

Impact of an Incentive Compensation Plan on Academic Productivity

Jonathan H. Chung, MD, David M. Paushter, MD, Gregory L. Katzman, MD, MBA

INTRODUCTION

Motivation is a key facet of management, especially in the health care setting, where individual tasks are typically complex and intellectually challenging. Though performance-based models work well for relatively simple and repetitive tasks, such as in manufacturing or manual labor, many have argued that this model of motivation does not work well for more complex tasks [1]. Regardless, incentive- and performance-based compensation plans are becoming nearly ubiquitous in the health care field [2]. However, there is a relative paucity of data in regard to whether the incentive plans in the health care field are effective in producing positive changes in physician behavior, especially in the long term.

Previous papers describing incentive plans within academic medical departments have mainly focused on the description of the plan itself with relative lack of outcomes data. Few studies that have evaluated the outcomes of academic medical incentive plans are limited by short temporal ranges, mostly restricted to 3 years or less [3-5]. Therefore, the long-term effects of an incentive plan in the academic medical setting are largely unknown.

WHAT WAS DONE

In our academic radiology department, we created an incentive bonus

plan (Appendix 1, available online), which stressed the research, programmatic, and educational pillars of academic medicine while still allocating a small clinical productivity component for those who clearly exceeded the norm in this regard. The amount of the incentive bonus offered was relatively small (\$5,000 total possible) compared with the total compensation. Our first goal was to determine the influence of an academic medical incentive plan by analyzing the resulting changes of salary payout levels awarded by the incentive plan over a 5-year period. A secondary goal of this study was to determine whether such a plan, primarily focused on nonclinical endeavors, would lead to an increase of academic productivity (research, programmatic, and education).

OUTCOMES

Incentive Bonus From Fiscal Year 2012 to 2016

During the first year the incentive plan was in place (FY 2012), the average incentive bonus was \$1,128 $\pm$ \$1,145 for 40 faculty members. Over the 5 years of the study, the average incentive bonus for faculty increased markedly during the first 3 years and then plateaued (Fig. 1). By FY 2016, the average incentive bonus had increased significantly to \$2,608 $\pm$ \$1,799 for 36 faculty members (P value $< .001$).

There were 28 faculty members who were eligible for an incentive bonus across all 5 years of the incentive plan (Fig. 2). The average baseline (FY 2012) incentive bonus for this subset of faculty was \$1,357 $\pm$ \$1,193 and had increased significantly to \$2,768 $\pm$ \$1,808 by the end of the evaluation period in FY 2016 ($P = .001$). There was no significant increase in the percentage of the incentive bonus derived from clinical productivity during the 5-year period of the study. On average, only 13% of the incentive bonus was derived from clinical productivity, implying that the increase in incentive bonus over time was largely owing to nonclinical increases in productivity.

Incentive Bonus From Fiscal Year 2012 to 2016 Relative to Rank

Of the 28 faculty members who were eligible for an incentive bonus across all 5 years of the incentive plan, 2 were clinical associates, 6 assistant professors, 10 associate professors, and 10 full professors. Given the small number of clinical associates and their nonacademic designation, they were excluded from subset analysis. The baseline average incentive bonuses in FY 2012 were highest for full professors and similar for assistant and associate professors; assistant, associate, and full professors

Incentive Bonus Plan Historical Performance: All Faculty

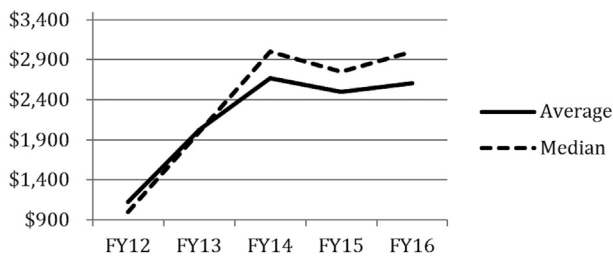


Fig 1. Average and median incentive bonus payouts over 5 fiscal years (all faculty).

were awarded \$1,000, \$800, and \$2,300, respectively. By FY 2016, the average incentive bonuses for assistant, associate, and full professors had increased to \$2,083, \$2,700, and \$3,700, respectively. The largest increase in incentive bonus over that period was gained by associate professors (\$1,900), with smaller but substantial increases realized by full professors (\$1,400) and assistant professors (\$1,083).

Our incentive plan study spanned 5 fiscal years, remained unchanged during this duration, and controlled for the changes in faculty over the course of the observation period. Though there are other studies that have analyzed the effects of incentive plans in the medical field, most were of much shorter

duration (with many as short as a single year) [3-5]. Furthermore, the vast majority of previous studies did not control for faculty attrition and new hires during the course of the study, which is a potential source of bias [6,7]. An academically directed incentive plan is created to stimulate and reward a shift in culture or philosophy. Therefore, it is likely that subsequent hires will reflect this new direction. Therefore, if the data are not analyzed with this in mind, the results may be artificially skewed toward a higher departmental bonus payout over the course of the assessment.

Only a handful of studies have described small bonus plans, which only account for a very small

proportion of the physician salary, similar to ours [8,9]. One incentive plan, which only rewarded academic performance, put 1% to 5% of the practice plan receipts at risk and did not show a substantial improvement in performance based on bonus points accrued [8]. Our incentive bonus plan only accounted for a small percentage of physician salary (total bonus compensation of \$5,000) but convincingly demonstrated improvement in physician performance over 5 academic years. Whether this desirable change in behavior was directly due to the small monetary gain associated with the incentive bonus plan or other concomitant factors is unknown. We could not control for the motivational effect of nonfinancial variables in our assessment—one of the most important being the respect for authority phenomenon [10,11]. The incentive bonus plan was created by our chairman, vice-chairman, and section heads. Knowledge that the targets and goals of the incentive plan were codified by our leadership team may have alone been enough motivation to inspire the desired changes in our faculty even if they were not linked to any monetary reward. It is unclear if a similar small incentive bonus plan, crafted for the nonacademic setting, would result in the same results, given that the formal hierarchy—and the accompanying ladder of authority—found in academic centers often does not exist in the private practice or hybrid practice environment. This would be the next logical study in this line of research.

Over the course of our assessment, associate professors had the largest increase in incentive bonus relative to baseline. The underlying reason for this phenomenon is likely

Incentive Bonus Plan Historical Performance: Uniform Faculty Participation

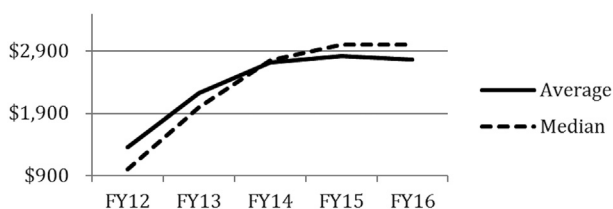


Fig 2. Average and median incentive bonus payouts over 5 fiscal years (faculty who were employed for all 5 fiscal years).

Download English Version:

<https://daneshyari.com/en/article/5726563>

Download Persian Version:

<https://daneshyari.com/article/5726563>

[Daneshyari.com](https://daneshyari.com)