**A Case Study: the Volume-Based Incentive Plan at a Department of UPMC**

by

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**Abstract**

This is a challenging time for hospitals and physicians. Externally, reimbursement systems are changing rapidly: both public- and private-sector payers are shifting the reimbursement models to emphasize value over volume. Internally, physician burnout is an issue: almost half of physicians experience at least one symptom of burnout. At this point, choosing an incentive plan that motivates physicians and attracts physicians may facilitate to address the challenges.

This essay presents an analysis of the volume-based clinical incentive plan of a medical specialty department at the University of Pittsburgh Medical Center (UPMC), the largest medical center in Western Pennsylvania. The incentive plan implemented by the department is clear and according to the department administrator, works well financially. This essay explains in detail the allocation of incentive funding, metrics and calculations of incentives, evaluates how well the plan realizes its two goals of aligning physicians with the strategies of the department as well as attracting and retaining physicians, and provides recommendations to the department.

**Public Health Significance**

As physicians are the foundation of patient care, it is necessary for a health care organization to try its best to decrease the risk of physician burnout. A health care organization must satisfy physicians’ mental, physical and social needs to ensure the quality of care in the long run. This essay provides recommendations for the department to improve physician satisfaction and gradually develop a value-based incentive plan. By presenting and analyzing an effective and simple incentive plan, this essay provides information and ideas to organizations about which incentive plans can work.

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# Introduction

This is a challenging time for health care executives. Reimbursement systems are changing rapidly, physician burnout is an issue, price competition is increasing, and regulatory burdens are heavy. Both public-sector and private-sector payers are supporting a shift of reimbursement model from volume-based to value-based by integrating components of efficiency, satisfaction and safety into a compensation structure. Aside from being driven by external factors, hospitals are pushed by their competitors. According to a 2014 survey, 72% of surveyed health executives said that the industry will switch from volume to value (HealthLeaders Media Intelligence, 2014, January). The pressures are passed on to physicians, leading to higher risks of physician burnout which can result in suboptimal patient care and psychiatric problems of physicians.

Having an appropriate compensation model may not be the solution to all challenges, but is critical to an organization’s success. As an important part of the compensation model, an appropriate incentive plan provides a health organization with opportunities to encourage physicians to behave in a desired way. According to the incentive theory of motivation, people are pulled toward behaviors that offer positive incentives (Kramer, Bernstein, & Phares, 2019), such as promotion and money. For instance, including operational metrics in an incentive plan can motivate physicians to complete their administrative work. Evidence suggests that implementing an incentive plan with greater emphasis on clinical quality and patient experience criteria is associated with more improvements in care coordination and office staff interaction (Rodriguez, Von Glahn, Elliott, Rogers, & Safran, 2009), while implementing a productivity-based incentive plan is associated with higher volume of work complete (Stanisce et al., 2019). By implementing and developing incentive plans, hospital leaderships have successfully achieved their goals such as increasing professional fee collection at an indigent-care teaching hospital (Stewart, Jones, & Garson Jr, 2001) and improving clinical productivity of orthopedic faculty at a university medical center (Lee et al., 2018).

This essay uses as an example the clinical incentive plan (the Plan) of a medical specialty department (the Department) under the University of Pittsburgh Physicians (UPP) at the University of Pittsburgh Medical Center (UPMC) in Fiscal Year 2018 (FY 18) to explain in detail the allocation of funding to operational, clinical and citizenship incentives, the metrics in the Plan, and the calculation of incentives. This essay further discusses minimizing physicians’ clerical burdens, adherence with the mission and incorporation of values, quality-related metrics, and concerns of using a work relative value unit (RVU)-based incentive plan. Based on this analysis, this essay gives recommendations on decreasing the risk of physician burnout and accommodating to a value-based reimbursement system.

# Background

## Physician Satisfaction and the Fourth Aim

Physicians are facing high pressures today. Every physician seems to be “managing 10 spinning plates to cover their professional and personal obligations” (Gorman, 2017, p. 113). Playing a fundamental role in healthcare, physicians bear the responsibility to do administrative work to keep organizations functioning normally as well as to provide care to patients.

With the trend to incentivize for outcome, quality and lower costs rather than volume, payers are encouraging health care organizations to take on the responsibility of cost control, while quality of care remains a priority. Despite the trend, the majority of reimbursement schemes are still volume-based. To survive and thrive in the dynamic industry environment is challenging for hospitals and health care executives. To stay competitive in the health market, some health care executives pass the pressure on to physicians by incentivizing them to work harder and to align with the organization’s long- and short-term strategies to realize the organization’s goals such as cost reduction and quality improvement. With implementation of the Quality Payment Program, as will be discussed below in *3.2.1*, physicians are faced with even heavier regulatory burdens (Luh, 2016).

Facing these challenges, physicians are more likely to burn out compared to other workers in the United States (U.S.), and almost half of physicians self-reported having at least one symptom of burnout (Shanafelt et al., 2012). Evidence suggests that early-career physicians have the lowest satisfaction with overall career choice (being a physician) and the highest frequency of work-home conflicts (Dyrbye et al., 2013). Symptoms of burnout are associated with several types of professional dysfunction and increased risk of psychiatric illness (Schwenk & Gold, 2018). On the other hand, physician engagement can accelerate the acceptance of innovative care models with an organization (Skillman et al., 2017).

Concerned that the emphasis on only patient care might lead to physician burnout, Bodenheimer and Sinsky (2014) proposed adding to the triple aims of health care – improving population health, reducing costs of care, and enhancing patient experience – a fourth aim of “improving the work-life of healthcare providers” (p. 573).

## Shifting Reimbursement Models

One of the external challenges that many medical groups face is shifting reimbursement models from volume-based to value-based. Medicare and other payers are gradually moving from a Fee-for-Service (FFS) basis to include incentives for quality, outcome, cost reduction and patient satisfaction. Changes in reimbursement systems drive hospitals to adjust their physician incentive models to align with the transition. Overall, although reimbursement under the new model takes up a small percentage of the whole reimbursement, it is expected to increase and spread to affect more medical groups.

### Shift in Medicare

Long-existing problems of the health system in the U.S. are increasingly high health expenditures and poor population health outcomes. The growing health expenditures increase fiscal deficit and concern private insurers. Under the circumstances, a shift from the traditional reimbursement schemes towards innovative models that stimulate low-cost and high-quality care occurs.

The last several decades saw both legislative efforts and attempts of the Centers for Medicare & Medicaid Services (CMS) to restructure the payment system. The Congress passed the Medicare Improvements for Patients and Providers Act (MIPPA) in 2008, Affordable Care Act (ACA) in 2010, Protecting Access to Medicare Act (PAMA) in 2014, and the Medicare Access & CHIP Reauthorization Act (MACRA) in 2015. Each act contains some section that directs CMS to implement programs that are more or less based on outcome, quality and patient experience.

CMS started to emphasize quality of care over quantity of services in 2008. Since then, CMS has initiated more value-based programs (VBP), such as the Quality Payment Program, to base Medicare payments on value rather than volume. CMS defines value-based programs as those that reward health care providers with incentive payments for the quality of care they give to people with Medicare (Centers for Medicare & Medicaid Services, 2019, July 16). The underlying principle is that the creation of appropriate incentives encourages all healthcare providers to deliver higher quality care at lower total costs (Centers for Medicare & Medicaid Services, 2009).

#### Quality Payment Program

As bipartisan legislation, MACRA of 2015 requires CMS to implement the Quality Payment Program, an incentive program in which clinicians participate in one of two ways: the Merit-based Incentive Payment System (MIPS) or Advanced Alternative Payment Models (APMs). MIPS-eligible clinicians are subject to a performance-based payment adjustment. The maximum MIPS penalty increases to 9% of Medicare part B payments beginning in the performance year of 2020 (Saignite, 2019). Clinicians who participate in an Advanced APM may receive a 5% bonus and APM-specific rewards incentive payments for sufficiently participating in an innovative payment model.

### Shift in Private Insurers

Fundamental changes in the day-to-day operations of physicians and organizations are appealing only if financial incentives are large enough and, in turn, financial incentives from payers would be large enough only if a critical mass of insurers in public and private sectors switched to value-based payment models along with CMS (Rajkumar, Conway, & Tavenner, 2014).

Historically, if a new payment model developed by CMS is demonstrated to improve quality and lower costs, other payers are likely to follow (Rajkumar et al., 2014). Observing that CMS successfully decreased costs by implementing value-based models, many commercial payers have started to follow CMS’s lead and developed their own value-based programs.

## The Resource-Based Relative Value Scale (RBRVS)

The resource-based relative value scale (RBRVS) is a system in which payments for physician services are determined by the resource costs needed to provide them. CMS established a standardized physician payment schedule based on RBRVS in 1992. CMS assigns a value to each CPT/HCPSC code, and this value is called relative value unit (RVU). The use of the RVU system makes it possible to compare the combination of skill, workload, complexity and risks across different medical services and care providers. It standardizes the billing method and allows the establishment of industry benchmarks.

The system is widely used by CMS, insurance companies, medical groups and other care providers and organizations. According to the Medical Group Management Association’s Physician Compensation and Productivity Report, more than one-third of physician practices in the U.S. are using a compensation plan based on some type of wRVU structure, and more than 60% of physicians are paid based on some type of wRVU metrics (Berg, 2012, January 17).

## Quality Measures

### HCAHPS Survey and CG CAHPS Survey

Consumer Assessment of Healthcare Providers and Systems (CAHPS) is a series of surveys to assess patient experience in a specific health care setting. As probably the most important CAHPS survey, HCAHPS (the Hospital Consumer Assessment of Healthcare Providers and Systems) is required by CMS for all hospitals in the U.S. On the survey, patients provide feedback on their experience in a specific area, such as communication with doctors, and the scores are publicly reported so they directly impact the healthcare organization’s reputation. Moreover, the score is one factor that determines reimbursement from the government.

CG CAHPS (the Clinician and Group Consumer Assessment of Healthcare Providers and Systems) is another part of the CAHPS survey family. Some refer to CG CAHPS as a “sister” to HCAHPS because it is also a standardized survey used to collect patients’ perceptions of care from healthcare providers. The difference is that CG CAHPS is specific to medical office settings rather than hospitals.

### Never Events

“Never Events” are adverse events that are “unambiguous (clearly identifiable and measurable), serious (resulting in death or significant disability), and usually preventable” (Agency for Healthcare Research and Quality, 2019, January, para. 1). An example of such an event is wrong-site surgery.

On September 1, 2008, Medicare ended its long-standing presumption in its payment rule that taxpayers and patients should bear the average costs consequences when complications occurred since hospitals tried their best to prevent such events from happening. CMS disallowed incremental payments associated with eight secondary conditions that it deemed “reasonably preventable.” For the fiscal year 2009, nine additional complications were put on the list.

Although the policy was expected to result in less than 0.01% of Medicare payments nationally, some hospital leaders opposed the inclusion of some complications that were not completely preventable by hospitals and noted that the policy did not directly reduce payments to physicians, even when they were primarily responsible (Milstein, 2009).

# Literature Review

## Physician Compensation Model

Four physician compensation models are commonly used by health care organizations: base salary plus incentive, equal shares, productivity-based compensation, and productivity plus capitation (American Academy of Pediatrics, 2016).

### Base Salary Plus Incentive

The base salary plus incentive model can be in the form of base salary/minimum-income guarantee or salary plus bonus/incentive. This model is widely used in large health maintenance organizations (HMOs), academic settings, and large corporate- and physician-owned practices. As a certain amount of salary is guaranteed, an advantage of such a model is that it offers the highest level of security to physicians, especially those who are young or new to an organization and need time to grow a patient base. On the other hand, such a model may ultimately discourage entrepreneurship or support minimum-effort work standards.

### Equal Shares

The equality/equal shares model is purely based on economics. Profits are equally distributed among the group’s physicians. As physicians’ income is directly related to the group’s profits, this model also works well in preventing waste and over-provision of services and aligning physicians with the financial goals of the group.

The model assumes that everyone is equally skilled, productive, and motivated to work for the best interest of the group. Therefore, a downside is that this model provides no incentive to work harder and thus physicians with lower productivity can take financial advantage of those with high productivity.

### Production-Based Compensation

Under the production- or productivity-based compensation model, physicians are compensated based on billings or collections, or the RBRVS units assigned to procedures or patient visits. The overhead costs are allocated among the physicians. This model motivates and rewards extra efforts by individual physicians. In the meantime, however, it creates a highly competitive environment that may lead to physician burnout and may hamper new doctors from joining. In addition, overhead expenses can be difficult to manage administratively and politically.

### Productivity Plus Capitation

Under the capitation or productivity plus capitation model, capitalized income of the physician group, which includes the prepaid health care premiums and payments from health plans, is distributed among physicians in a nearly equal manner or based on some type of formula. The reimbursement scheme – capitation – discourages the physician group from over-provision of services, and a compensation structure of capitation motivates physicians to work effectively and efficiently. Depending on marketplace factors and the group’s negotiating power, a physician group’s capitalized income may wax or wane, and so does a physician’s compensation.

## What Is a Good Compensation Model or an Incentive Plan?

A compensation framework that works well provides a tangible and aligned structure for a winning patient-provider-system-payer strategy (Gee, 2015). It gives specific direction about what performance the organization desires and effectively focuses physicians on priorities of the organization. It also eases the issue of physician burnout by offering financial security and relieving financial stress. Ideally, the compensation model has unified and common principles across the hospital system, and is flexible enough to allow departments to have their specific metrics, variables and incentives. It should apply to all providers but with specialty or group-specific components (Gee, 2015).

An incentive plan should be sustainable and simple, align with the missions of the organization, have good indicators of what matters, and set challenging but realizable goals. When developing an incentive model, it is important to involve physicians in the early stages and ensure adherence to guiding principles (Dolan, Nesto, Ellender, & Lucchesi, 2017).

## Decrease the risk of Physician Burnout

Although the problem of physician burnout has widely be recognized, as discussed in *3.1*, there is no exact solution to address the problem. A systematic review and meta-analysis in 2016 found that both individual-focused and structural or organizational strategies can reduce physician burnout (West, Dyrbye, Erwin, & Shanafelt, 2016).

The Mayo Clinic summarized nine organizational strategies to promote physician well-being, including acknowledging and accessing the problem of physician burnout, harnessing the power of leadership, developing and implementing targeted interventions, cultivating community in the work place, using rewards and incentives wisely, aligning values and strengthening culture, promoting flexibility and work-life integration, providing resources to promote resilience and self-care, and facilitating and funding organizational science (Shanafelt & Noseworthy, 2017).

Evidence suggests that productivity-based compensation increases the risk of physician burnout (Shanafelt & Noseworthy, 2017). A study suggests that spending at least 20% of time (approximately one day/week) on the dimension of work a physician finds most meaningful can greatly decrease the risk of burnout (Shanafelt et al., 2009).

# The Case: the Incentive Plan of a Department at UPMC

The University of Pittsburgh Medical Center (UPMC) is a prestigious medical center and the largest employer in Western Pennsylvania. The biggest physician group under UPMC is the University of Pittsburgh Physicians (UPP). UPP allows a department to fund its incentive pool in four categories – Clinical, Operational, Chair Distinction Recognition (optional), and Mission Critical (optional) – and requires departments to allot 25% of the incentive pool to the Operational Incentive and 10% to the Chair Distinction Recognition Incentive if a department chooses to fund it.

This essay uses as an example the clinical incentive plan (the Plan) of a medical specialty department (the Department) under UPP at UPMC in Fiscal Year 2018 (FY 18). The purpose of the Plan is to motivate physicians to do the following:

1. Provide care that complies with the Department’s short- and long-term strategies in order to achieve the overall mission and objectives of the Department.
2. Support the Department’s mission and strategic and financial objectives by aligning financial incentives with individual, divisional, departmental and hospital performance measures.
3. Improve the Department’s clinical productivity, quality of care, patient satisfaction and educational activities, as well as attract, retain, motivate and professionally develop high-quality care providers and leaders in the health care market in which the Department provides services.

To be eligible for the Plan, physicians must remain continuously employed by the Department on a full-time or part-time basis, as explicitly specified in his/her Employment Agreement, through the end of the Fiscal Period, which for this essay is the annual period of 7/1/2017 through 6/30/2018. In addition, physicians must meet the UPP criteria for participating in an incentive plan, which includes maintaining a current unrestricted medical license, a current Drug Enforcement Agency (DEA) certificate and active Medicare participating provider status, as applicable or required by the Department Chair, as well as maintaining active Medicare participating provider status and not receiving a written notice of breach of the Employment Agreement during the fiscal year.

 Physicians who are hired during the Fiscal Period are immediately eligible for participating in the Plan on a pro-rata basis, unless otherwise specified in the Employment Agreement. Participation in the current plan or previous plans by an eligible physician does not guarantee his/her participation in subsequent fiscal year plans.

The Incentive Pool is determined as follows. Every physician has a wRVU target (i.e. the Minimum Mandatory wRVU Requirement) set forth in his/her Employment Agreement. The amount of the incentive pool is determined by the product of the Department’s average net patient revenue times the total wRVU performed in excess of individual wRVU targets. Based on the financial performance of the Department, the annual operational budget contributes funding to Incentive Expense. The Incentive Pool cannot exceed the Incentive Expense allocated.

 All performance and productivity targets and formulas for the targets in the Plan are set at the beginning of each fiscal year in sufficient detail so that they can be objectively verified. Prior to the start of each fiscal year, the Department Chair determines who is eligible to participate in the Plan and notifies them in writing of the specific target objective upon which their incentive payment will be based.

Under no circumstances can performance targets be based on the value or volume of referrals or other business generated but not personally performed by the eligible physician. For a medical service to be counted forward the calculation of a productivity bonus, the service must be medically necessary, properly documented, and consistent with any utilization review, case management, best practices and guidelines that UPP adopts.

## Measures

### Operational Measures

Only a physician who has met the wRVU targets is eligible to earn the Operational Incentive. In case of the occurrence of one or more Never Events for which a physician is found solely responsible, his/her eligibility will be reduced no less than 50% of the potential operational incentive payment for each Never Event for which he/she has sole responsibility during the Fiscal Period. The clinical members of the UPP Executive Committee determine if a physician is solely responsible for the occurrence of a Never Event on an individualized peer-review process.

Every operational performance target is based on reports or data from reliable third parties, such as Epic, the electronic health records system used by the Department, and the Corporate Compliance Department, in order to make sure that the measures can be objectively verified. If through no fault of an eligible physician insufficient data exist to compare the physician’s performance against the benchmark, the operational incentive associated with that measure will be deemed to have been earned.

The operational measures include four areas, each of equal weight of the total Operational Pool. If a Measure has subparts, each subpart is of equal weight within that Measure. The weight of each Operational Measure in the Operational Pool is shown in *Table 1*. Physicians are eligible to earn the share of a Measure, or subpart of a Measure, individually and do not need to meet other measures, or subpart of a Measure to do so, unless meeting all subparts is expressly set forth as a condition of earning that respective Measure.

Table 1 Weight of Each Operational Measure in the Operational Pool

|  |  |  |  |
| --- | --- | --- | --- |
| **Operational Measure Name** | **Operational Measure Detail** | **Weight in the Total Operational Pool** | **Sub-Total** |
| Documentation  | Closure of Epic Encounters | 8.33% | 25% |
| Completion of Surgical Dictation  | 8.33% |
| Credentialing  | 8.33% |
| Physician Communication  | HCAHPS (Communication with Doctor Domain)  | 12.5% | 25% |
| CG CAHPS (Rate Provider Domain, Recommend Provider, and Provider Communication Domain) | 12.5% |
| Education | Annual Compliance Training | 12.5% | 25% |
| Annual training modules in U-Learn | 12.5% |
| Legal/Regulatory | Completion of UPMC Conflict of Interest | 25% | 25% |

#### Documentation, Education, and Legal/Regulatory Measures

To receive full operational incentive payment for documentation, an eligible physician must 1) close at least 95% of Epic Encounters within seven calendar days of the Date of Service, 2) finalize at least 95% of Surgical Dictation for billing within three calendar days of the Date of Service, and 3) submit full, complete and accurate credentialing forms, information and signatures on or before the deadlines established by UPP Credentialing for all required initial and subsequent payer enrollment.

To receive full operational incentive payment for education, physicians must complete the following two subparts within two weeks of published grace period: 1) completion of the Annual Compliance Training, and 2) completion of the annual training modules in U-Learn. The completion status is determined according to the reports issued by the UPMC Health Services Division (HSD) Human Resources or Compliance Department, the centralized department responsible for human resources and related affairs and thus independent from the Department.

To receive full operational incentive payment for the legal/regulatory measure, physicians must complete the UPMC Conflict of Interest within two weeks of the published grace period. The completion status is determined by reports issued by the Corporate Compliance Department, which is independent of the Department.

#### Physician Communication Measure

To measure physician communication, the Department uses the results of the HCAHPS surveys and the CG CAHPS surveys, which are based on Hospital Press-Ganey-Based Generated Report Card for Individual Physicians, and Outpatient Individual Physician Press-Ganey-Based Generated Report Card, respectively.

For the results of surveys returned for a campus or office to be statistically reliable, the campus or office must have 30 or more returned surveys. If no single campus or office location where a physician practices has 30 or more surveys returned for a Measure, the physician will be deemed to have earned the operational incentive associated with that Measure.

Eligible physicians’ performance is measured in all three questions under the Communication with Doctor Domain if HCAHPS measures apply, and in all three domains – Rate Provider Domain, Recommend Provider, and Provider Communication Domain – if CG CAHPS measures apply.

The Department will use the question (HCAHPS) or domain (CG CAHPS) for which the physician receives the highest score to determine if the measure’s respective benchmarks are met. If an eligible physician’s score is higher than the 75th percentile of the national benchmark, s/he will receive full incentive payment for the Measure. If the score is between 50th-75th percentile or the score is less than 50th percentile but increases by 3% over FY17, s/he will receive 50% of the incentive. Otherwise, s/he will receive no incentive for the Measure.

#### Distribution of Operational Pool

The amount of the operational pool will be divided by the total units of wRVUs in excess of individual targets performed by all eligible physicians during the Fiscal Period to determine the amount of available incentive payment per unit of excess wRVU. The maximum amount of incentive payment a physician will earn is equal to that operational incentive payment per wRVU times the physician’s actual wRVU personally performed by him/her in excess of his/her wRVU target, with the subtotal reduced by the amount of the UPP fringe benefit costs, which equals 12% of the unadjusted product.

For example, if Dr. X, a physician in the Department who is eligible for the incentive plan, personally performed 5,000 wRVUs in FY 18 and his wRVU target is 3,600 wRVUs, the excess wRVU is 1,400 (=5,000-3,600). Assuming the calculated amount of operational incentive per excess wRVU in FY18 is $10/wRVU, then the maximum operational incentive payment Dr. X could potentially earn will be $12,320 (=1,400\*10-1,400\*10\*12%) if Dr. X meets all four operational Measures. If he, however, did not close at least 95% of all Epic Encounters as detailed in the Plan, he will be not eligible to earn the incentive associated with this Measure. As a result, he will be entitled to an operational incentive of $11,293.74 (=12,320-12,320\*8.33%).

If an eligible physician has multiple wRVU targets during the Fiscal Period, the wRVU target will be calculated based on the weighted wRVU targets of all signed Employment Agreement for the Fiscal Period. The Operational Incentive shares not earned by any eligible physician that remain in the Operational Pool will be retained by the Department for its own purposes.

### Clinical Measure

Physicians who meet all requirements of the Plan are eligible for the Clinical Incentive. The Clinical Pool is derived by the following formula: for each wRVU personally performed by an eligible physician in excess of his/her wRVU target as defined is his/her individual Employment Agreement, the Department will fund the Clinical Pool at a certain amount per wRVU. The amount is fixed for a Fiscal Year. The Clinical Incentive shares not earned by any eligible physician that remain in the Operational Pool will be retained by the Department for its own purposes.

The amount of Clinical Incentive that an eligible physician will receive is calculated as follows: the product of that amount per wRVU times the number of wRVU personally performed by the physician in excess of his/her wRVU target (as defined in his/her individual Employment Agreement and, if applicable, adjusted at the end of the Fiscal Period by the actual services personally performed by the physician at the Veterans Administration Hospital as tracked by the Department), with the subtotal reduced by the amount of the UPP fringe benefit costs associated with the unadjusted product at the FY 17 rate of 12%.

A special rule applies when an eligible physician works on an industry-sponsored clinical trial. In addition to wRVU associated with clinical services billed to third-party payers, at year-end, wRVU credits will be given to physicians for whom the Department receives actual funding support (exclusive of Administrative salary support) for base salary efforts on industry-sponsored clinical trials. Under such circumstances, the physician will receive wRVU credit that is equal to the quotient of the amount of the base salary support the Department receives for the physician divided by the amount of the Department’s average net patient revenue per wRVU. This incentive credit applies only to the Clinical Incentive.

For example, if eligible physician Dr. X performed 5,000 wRVUs in FY2018 and his wRVU target is 3,600 wRVUs, his unadjusted excess wRVUs is 1,400 (=5,000-3,600). Assume the Department’s average net patient revenue is $70/wRVU. If the Department receives $40,000 base salary support for his work on an industry-sponsored clinical trial, the physician will get wRVU credit of 571 (=40,000/70). Assuming the Department determines to fund the Clinical Pool at $21 per wRVU, the physician will be entitled to a clinical incentive of $36,424 (= (1400+571)\*21\* (1-12%)).

If an eligible physician has multiple wRVU targets during the Fiscal Period, the wRVU target will be calculated based on the weighted wRVU targets of all signed Employment Agreements for the Fiscal Period.

### Chair Distinction Recognition Measure

Chair distinction recognition payments are for physicians who realize extraordinary results, achievements and/or accomplishments during the Fiscal Period that are outside of the scope of what is being measured in the Plan and are not compensated in any other component of the Plan or the eligible physician’s compensation package, such as faculty meeting attendance and completion of residency review.

The Chair Distinction Recognition payment cannot be used to adjust the results of other incentive calculations under the Plan. Under no circumstances can the payment result in a reduction in the total incentive payment to a physician eligible for the Plan. The Chair Distinction Recognition payments must be less than or equal to 15% of the total payments made under this plan.

#### Distribution of Chair Distinction Recognition Incentive

The Chair Distinction Recognition Pool is funded in a similar way as the Clinical Pool: for each wRVU performed by an eligible physician in excess of his/her wRVU target, the Department will fund the Chair Distinction Recognition Pool at a certain amount per wRVU. The amount is determined and fixed for a Fiscal Year. The maximum amount of Chair Distinction Recognition payments an eligible physician can potentially receive is equal to that fixed amount per wRVU times the wRVU personally performed by the physician in excess of his/her wRVU target set forth in his/her Employment Agreement. Any Chair Distinction Recognition funding not earned by any eligible physician that remains in the Chair Distinction Recognition Pool will be retained by the Department for its own purposes.

Eligible physicians can earn one credit by meeting one requirement, such as receiving a flu shot or completing flu declination, attending a Faculty Meeting, or participating in a resident interview. In FY 2018, all physicians have a chance to meet 12 requirements and some will have a chance to meet eight. Those who score 9 or more will receive 100% of his/her potential Chair Distinction Recognition Incentive payment; those who score 7 or 8 will receive 75%; those who score 6 will receive 50%, those who score 4 to 5 will receive 25%; and those who score 3 or less will not receive Chair Distinction Recognition Incentive payment.

# Case analysis: Evaluation of the Case

## How the Department Realizes the Two Goals of The Plan

### Attract, Retain, Motivate and Professionally Develop Physicians

Although administrative work is important to the operation and development of the Department and UPMC, physicians usually do not like it. Therefore, when the Department Chair (the Chair) and the Department Administrator (the Administrator) developed the Plan, they incorporated some operational metrics to use financial incentives to motivate physicians to comply with the administrative requirements. They also talked with every physician to ensure that the Plan incorporates physicians’ opinions.

 Some physicians conduct clinical work and take leadership responsibilities. To balance their clinical and managerial efforts, the Department offers them a high base salary that includes compensation for the leadership role. Some physicians see patients at VA hospitals and some lead industry-sponsored clinical trials. Their professional efforts are recognized: their clinical incentive payments are based on an adjusted wRVU so that they can get the bonus for working on clinical trials or providing care to veterans.

When relocating to a new area or joining a new practice, physicians usually need some time to build their patient base. Those who do not perform many wRVUs can also receive a financial incentive of up to $1,000 from the Value Incentive Plan by providing high-quality care.

Excessive workload and clerical burden are two factors contributing to physician burnout (Wallace, Lemaire, & Ghali, 2009). Administrative staff work to decrease as much clerical burden of physicians as possible. Every physician in the Department has or shares with other physicians an assistant to help him/her to deal with administrative jobs. As for the Plan, the Administrator will periodically present to physicians in the Department the Measures and formulas to calculate incentives as well as the rationale behind the Measures in order to educate physicians on the Plan and address questions and concerns. To help physicians have a picture of their performance, the Administrator and other administration staff periodically check physicians’ performance against the metrics and notify a physician if they find the physician has suboptimal performance on a metric such as the timely closure of Epic encounters. The Administrator will update every physician on a monthly basis his/her wRVUs performed each month, and send a line chart that compares the wRVUs performed by a physician to wRVUs performed by other physicians.

According to the Administrator, overall, the Plan works well in attracting, retaining, motivating and professionally developing physicians who are motivated by financial incentives.

### Support the Mission and Strategic and Financial Objectives

As part of a not-for-profit medical center, the Department aims to provide the best care possible, to be on the cutting edge of research, and to educate and train the next generation of physicians through residency and fellowship training programs. The Department Chair periodically updates the Department Strategic Plan, which contains the mission statement. Physicians can access the information of the Department’s strategies and goals via the annual report, Department website, and bi-monthly faculty meetings. The Department has a strict agenda for faculty meetings. The Department Chair always updates physicians on what the Department is focused on and what is important, and motivates faculty to align with priorities. The Chair also updates physicians on the strategic meeting that the Chair attends with UPMC leadership and the Dean of the University of Pittsburgh School of Medicine, new business such as updating the clinical plan, a new physician coming, opening up a new service, and acquiring another practice. Faculty in each clinical, research and service area will update the group on what is going on in their area, what is important to them, and what their next steps are.

The Administrator makes sure that the measures set in the Plan are aligned with the Department’s short- and long-term strategies and an incentive plan draft is always reviewed and approved by the Chair before coming into effect. In addition, the Plan explicitly specifies that productivity bonuses must be based on personally performed services or charity care encounters, and under no circumstances can performance targets be based on the volume or value of referrals or other business generated by the eligible physician. This is aligned with the mission.

## Quality of Care Reflected in The Plan

The Plan incorporates three quality-related metrics: sole responsibility of a Never Event, CAHPS scores and provision of unnecessary medical care.

The Department holds physicians accountable for serious malpractice by relating their incentive payments to their responsibility for a serious complication. The Plan requires that a physician who has sole responsibility for one or more Never Events will lose at least half of his/her eligibility for Operational Incentives.

HCAHPS and CG CAHPS are not only commonly recognized patient satisfaction surveys, but also determinants of payments from insurers. The Department relates CAHPS scores to Operational Incentive payments.

The Department encourages physicians to provide services that are medically necessary and follow UPP-adopted guidelines, utilization review, case management, and best practices by excluding services that are not part of the calculation of incentive salary. This policy is aligned with the Section 1862 of the Social Security Act (the Act), which stipulates that payment can be made only for care that is reasonable and necessary. To ensure that services are medically necessary, a centralized compliance department of UPMC routinely randomly checks a physician’s services by pulling and auditing the patient charts and bills of the physician. Each doctor across UPMC is audited two to four times a year. If the audit found that a physician might have conducted unnecessary services, s/he receives a “grade red.” In the Department, receiving a grade red may result in a reduction in the Chair Distinction Recognition incentive payments.

### Trade-Off between Quality and Productivity according to the Plan

Because the Plan is volume-based and is essentially based on wRVU, an increase in productivity (wRVU performed) may offset the influence of failing a quality-related benchmark, such as the Physician Communication Benchmark. Therefore, by making the effort to produce more wRVU rather than improving quality of care or patient satisfaction, a physician is able to earn the same or even more incentive payments. The following calculations analyzes the trade-off.

Taking the Physician Communication Benchmark as an example, assume that a physician, Dr. Y, has the benchmark of *b,* performed *x* (x>b) wRVUs in FY 18, and is eligible to earn the full incentive payment, $M. Dr. Y wants to earn more incentive by performing more procedures (more wRVU), and the only way for him to do so is to reduce the time for communicating with patients, which makes him ineligible or the incentive associated with the Physician Communication Measure (25% of the Operational Pool).

Assume that if Dr. Y produced additional *y* wRVUs, he could earn $M of incentive in FY 18. The operational, clinical, and clinical incentive payment in FY 18 is assumed to be i1, i2 and i3 dollars per wRVU, respectively. Since the amount of additional total incentive payments should equal the amount of incentive associated with the Physician Communication Measure (25% of the Operational Pool), the following equation should apply:

 (75%\*i1+i2+i3)\*y = 25%\*i1\* (x-b)

The equation gives the results as follows:

y = .25(x-b)/(.75i1+i2+i3)

y/x = .25(1-b/x)/ (.75i1+i2+i3)

y/x represents the minimum increase rate of annual wRVU to offset the impact of failure to achieve the Physician Communication benchmark. The resulting equations are used to calculate the actual minimum increase rate for an eligible physician to offset the impact of failure to reach the Physician Communication Benchmark in FY 18. Based on the actual rates set forth in the Plan, the individual benchmark of wRVU, and wRVU personally performed by physicians eligible for the Plan, the calculating result is 2.2%. In other words, as long as a physician can perform 2.2% more procedures (increase annual wRVU performed by 2.2%), poor communication with patients will have no negative financial impact for him/her.

 The rate seems too low to motivate physicians to better communicate with patients. From the mathematical perspective, the major reason is that the Clinical Incentive payment for each wRVU produced is approximately 2.5 times and 7 times higher than the payment for the Operational Incentive and Chair Distinction Recognition Incentive, respectively, not to mention that the incentive payments related to quality-related measures take up only part of the Operational or Chair Distinction Recognition Pool. On the other hand, the resulting equations indicate that the more wRVUs one performs in excess of his/her benchmark, the higher the opportunity costs for him/her to fail a quality-related benchmark.

## Concerns with wRVU-Based Physician Compensation

The Department uses the compensation model of base salary plus incentive. The base salary is negotiated between a physician and the Department before the physician signs the Employment Agreement for the fiscal year and is usually fixed for a fiscal year. As mentioned in *4.1.1*, such a compensation model offers a high level of security to physicians but may encourage minimum-effort work standards. A wRVU-based incentive plan can prevent such behaviors from happening.

Despite all the advantages, there are some major concerns about using wRVU-based physician compensation. In the first place, as a product of the fee-for-service payment mechanism, wRVU-based compensation is, in essence, paying for more work, which contrasts with the outcome and value-driven federal mandate, and increases the risk of physician burnout (Shanafelt & Noseworthy, 2017).

Secondly, physicians are paid as “piece workers.” Innovations and adoption of new technology are seriously restricted by the ponderous, cumbersome administrative procedures to update CPT or HCPCS codes. Telehealth is a typical example of how the slow process of changing the reimbursement system hinders the wide application of convenient and low-cost technology. Integrated home-based care is another example of care innovation slowed down by the reimbursement scheme.

Last but not least, encouraging more work performed may also risk the healthy long-term development of health care professionals and medical departments. Hungry for more wRVU, specialists may become generalists, risking losing their expertise as a specialist (Altman, 2018, October 2). Physicians lack motivation to take an entrepreneurial approach to grow their team, mentor junior physicians, advance with changing best practice, and evolve.

## Case Summary

UPMC utilizes a unified compensation model that has common principles across the system and also allows departments to have their specific metrics and variables, which is a generally good compensation structure for a health organization.

Overall, the Plan is effective. First of all, it aligns with the Department’s missions and strategies, as is discussed in *5.1.2*. The Plan has helped the Department to realize its short-term financial goals. According to the Administrative, the plan works well from the financial perspective. The Department has had a satisfying financial performance over the recent years, and physicians are motivated to see more patients and perform more procedures. Secondly, the Plan is financially sustainable. The Incentive Pool is determined by the Department’s net patient revenue per wRVU and the total excess wRVU performed by physicians in the Department. In addition, by requiring that the total incentive pool cannot exceed the amount of Incentive Expense set in the Department’s annual operating budget, the Department ensures that paying physician incentives will not jeopardize the Department’s financial condition. Thirdly, metrics included in the incentive plan are good indicators of what matters. Physicians can earn a large incentive by performing more work, and the Plan includes a number of administrative measures. Fourthly, the goals set forth are challenging but realizable. Some physicians earned substantial incentive payments while others earn not as much if any. Last but not least, the Plan is simple and clear. The Plan sets the performance and productivity targets and formulas for the targets in sufficient detail. By periodically presenting and explaining the Plan, Administrator makes sure that every participant in the Plan understands it. The Administrator and Administrative staff also notify physicians of their progress in reaching those performance targets, as discussed in *5.1.1.*

The Plan has some limitations, too. The incentive plan uses financial incentives to motivate physicians. For most physicians in the Department, financial incentives work well. Others, the minority, work because of other reasons, such as just enjoying providing care to others and helping others. For individuals not motivated by dollars, financial incentives may not work as well.

As a volume-based incentive plan, it tends to give physician pressures to work harder and thus increase the risk of burnout despite the Department’s efforts to decrease their clerical burden. Also, the Plan does not assign enough value to quality of care or cost restriction. Indeed, the Department has a Value Incentive Plan that rewards physicians for providing high-quality of care, yet physicians can only earn up to $10,000 incentive payments for complying with some quality requirements, which is approximately one-tenth of the average incentive payments that physicians received from the Plan in FY 18. The amount of potential incentive may not be attractive enough to realize the Department’s quality-related goals. With shifting value-based reimbursement models, current metrics in the Plan may be insufficient to motivate physicians to focus on what is important to adapt to new payment models.

The Plan discussed in this essay applies to most, but not all physicians in the Department. Some physicians in the Department use other incentive plans that have nuanced differences from the Plan discussed in this essay.

# Recommendations

## Care about Physician Well-Being

The Chair and Administrator should keep in mind that physicians need time to complete administrative work. When assigning administrative tasks, staff should carefully set the deadlines so that physicians have enough time. When setting performance targets such as the minimum wRVU to be performed, maintenance of certification or completion of training, the Administrator should take into consideration professional time for physicians to complete these tasks. In addition, physicians should have at least 20% of their time to focus on activities they find most meaningful (Shanafelt et al., 2009). Such activities could involve caring for specific type of patients (e.g., the underserved, or patients with a specific health condition), quality improvement work, community outreach, mentorship, teaching student/residents, or leadership/administration (Shanafelt et al., 2009).

The Department should encourage physicians to build community and connections with colleagues (Shanafelt & Noseworthy, 2017). The Department currently does not formally have non-financial incentives, but physicians are encouraged and motivated in a “soft” way to align with the goals and strategies of the Department: The Department Chair periodically talks with physicians about their life and work, and recognizes accomplishments in an email sent to all physicians in the Department.

 For younger physicians, a salary without incentives or with guaranteed shared incentive may give them a sense of security that allows them to develop their careers and patient base without having to worry about productivity or efficiency measures early on.

## Potential to Accommodate to the Shifting Value-Based Reimbursement Model

To accommodate to a value-based reimbursement model, one potential area for improvement is spending variation. Studies have shown great variance in Medicare spending for the same condition across different geographic regions, and that higher expenditures do not correspond to better care outcome (Kibria et al., 2013). The amount of difference could potentially be saved with the right incentives and capabilities.

The increasing availability of quality data in the industry enables hospitals to compare themselves to others with regard to quality, costs and patient satisfaction and accordingly make changes to their operations to adapt to value-based models. Quality data also help physicians and researcher to study where the spending variation come from and thus make improvements clinically or administratively. In addition, engaging professionals from the quality department on the compensation committee can facilitate incorporating quality measures in the incentive plan.

# Conclusion

UPMC implements a unified compensation model and allows specialty departments to develop specific metrics. The Department of interest for this essay utilizes a compensation model of base salary plus volume-based incentive, which offers a high-level of financial security as well as motivate for productivity.

The Plan is the result of the Chair’s and Administrator’s efforts to realize the short- and long-term strategic goals of the Department plus opinions from physicians. The Department Administrator drafts and updates the plan and the Chair reviews and approves it, which ensures that the Plan is aligned with the short- and long-term strategic goals of the Department. The incentive pool is influenced by the Department’s financial performance. It includes operational, clinical and citizenship incentives, which takes up 25%, 65% and 10% of the pool, respectively. Overall, the incentive plan is clear and effective from the financial perspective. The Department has tried to decrease physicians’ clerical burdens when executing the Plan. So far, the Plan works well to realize the two goals set forth: 1) attract, retain, motivate and professionally develop physicians, and 2) support the department’s mission and strategic and financial objectives.

The Plan rewards physicians for working hard and completing administrative tasks. Essentially, the Plan is based on wRVU, which leads to some concerns, including lack of incentives for value, hindered adoption of technology and innovative care delivery model, and unhealthy long-term development for both physicians and the Department. Limitations of the Plan include ineffectiveness for some physicians who are not motivated by financial incentives and insufficient value-based metrics.

A limitation of the analysis is that the information about the case discussed in this essay is based on the document of the Incentive Plan, the data of incentive payments in FY 18, and narratives of the Department Administrator, who has eight years of experience working as the Administrator of the Department. The author did not have a chance to interview physicians working at the Department nor collect data to demonstrate the effectiveness of the Plan. It is likely that some comments about the effect of the Plan are subjective.

In the end, this essay provides recommendations on decreasing the risk of physician burnout and accommodating to the shifting value-based reimbursement model. This essay recommends that the Department to do the following:

* Demonstrate that the Department cares about the well-being of its physicians,
* Allow enough time for physicians to complete administrative tasks,
* Allow physicians to spend at least 20% of professional time on activities that the physician finds most meaningful,
* Encourage physicians to build connections with colleagues,
* Carefully choose the compensation structure for younger physicians, and
* Develop data-driven strategies to eliminate spending variation and improve daily operation.

By analyzing the incentive plan of the Department, this essay aims to identify potential areas of improvement to help the Department improve physician satisfaction and gradually develop a value-based incentive plan. In addition, with increasing mergers and acquisitions occurring in the healthcare market, both acquiring and acquired groups usually need to redesign their compensation models to fit the dramatic change in organization. By presenting and analyzing an effective incentive plan, this essay provides information and ideas for those organizations that are facing the challenge of choosing an appropriate compensation structure and an incentive model.

Ultimately, the framework of the incentive plan should “facilitate a bridge to more risk-based, population health focused care delivery system as organizations gradually realign measures, metrics and compensation to value-driven growth models.” (Gee, 2015, para. 2)

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