity. Institutions and practices with the "productivity minus expenses" model rely heavily on a financial incentive to increase productivity. Productivity can be measured by RVUs, net collections or similar measures. Surgeons compensated under such models have the option to balance their net income with work output, so they can achieve more control over their lifestyle. The "salary plus productivity" model ensures a baseline salary for surgeons with the opportunity to earn productivity based bonuses.

From a health system standpoint, compensation plans can be based on individual performance, group performance or some combination of the two. Individualistic plans focus on individual productivity, net collections, work relative value units (WRVUs) or some combination. Group oriented plans include rewards based on the success of the department, the hospital or the health system. For instance, a 60/20/20 plan would imply that 60% of compensation would be based upon individual productivity, 20% based on the division or department profitability and another 20% based on the health system profitability.

Compensation plans for academic practices

Orchestrating a compensation plan for academic medical centers (AMCs) is relatively complex. This is primarily because AMCs strive to achieve and reward the fulfillment of a much broader organizational mission.

While the main focus of most private practices is patient care, AMCs usually expect their employed surgeons to excel in clinical, administrative, research, teaching and scholarly activities [7]. What makes these plans more complex is the fact that all surgeons in AMCs are allocated different amounts of time to fulfill each of the aforementioned responsibilities. Performance in each of these activities is measured by different metrics. Consequently, AMCs rely on various national benchmarks for measuring performance of their employed surgeons. Because of declining reimbursements for clinical services and federal funding for research grants, most AMCs incentivize surgeons to generate more RVUs than their peers and to capture federal research grants.

Compensation in academic practices should support a surgeon's effort in clinical services, education and research. Most of the time compensation depends on the practice revenue, though support from the university may be required in order to maintain a competitive edge. In return, all programs provide funding (tax) to a dean's fund which is used to initiate new programs, recruit employees, subsidize nonproductive departments and fund basic science research. In order to reduce variation and reward teaching, educational and financial value units have been proposed [8].

Most AMC compensation plans are referred to as "XYZ" plans [3]. The base salary (X) is often the largest component and is tied to academic rank, historical salary and/or market factors. The supplement component (Y) is tied to teaching, research and/or service efforts with additive pay for administrative positions such as directorship or clerkship directorships. The incentive component (Z) refers to clinical or non-clinical incentives for an individual, division, department or institution. An example is the compensation plan offered at Penn State Hershey Medical Center wherein a surgeon is paid a base salary (X) and an additional amount for teaching, research, clinical and administrative activities (Y) [9]. Together, the pay offered by parts X and Y meets the 90% threshold of median income as benchmarked by Association of American Medical Colleges. In this case, the incentive pay (Z), which may be 10-15% of total compensation, is based upon productivity, clinical quality and/or academic success-related goals. Furthermore, additional bonuses may be awarded to surgeons who exceed the 75th percentile for clinical productivity.

Rewarding non-clinical productivity and other activities

Compensation for non-clinical production can be organized by laying out the desired outcome, determining appropriate measures of success, establishing the proper incentive structure and then allotting a pool of money to surgeons based on achievement of performance goals. There is no consensus regarding how to measure and reward non-clinical contributions such as teaching, research, directorships, committee assignments, servicing satellite offices and administrative work. Although most non-clinical activities cannot be easily assessed in RVUs, efforts have been made to assign RVU values for each of these activities [10]. Disadvantages of this approach includes the need for record keeping, individuals gaming the system to inflate RVUs and an emphasis on quantity of activity rather than quality. Besides RVUs or WRVUs, compensation may also be dependent on peer and staff evaluations, phone survey results, community volunteer work and national quality metrics. On-call compensation is usually a daily stipend that is negotiated between parties [11]. Because of the regulatory environment, director compensation is generally set in a formal contract. The stipend depends on the specialty, the demand and the number of hours worked [12].

While the subject of part-time surgeon employment and a discussion of transition to part-time employment are beyond the scope

of this paper, a clear definition of a full-time surgeon in terms of days of practice per week or per year, work expected and other obligations expected would be useful. A complete and transparent policy that includes information for a part-time surgeon related to governance, on-call obligations, length of time in part-time status, financial impact and reduction in benefits should be established.

Calculating expenses

While the main focus during employment negotiation is surgeon salary, it is also important to be mindful of how expenses are calculated and attributed to members of a surgeon group. There are many variations in how expenses are accounted for. The most laborious accounting method is to track each expense and allocate the actual or estimated amount to the corresponding surgeon(s) to whom the specific expense applies. Although this is the most accurate and fair expense accounting method, it is frequently too impracticable for implementation. Perhaps the simplest expense accounting method is to calculate total expense for the entire practice and to distribute it evenly amongst all partners. While convenient, this method is unlikely to reflect the true expense generation among various partners. Another common expense accounting method is to tie expenses to the percentage of revenue collected. For example, a surgeon who generates 20% of a practice's revenue will be responsible for 20% of the practice's expenses. A further variation of this method is to divide half of the total expenses equally among all partners and to attribute the remaining half of expenses to partners based on percent of revenue generation.

If the variation in productivity within a practice is significant, high producing members will prefer expense allocation based upon an equal share of expenses (*i.e.* total expenses divided by the number of surgeons in the group). Conversely, low producing members will prefer expense allocation based upon the set percent of each member's productivity, contending that high producers will utilize a larger share of available resources. It is evident that in the first scenario, the highest producing surgeon has the most favorable compensation arrangement. In the second scenario, the lowest producing surgeon has the most favorable compensation arrangement. In most cases, expense sharing is a compromise in which partners develop a formula that may be adjusted until all parties perceive it to be amicable.

Legal constraints

The structure of surgeon compensation plans and how a surgeon is compensated is significantly influenced by federal and state laws that continue to change. This has led surgeons to seek advice from attorneys at almost every turn. The Internal Revenue Service (IRS) provides guidance with reference to the federal tax code, particularly when a surgeon is employed by a tax-exempt hospital, but there are no specific laws that dictate FMV compensation.

The Stark law prohibits a surgeon from referring a Medicare or Medicaid patient to a designated health service (DHS) if the surgeon or the surgeon's immediate family has any financial relationship with the health care entity that provides the DHS [13]. At least one of the exemptions to the Stark regulations must apply in order for a surgery practice to legally generate income from these sources. Most surgery groups and hospitals use the "bonafide" group practice exemption to avoid being in violation of the federal statute. Compensation and incentive plans offered by physician owned surgery groups are different than those offered by hospital affiliated/owned entities. Most surgeons who are hospital employees are not permitted to receive any financial benefits from ancillary services, such as vascular imaging, even though it may be possible to comply with the Stark law's "in office ancillary services" exemption. Instead, hospitals elect to utilize the Stark law's "direct employment" exemption, which prohibits any consideration of referrals for DHS for purposes of compensation.

The federal Anti-Kickback (AKB) statute prohibits anything of value from being exchanged for purposes of obtaining referrals of patients or services when those patients healthcare is paid for by federal healthcare programs. Whereas the Stark law only applies to physicians, AKB laws apply to anyone being reimbursed by federal funds. "Safe harbors" have been specified by Congress to allow normal and usual business activity to proceed without violating AKB laws. The general applicability for surgeons has to do with compensation arrangements, which have to be commercially reasonable, at FMV and set in aggregate in advance, with no consideration of volume or value of referrals.

Future

With the change in payment systems, surgeon-hospital alignment, accountable care organizations and the shortage of surgeons, it seems likely that there will be an upward pressure on surgeon compensation and surgeons will demand compensation for non-patient care related responsibilities. Furthermore, a generational change will put pressure on employers to offer part-time and flexible employment opportunities. Uncertainty will likely lead groups to try different compensation models. Value-based compensation may become more common, but not before better defined metrics that help measure value are agreed upon. In addition, it will be necessary to establish who should be incentivized by those metrics. Validation of any such system and transition to a new system will be a slow process. Until a new system is implemented, rightly or wrongly, RVU or WRVU based productivity plans will continue to be pervasive. This was evidenced in a recent Merritt Hawkins survey of recent offers to physicians which showed that a "salary plus productivity" bonus formula was proposed in 74% of job searches. In half of these searches, RVU/WRVU was the sole metric utilized [14].

Medicare, the largest payer for healthcare services, often sets the incentive structure that drives surgeon and hospital behavior. As an example, Medicare currently has plans to dispense almost $1 billion in payments which are tied to patient satisfaction surveys. However, current surveys show that for specialists, only 2.3% of compensation is tied to patient satisfaction scores [15]. There are also signs that health systems are beginning to move towards rewarding quality metrics. In a more recent review of their search assignments, Merritt Hawkins has observed an increase in offers to physicians in which a production bonus related to quality metrics was included (from 7% in 2011 to 39% in 2013) [16]. In order to successfully implement a gradual transformation to new payment models, it will be imperative to maintain surgeon trust, allow surgeons to lead the initiative, ensure consistent measurements of productivity, define quality parameters and appropriately invest in information technology to allow health management for a large population. With numerous variables (pay for performance, meaningful use, e-prescribing, quality metrics), there is some danger that compensation plans will become too complicated and hard to understand leading to "compensation layering."

As far as surgeon employment by hospitals is concerned, more health systems and surgeon groups are implementing incentives (after an initial period of guaranteed salary) for productivity as part of a compensation and bonus plan. The difficulty for graduating surgery trainees starting new jobs is in understanding the many compensation plan variations, even within the context of productivity incentives.

Pros and cons of various types of compensation plans need to be fully comprehended during employment negotiations. Surgical societies, through relevant committees, should consider offering peer to peer support or mentoring by more experienced surgeons. Consideration should also be given to providing practice management instruction, including discussion about employment contracts and compensation, during surgery residency and fellowship training.

Compliance with ethical standards

Conflict of Interest: Suraj Prakash declares that he has no conflict of interest. Bhagwan Satiani declares that he has no conflict of interest. Faisal Aziz declares that he has no conflict of interest. Raghu L. Motaganahalli declares that he has no conflict of interest.

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