Performance-based healthcare and its effect on cost access and quality in the us ...

Technology, Innovation

INTRODUCTION

The healthcare system has been proven to have inherent flaws in its system, the foremost being the ability to charge patients top dollar for medical procedures and examinations that so not rectify or correctly identify the problem (Rosenthal et al., 2007). The current system for medical care in the United States is a fee for service arrangement, wherein medical professionals set a specific fee which the patient must pay after the service is rendered, regardless of the perceived quality or effectiveness of the procedure or examination. There is then perceived to be a wide gap between the pay medical health professionals receive and their level of performance or skill (Rosenthal et al., 2007).

Performance-based healthcare is a movement that is intended to provide accountability to health care professionals by setting quality standards that have to be met in order to be paid certain rates. This concept is a culmination of accountability, adding incentives, and reducing cost based on efficiency, while maintaining an optimized level of access to care and quality, not forgetting the objective reason for doing so: the health of the population being cared for. In this research paper, studies on the effectiveness of performance-based healthcare will be assessed and critically evaluated, and the literature involved in the movement will be reviewed thoroughly. A qualitative study will also be prepared to examine the potential effects of performance-based healthcare in a health care setting, from financial, quality and access standpoints.

PART 1 – EXAMINING STUDIES

In “ Early Experience with Pay-for-Performance,” Rosenthal et al. (2007) set up a sample pay-for-performance program in an intervention group (a California physician group) and tracked another group for comparison (a Pacific Northwest physician group) in order to examine its effects. By evaluating the quality improvement experienced by the California network in comparison to the Pacific Northwest network as a control, the researchers were able to look at quality trends that showed how the pay-for-performance program affected the intervention group (Rosenthal et al., 2007). Threats to validity included the need for California and Pacific Northwest groups to experience the same quality improvement trends in order to provide an effective comparison, which was far from testable. It was additionally difficult to determine just what improvement came about as a result of the pay-for-performance incentive and not other factors (Rosenthal et al., 2007).

The results indicated that the intervention group experienced only a limited improvement in quality in the group experiencing the pay-for-performance program (Rosenthal et al., 2007). While the groups that were already the lowest scoring on their threshold improved the most, many of the existing groups were already above the quality threshold, and thus were less inclined to improve their performance, as the status quo was already satisfactory (Rosenthal et al., 2007). The implications made in the study are that the pay-for-performance program quality thresholds are being met, in many ways punishing already well-performing groups for not improving well enough, and

discriminating against low-performing groups that cannot improve past a certain point due to mitigating factors (Rosenthal et al., 2007).

The study was performed admirably, with clear controls and objectives in place. As they admit, however, " the uniqueness of PacifiCare's history and California health maintenance organization market...limits the generalizability of these results to other settings," meaning that whatever they find is very difficult to apply to different networks (Rosenthal et al., 2007, p. 1793). In the end, however, the study was very thorough and educational, shedding substantial light into the applicability and return on investment a pay-for-performance program provides (Rosenthal et al., 2007).

In " The Effect of Performance-Based Financial Incentives on Improving Patient Care Experiences: A Statewide Evaluation," Rodriguez et al. (2009) performed a study on the patient care experiences of a performance-based healthcare system. As there had been no prior assessment of the effects of these incentives on patient care, this study was an attempt to fill in the gap in that research (Rodriguez et al., 2009). In order to perform this research, over 1400 commercially insured patients were surveyed in order to assess their experiences with their doctors who existed in financial-incentive programs, using composite scoring and linear questions to determine increases and decreases in quality (Rodriguez et al., 2009). Some of the limits of the study included the lack of a control group in the experiment, making the assessment of secular trends in performance improvement impossible (Rodriguez et al., 2009). There were also instances of non-

response in the assessment of quality improvement, but that was thought to not make the integrity of the responses less valid (Rodriguez et al., 2009).

According to the study, “ in the context of statewide measurement, reporting and performance-based financial incentives, patient care experiences significantly improved” (2009, p. 1281). Communication between physicians and patients, as well as office staff interaction and coordination of care, were enhanced significantly once there was extra money involved based on how well a physician cared for his or her patients (Rodriguez et al., 2009). Being the first study to tackle the “ relationship between the use of performance-based financial incentives and changes in patients’ experiences over time in the US,” the first and most compelling piece of evidence that improvements can occur as a result of one of these programs is provided (Rodriguez et al., 2009).

In “ Performance-based financing for better quality of services in Rwandan health centers: 3-year experience,” Rusa et al. (2009) examine the effects of performance-based financing on a group of health centers in Rwanda in order to assess their effectiveness. Because of the need to meet the Millennium Development Goals by 2015, Rwanda needs to find effective ways of administering quality health services – this study is intended to see how well pay-for-performance would work in that situation (Rusa et al., 2009). A performance based financing strategy was implemented in these health centers in 2005, expanding in 2006, and their effectiveness was catalogued for each year after that (Rusa et al., 2009). The data was analyzed by district supervisors each month, who created the data through

their appraisal of the health centers' work (Rusa et al., 2009). Threats to validity included the ability of the supervisors to collect accurate and pertinent data regarding the performance of the health centers, which was handled through proper training and experience (Rusa et al., 2009)

According to the results, performance based financing had a positive effect on growth monitoring consultations and institutional deliveries (Rusa et al., 2009). Quality care substantially increased with the administering of this type of program. This often came, however, at the expense of already overworked health centers, as there were often insufficient numbers of health workers to go around (Rusa et al., 2009). " If PBF is an adequate strategy to increase efficiency of existing staff by improving quality of health services, it is unclear if it will correct for the supply of health workers that is necessary to overcome the shortage and misdistribution of health workers" (Rusa et al. 2009, p. 836). Overall, this study contributes to the effectiveness and utility of a performance based healthcare system on a struggling health care network, especially in an impoverished country such as Rwanda. The study presents the network as a viable method of providing needed quality health care to those who cannot normally receive said health care (Rusa et al., 2009).

PART 2 – LITERATURE REVIEW

Importance and utility of performance-based health care

As healthcare becomes more and more " the responsibility of the state," the importance of providing incentives to provide the highest quality of health

care possible becomes clear (Forsberg, Axelsson and Arnetz, 2010, p. 102). It then makes sense to offer greater money and bonuses to those health care providers and professionals who provide the highest level of quality care to their patients (Forsberg, Axelsson and Arnetz, 2010). With the application of performance-based reimbursement, efficiency and methods to improve the health care system is considered a great deal in order for medical groups and providers to work toward those incentives (Forsberg, Axelsson and Arnetz, 2010).

This style of health care is particularly considered as an alternative in developing countries, where cost effectiveness is important due to the lack of sufficient funds allotted to these resources (Kalk et al., 2010). The Millennium Development Goals created by the United Nations require developing countries to reach certain goals by 2015, in order to provide incentives for faster development – in the case of health care, reform needs to take place in the form of more cost-efficient methods of administering quality health care (Meessen et al., 2011). Inadequate health worker performance is a significant problem in these countries as well, as low incomes do not favor the employment of qualified individuals to positions of health care (Rusa et al., 2009). In countries like Rwanda, the “ Paying for Performance” approach has worked since 2002, but studies have indicated that health providers often work on improving the rote indicators for health care quality provided by the P4P system, in lieu of actually activating systemic change in their procedures and budgets – a side effect known as ‘ gaming’ (Kalk et al., 2010). However, a study of a program started in 2005

indicates a substantial quality improvement found in utilization of performance-based healthcare programs in Rwanda, and the program helped to organize programs, such as growth monitoring services and institutional deliveries, that were previously extremely ineffective (Rusa et al., 2009). The ideas of human labor that can come about from P4P programs in countries like Rwanda can be counterproductive to providing superior care.

In American settings, performance-based measures seem to provide a significantly higher rate of success – incentives of both financial and nonfinancial varieties provide significant motivation for health care delivery systems to improve their levels of accountability, transparency and measurement. There is still significant research to be done on whether or not these incentives provide a sufficient return on investment for health care providers to make the reward worth the investment (O'Kane, 2007).

Impact on cost and access to healthcare

Performance-based reimbursement can have significant effects on the performance and affordability of doctors. For one, doctors who participate in these programs possess a much higher cost awareness than others; there is then appropriate motivation to use resources more efficiently. Other incentives to gain performance-based reimbursement include providing easier and quicker access to health care services to their patients, improving the time taken to get patients the help required. Working conditions are also improved; while some research indicates the opposite (that performance-based initiatives place more of a strain on health care workers), other factors are likely to be blamed for that (Forsberg, Axelsson and Arnetz, 2010). While

there are negative connotations of said incentives that involve the overworking of health care professionals, the good results that come from these programs include a more efficient use of resources, and faster implementation of medical services.

Degrees of improvement

Recent studies show that the level to which a medical group or physician improves depends greatly on their status on the baseline – the lower the group is on the baseline, the more improvement is likely to occur, given the financial incentives of a pay for performance program (Rosenthal et al., 2007). Regardless of a physician group's status on the rating threshold and their likelihood (or lack thereof) of getting the incentives, there is evidence of a marked improvement in quality from attempts to achieve them. The existing research, however, is hampered by thresholds that are far too low, leading to many health centers that are already above the thresholds to not work as hard on improving their quality, as they consider their current work to be satisfactory (Rosenthal et al., 2007). The groups that improve the most will get the smallest performance pay on a threshold performance scale, making it necessary to look into both achievement and improvement incentives as a potential solution to properly reward those health care programs and providers who experience marked improvement. Determining which factor would be the most effective incentive – level of improvement or reaching a specific set of criteria (achievement) – is extremely important (Peterson et al., 2007).

There are many factors that contribute to the level of improvement that a provider experiences as a result of the implementation of a performance-based health care program. First is the size of the bonus; studies have indicated a smaller increase in improvement proportionate to the bonus given for meeting the established performance criteria for qualification (Peterson et al., 2007). Given the smaller nature of these bonuses, finding evidence as to whether or not marked improvements in health care quality will increase as a result of these programs is increasingly difficult (Peterson et al., 2007).

Performance-based financing is not thought to be a complete solution to the problems inherent in health care; there are still rampant issues of dimensions of performance that are hard to measure, meaning that compensation would not be forthcoming (Kalk et al., 2010). There are many different models of performance-based financing to consider, many of which have dubious results (Kalk et al., 2010). The conflicting nature of the results of preliminary attempts to apply these programs points to inherent flaws in their implementation (Rosenthal et al., 2007). Given the opportunity to see improvements as high as 5 to 10 points in the performance percentile range in a health care provider or physician, the option to implement performance-based health care programs is difficult to ignore (Rodriguez et al., 2009).

PART 3 – RESEARCH PROPOSAL

For the purposes of this study, the research question being examined is whether or not more physician groups would work towards improving the quality of their health care performance in the face of financial incentives if

the threshold for quality was higher. The purpose of this research is to determine the level of improvement placed on physician groups given a stricter barometer for quality. The hypothesis is that, given a more challenging set of criteria to qualify for performance-based bonuses, the level of improvement in health care exercised by the majority of physician groups would be higher.

A quantitative study would be created in order to survey patients over a two-year period. Two physician groups would be targeted for study, ones which matched similar trends in patient satisfaction and quality of health care. One would be provided a performance-based health care system consisting of bonus incentives and reimbursements that would be available to those physicians in the group whose quality matched certain criteria. If these performance criteria were met, each participant would get a bonus for each criteria passed. Instead of the criteria involving passing the 75th percentile of performance by those physician groups (as in Rosenthal et al., 2007), this study would involve passing the 90th percentile of performance. This would increase the standards by which physician groups needed to improve in order to qualify for these economic incentives. The control group, on the other hand, would simply be observed throughout this period without any intervention to observe secular trends in performance quality.

This natural experiment would take place over the two years, recording the levels of performance via clinical quality, cost and access scores provided by the patients by written survey. On these surveys, questions would be asked as to the patient’s satisfaction with the access to health care, its cost and its

overall quality, using a linear system to apply a numerical value to their level of satisfaction. This quantitative data would be assembled and compiled into data sets to be compared and observed for noticeable improvements in health care quality, cost and access. They would be analyzed by comparing the scores month-by-month to the control group that had no intervention, and a marked improvement would indicate the measure of success the intervention group experienced. Stratified analyses would be used to test statistical significance and investigate the extent of the performance improvements.

Strengths of the study include the length of time allotted to the study (two years), as well as its close modeling to a previous successful story. Some weaknesses of the study, as well as threats to validity, include the uncertain nature of the patient’s honesty regarding their health care quality, and the subjective nature of such an assessment, which can often lead to quality scores that are not indicative of the objective efforts of the physician. Also, it is possible that the extremely high qualification criteria can discourage some of the more low-scoring physicians on the threshold from participating.

The design I have chosen for the study is justified based on its clear, straightforward nature, as well as the length of study and the evaluation of patients, who are the real beneficiaries of a performance-based health care system, and who are the determiners of how well a health care provider does their job. Given their clear, linear input, my study can more accurately assess how far physicians and health care providers would improve in the

face of economic incentives than a qualitative study on patient’s reactions to improved health care.

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