Pay for Performance Nursing Compensation Models -

Value Based Compensation through Performance Incentives

by

Dominic Boito

B.S. Indiana University of Pennsylvania

Submitted to the Graduate Faculty of the Department of Health Policy and Management School of Public Health in partial fulfillment of the requirements for the degree of Master of Health Administration

University of Pittsburgh

2024

UNIVERSITY OF PITTSBURGH

SCHOOL OF PUBLIC HEALTH

This essay is submitted

by

Dominic Boito

on

March 29, 2024

and approved by

Essay Advisor: Lucy Savitz, PhD, MBA, Health Policy and Management, University of Pittsburgh School of Public Health

Essay Reader: Joshua Porat-Dahlerbruch, PhD, RN, University Pittsburgh School of Nursing

Essay Reader: Mark S. Roberts, MD, MPP, Health Policy and Management, University of Pittsburgh School of Public Health

Copyright © by Dominic Boito

2024

Pay for Performance Nursing Compensation Models -Value Based Compensation through Performance Incentives

Dominic Boito, MHA

University of Pittsburgh, 2024

Abstract

The purpose of the essay is to explore and propose a Pay for Performance (PFP) Compensation Model specifically for nursing staff, linking employee financial compensation to job performance. A PFP compensation model for nursing staff would function by linking employee financial compensation to their job performance. The more accurately and proficiently a nurse performs their duties, the higher their compensation would be in the form of a merit-based incentive bonus. The primary objectives of the paper include examining economic and organizational behavior theories, establishing KPIs, outlining the benefits and potential adverse effects, and discussing the relevance of such a model in healthcare.

The essay design involves a comprehensive exploration of economic theories, organizational behavior theories, and human resource theories related to performance incentives in nursing. The methodology includes defining key performance indicators, establishing performance goals, determining compensation structures, and monitoring and reviewing performance. Sources of information encompass a variety of theories, economic principles, and practical considerations related to nursing performance incentives.

Key findings from this review include benefits of a PFP compensation model to systems, such as increased workforce efficiency, cost control, talent attraction, and enhanced employee engagement, a logic model for how this type of compensation system would be implemented, and a compensation structure for a theorized PFP model. The relevance of a PFP compensation model within public health lies in its potential for improved health outcomes through the implementation for nursing staff. By aligning financial incentives with performance metrics, the model aims to enhance workforce efficiency, improve quality outcomes, attract skilled professionals, and ultimately contribute to a positive impact on patient care and satisfaction. This relevance extends to addressing workforce shortages, improving patient safety, and fostering a culture of continuous improvement within healthcare organizations.

Table of Contents

Prefaceviii
1.0 Introduction1
2.0 Literature Review
2.1 Background of Theories with Implications on a PFP2
2.1.1 Business Psychology/Organizational Behavior Theories2
2.1.2 Economic Theories6
2.1.3 Human Resource Theories7
3.0 Hypothesis
3.1 Hypothesized Logic Model and Expected Outcomes
3.2 Theorized Incentive Structure and Calculation10
3.3 Organizational Benefits16
4.0 Pay for Performance Implementation 19
4.1 Pay for Performance Incentive Program Parameters
4.2 Data Collection and Compensation Delivery22
5.0 Discussion
Appendix A Appendices and Supplemental Content
Appendix A.1 Figure 1
Appendix A.2 Figure 2 29
Bibliography

List of Figures

Figure 1	
Figure 2	29

Preface

I would like to thank the faculty at the University of Pittsburgh's Graduate School of Public and the Department of Health and Policy Management for facilitating the Master of Health Administration program and contributing to the continued enhancement of the professional practice of healthcare management. I would like to specifically acknowledge Dr. Lucy Savitz, Dr. Joshua Porat-Dahlerbruch, and Dr. Mark Stenius Roberts for their direct guidance and support in the development of this research.

1.0 Introduction

The healthcare landscape is continually evolving, presenting challenges that demand innovative solutions. A PFP compensation model addresses the pressing issue of optimizing nursing performance by delivering high-quality patient care in an increasingly complex environment through the alignment of compensation incentives with performance efficiency and accuracy. Healthcare systems face persistent challenges related to workforce efficiency, high employee salary expenses, quality outcomes, and talent retention Addressing these issues is vital for enhancing patient care and maintaining a motivated, skilled nursing workforce.

With the growing demand for healthcare services, there is a need to explore innovative approaches to optimize nursing performance. The PFP Compensation Model emerges as a potential solution, offering a direct link between employee compensation and job performance to improve efficiency, attract and retain talent, and elevate the overall quality of patient care.

The primary objectives of this essay include examining economic and organizational behavior theories, establishing KPIs, outlining the benefits and potential adverse effects of a PFP model for nursing staff, and discussing the public health relevance of implementing such a model.

In order to provide a comprehensive understanding, this essay is situated within the context of a healthcare organization dedicated to delivering high-quality patient care. The discussion encompasses the broader domain of healthcare services, emphasizing the unique challenges to implementation of PFPs, potential adverse effects on organizations' workforces, and considerations when designing PFP models for organizations.

1

2.0 Literature Review

2.1 Background of Theories with Implications on a PFP

Psychological, economic, and human resource theories collectively suggest that employees are more productive when incentivized with performance bonuses, because such bonuses tap into both economic principles of incentivization and psychological motivators, thereby encouraging employees to work harder or more effectively to achieve the desired outcomes. The following passage trifurcates this concept into three conceptual theory areas: Behavior Theory, Economic Theory, and Human Resource Theory.

2.1.1 Business Psychology/Organizational Behavior Theories

Herzberg's Two-Factor Theory argues that satisfaction and dissatisfaction are not opposites but separate constructs, indicating that performance incentives can act as motivators to drive employee performance. Through a series of interviews in the 1950's, Frederick Herzberg developed a two-dimensional behavioral theory behind job satisfaction: motivation and "hygiene". Hygiene issues, according to Herzberg, cannot motivate employees but can minimize dissatisfaction, if handled properly. Motivators instead drive satisfaction by fulfilling individuals' needs for meaning and personal growth using stimuli such as achievement, recognition, the work itself, responsibility and advancement (Syptak et al., 1999). When employees are offered incentives for performing responsibilities well, they may be more motivated to put in extra effort to achieve better results. The design of the incentives is important - if incentives are seen as unfair or unachievable, they may have a negative impact on motivation. According to Herzberg's Two-Factor Theory, pay is categorized as an extrinsic factor, which means it is essential for preventing dissatisfaction. In other words, adequate pay is necessary to ensure that employees are not dissatisfied with their jobs. Herzberg's Theory also suggests that performance metrics can act as both hygiene factors and motivators. On one hand, clear performance metrics can help prevent dissatisfaction by providing employees with clear expectations and goals. On the other hand, performance metrics can also act as intrinsic motivators by giving employees a sense of progress and achievement when they meet or exceed their targets.

McGregor's Theory X and Theory Y represent contrasting assumptions about human nature and behavior in the workplace. Theory X assumes that employees are inherently lazy, will avoid work if possible, and must be closely monitored and controlled. They may be more averse to PFP compensation models that rely heavily on individual performance metrics and are closely tied to rewards and punishments. However, organizational application of this rigid approach may inversely limit success in motivating employees who feel micromanaged and underappreciated. In contrast, Theory Y instead indicates that if employees are self-motivated and enjoy their work, they may be more likely to implement performance incentive funds that offer opportunities for recognition, autonomy, and growth, rather than just monetary rewards. Consequently, Theory Y management practices are characterized by decentralized decision-making, participative leadership, trust in employees, and a focus on creating a supportive work environment that fosters intrinsic motivation and job satisfaction. Considering Theory Y in management techniques can be successful in motivating employees who are driven by intrinsic rewards such as personal growth and job satisfaction. Instead, hybrid approaches that integrate elements of both theories may be more effective in motivating employee performance and satisfaction and limiting the negative effects of both micromanagement and autonomy. For example, aspects of Theory X, such as clear expectations and performance standards, may be necessary for providing structure and accountability in a PFP model, while elements of Theory Y, such as empowerment, autonomy, and opportunities for skill development, are essential for fostering intrinsic motivation and employee engagement. Research does exist bridging this theoretical chasm by empirically investigating the interplay between managerial attitudes (X/Y) and behaviors, and their impact on individual and group performance. Statistical analysis investigating the dichotomy between X and Y shows positive relationships between nuanced integration of managerial attitudes and behaviors (Lawter et al., 2015). This research underscores the profound impact of managerial practices on organizational performance and suggests that managers can use the complementary nature of X and Y elements to harness the full potential of their employees, fostering a culture of high performance and productivity.

Equity theory, proposed by psychologist John Stacey Adams in the 1960s, is a motivational/justice theory that focuses on the concept of fairness in social exchanges. According to Equity theory, individuals are motivated to maintain a sense of fairness or equity in their relationships and interactions with others, particularly in the workplace. Employees inherently compare their ratios of outcomes-to-inputs of other employees of the same role and will be more motivated and satisfied when they perceive that they are being treated fairly in terms of rewards and evaluations (Horne et al., 2014). By designing pay for performance compensation models, performance incentive funds, and performance metrics for nurses that are transparent, fair, and well-communicated, organizations can help ensure that their employees feel that they are being treated fairly and equitably through compensation reflective of not only their skills, but also of their direct contributions to their organizations value proposition. This transparency will require

high access to large performance data and quality data systems, which only large systems or AMCs may have access to, but will help improve motivation, engagement, and job satisfaction, and ultimately lead to better performance outcomes of employees.

Lastly, Expectancy theory presents the idea that the strength of employee tendencies to act in a certain way depends on the strength of the expectation that the act will be followed by a given outcome and on the attractiveness of the outcome to the individual. Thus, employees can be motivated by performance incentive funds when they believe that their efforts will lead to improved performance, and that improved performance will lead to increased rewards. Organizations can support this belief by providing clear and achievable performance targets and ensuring that the rewards are significant and valued by employees. When employees perceive a clear link between their efforts, their performance, and their rewards, they are more likely to be motivated and engaged, leading to better performance outcomes for the organization. In addition to individual performance evaluation, the concept of pay-for-performance (PFP) can be expanded to encompass team-based or departmental assessments, offering a more comprehensive approach to incentivizing and rewarding collective achievements. Additionally, extrapolating performance evaluation to a team or unit basis would allow organizations to recognize and reinforce collaborative efforts and shared successes, aligning incentives with broader organizational objectives. By assessing team or unit performance, PFP models promote collaboration, communication, and synergy among members, fostering a culture of teamwork and mutual support. In this context, individuals are encouraged to contribute their unique skills and expertise towards common goals, leveraging collective strengths to achieve superior outcomes. Furthermore, scaling PFP initiatives to encompass entire departments could provide a more holistic perspective on performance, considering factors such as interdependence, resource allocation, and coordination among team members. This approach encourages individuals to consider the broader impact of their actions on team success, promoting accountability and a shared sense of responsibility for achieving desired results.

2.1.2 Economic Theories

In labor economics, the Efficiency Wage Hypothesis, introduced by economist Alfred Marshall, details how paying workers higher-than-market wages can lead to increased productivity and efficiency and reduced turnover expenses, especially in industries prone to high labor replacement costs. In the context of merit-based performance incentives, this theory supports the idea that offering additional financial rewards for high-performing employees can act as a highly powerful motivator. By incentivizing compensation to be aligned with individual contributions, employees may be incentivized to invest more effort, skills, and time into their work, ultimately contributing to increased efficiency and overall productivity.

Agency Theory explains the challenges that arise from divergent interests between employers (principals) and employees (agents). Merit-based performance incentives address the principal-agent problem by directly tying compensation to individual or team performance. By aligning the interests of employees with organizational objectives, these incentives reduce the agency problem, fostering a sense of shared goals and motivation to act in ways that benefit the organization. Additionally, Kenneth Spence's Theory of Incentive Motivation, suggests behavior is driven by the desire to gain rewards and avoid punishments, with behavior rewards and incentives driving performance (Hilgard et al., 1967). This concept further supports the idea that merit-based performance incentives directly apply this theory by offering financial rewards tied to individual or team accomplishments. This proposed PFP model leverages the motivating power of incentives, encouraging employees to exert additional effort, achieve goals, and ultimately contribute to the success of the organization.

2.1.3 Human Resource Theories

Goal-Setting Theory emphasizes the power of specific and challenging goals in motivating employees. Merit-based performance incentives often involve setting performance goals tied to financial rewards, aligning with this theory. By providing employees with clear objectives and tangible rewards for goal achievement, merit-based models contribute to increased motivation, focus, and overall performance.

Social Exchange Theory suggests that individuals engage in reciprocal relationships with their employers where effort is exchanged for rewards. Merit-based incentives operate on the principle of this social exchange, where employee performance is reciprocated with financial rewards. When employees perceive fair compensation for their contributions, they are more likely to reciprocate with increased effort, loyalty, and commitment.

Additionally, psychological safety theories, as posited by Edmondson and Mortenson, can significantly impact the effectiveness and success of such programs. When employees feel psychologically safe in their work environment, they are more likely to engage openly in discussions about performance metrics, goals, and challenges associated with PFP (Edmondson, 2021). by fostering a culture of psychological safety, managers can encourage employees to collaborate and share ideas for optimizing performance and achieving PFP goals. Team members are more likely to work together to overcome obstacles and support each other in reaching shared objectives when they feel psychologically secure.

3.0 Hypothesis

3.1 Hypothesized Logic Model and Expected Outcomes

A logic model would be indispensable for the development and execution of a Pay-for-Performance (PFP) model tailored to nurses for several reasons. Nursing management entails overseeing a complex array of responsibilities, including patient care coordination, staff supervision, resource allocation, and quality assurance. A logic model provides a structured framework for designing and implementing the PFP model, ensuring clarity of purpose, alignment of objectives, and effective resource utilization. A properly constructed logic model would offer clarity of purpose by delineating a pay-for-performance program's goals, inputs, activities, outputs, and outcomes, ensuring all stakeholders comprehend its objectives and align their efforts accordingly. This would assist organizational leaders in strategic planning by outlining the logical sequence of activities, resource requirements, and milestones necessary for successful implementation, thereby aiding effective project management. This logic model, exampled in Figure 2., provides clear guidance for implementation by detailing specific tasks and outputs at each stage, empowering project staff and HR partners with a roadmap for execution. Moreover, the logic model identifies KPIs and anticipated outcomes, laying the groundwork for systematic data collection to evaluate program effectiveness and inform decision-making. Additionally, it serves as a communication tool for engaging stakeholders, articulating the rationale, design, and anticipated outcomes of the PFP model, fostering understanding and support. The logic model would support continuous improvement efforts by providing a framework for ongoing monitoring, evaluation, and refinement of the PFP model validating the compensation model implementation

effectiveness and relevance over time through patient care efficiencies stemming from higher performing nursing staff.

Logic model inputs begin with financial resources allocated for the program, project staff for design and implementation, HR partners for management, and a system for tracking performance metrics. Output activities involve defining relevant KPIs, setting measurable performance goals, creating a transparent compensation structure, communicating the program to staff, and establishing a system for monitoring and reviewing performance regularly. Output participation entails fostering an engaged nursing workforce, encouraging staff participation in goal setting and achievement, facilitating regular performance monitoring and feedback, and promoting continuous learning and adaptation.

In the short term, expected outcomes include increased awareness among nursing staff regarding the PFP model and its KPIs, immediate improvement efforts aligned with defined goals, an initial boost in performance as staff become more conscious of metrics, and feedback loops for quick adjustments to the compensation model based on early performance data

Medium term outcomes include sustained performance improvement, enhanced team collaboration, continuous refinement of the compensation structure, increased job satisfaction among staff due to the direct link between effort, outcomes, and rewards decrease in reported adverse events, and decrease in nursing sensitive indicators.

In the long term, expected outcomes include proven and sustainable gains in efficiency from optimized workflows, organizational embodiment of a continuous improvement culture with motivated staff, increased job attraction and retention of high-performing nursing professionals, and improved patient outcomes due to staff focus on key performance metrics.

9

These outcomes are contingent on several assumptions, including the linkage between performance and financial compensation, the motivating effect of incentives based on performance metrics, hospital resource levels, the extent to which nurses have control over orders and documentation, the transparency and fairness of the PFP model, regular monitoring and feedback, alignment of KPIs with organizational objectives, clear understanding of metrics by staff, fair benchmarks and standards for performance comparison, support from management, efficient data management systems, and adequate communication with staff regarding the program's mechanics and purpose. Additionally, in many hospital systems there may not be process measures established or measurement systems available for these metrics. Potential reporting burden and burn out tradeoffs must be considered in collecting this new data and may best done and delivered by hospital HR partners during the onboarding process or orientation period. By integrating this training into the initial stages of a nurse's employment, organizations can ensure that nurses are equipped with the necessary knowledge and skills related to HR policies from the start and set clearly familiarizes nurses with reporting procedures to minimize change training effects on nursing operations and ensure proper education of new policies. Because of the central role nurses play in patient safety, further research must be conducted to fully understand the sensitivity of these indicators on nursing staff and data evaluated to understand subsequent outcomes when changes are implemented in care processes and care delivery (Savitz 2005).

3.2 Theorized Incentive Structure and Calculation

Compensation model structures play a crucial role in aligning organizational goals with individual performance, while ensuring fair and competitive remuneration for productive and efficient staff. In nursing, productivity refers to the efficiency with which inputs, such as nursing labor, materials, equipment, are converted into outputs, such as care delivered and patient outcomes. Traditional definitions of nursing productivity that focus only on inputs like staffing ratios (e.g., nurses per patient day) or hours worked are outdated and inadequate. Nursing productivity should be viewed in terms of the quality of care provided and patient outcomes achieved, not just staffing levels or costs. Nursing productivity should be based on the quality of patient care and holistically evaluate how nursing labor and resources are utilized to deliver high-quality, safe patient care and positive outcomes in the most efficient way possible on individual, team, and organizational levels (Holcomb et al., 2002)

The United States government has already implemented various physician payment models, including the Quality Payment Program (QPP) initiated by CMS. The QPP, established under the Medicare Access and CHIP Reauthorization Act (MACRA), aims to link physician payments to quality and efficiency measures. This program provides precedence for a nursing PFP model as it is designed to financially incentivize healthcare providers, specifically physicians, to deliver high-quality care while controlling costs. Physicians are encouraged to participate in the QPP by meeting specific quality and efficiency benchmarks, which can lead to financial rewards based on their performance (CMS, 2023). An additional instance of precedence of benefits of shared governance on quality of nursing care can be seen in Magnet certifications. The Magnet program's emphasis on structural empowerment through shared governance aligns with many human resource theories and shows that engaged, empowered employees can be a powerful driver of innovation, quality, and organizational performance. Shared governance flattens traditional hierarchies by distributing decision-making closest to the point of care through unit-based councils and committees. Nurses collaborate to identify issues, determine root causes, and develop solutions. This inclusive model, where all nursing staff can contribute regardless of role, has been shown to increase engagement, reduce turnover, and improve patient outcomes by leveraging the collective strengths of the entire nursing workforce. (Austria, 2023) The success of this model in nursing suggests there could be valuable lessons to explore adapting similar principles to incentive structures and performance management approaches in other healthcare and knowledge worker settings.

The creation of an incentive program in nursing has the potential to promote continuous improvement and accountability and motivate nurses to consistently deliver exceptional care, ultimately leading to improved patient outcomes and increased job satisfaction among nursing professionals. This incentive would be delivered to all employees in the form of a periodic bonus, with the bonus calculated using an aggregate weighted score multiplied by the individual's base salary, resulting in a Salary-plus-Base compensation system. The frequency of the bonus payout should be aligned with the organization's ability to collect, analyze and review this data. Employees who would be eligible for this PFP program include all inpatient RNs, LPNs, CNAs, or other allied healthcare professionals who deliver bedside care during a patient stay within any inpatient department. Each department would all have different payout levels, dependent on the acuity of patient conditions, experience requirements, and difficulty of specialty. For example, ICU nurses would experience a higher boost in scores compared to Med-Surg nurses, as ICU nurses typically treat patients with more difficult conditions and are required to have more years of experience before joining their unit. These nurses should be employed directly by the organization where they work and would be required to reach a minimum hours-worked threshold to prevent potential skewed scores when calculating bonuses that may arise from out-of-control or atypical performance during short periods.

An example of this type of incentive structure can be seen in Figure 1. Because quality of patient care is paramount in clinical settings, compensation models could incorporate KPIs that reflect various aspects of nursing practice directly impacting patient outcomes. Carefully selected KPIs could encompass a comprehensive range of critical factors such as patient safety, communication effectiveness, care efficiency, regulatory compliance, patient satisfaction, and post-discharge outcomes. The KPIs in this example were chosen to allow for the consideration of nursing as both an individual- and a team-based activity. Nurses collectively contribute to multidisciplinary teams, communicating effectively and sharing goals to achieve optimal outcomes, while simultaneously exercising their independent judgment, critical thinking, and clinical expertise to assess patient condition, administer medications, perform treatments, and provide patient education. Because of nursing's collaborative environment, both individual and team focused KPIs should be measured and included to reflect the holistic nature of nursing, blending teamwork with autonomous practice to deliver high-quality care for patients.

Decisions on the weighting of KPIs within the compensation model stem from multidisciplinary and collaborative selection committees with stakeholders representing nurses, hospital administration, finance, quality assurance, or other relevant departments. This collaborative approach ensures that the chosen KPIs reflect not only nursing priorities but also broader organizational objectives, regulatory requirements, and industry best practices. Forming a well-structured KPI Selection Committee increases the chances of selecting suitable KPIs that are effective and embraced. Committee members must be impartial, devoid of conflicts of interest, and dedicated to crafting KPIs that offer an unbiased and precise portrayal of the measured domain. By incorporating diverse perspectives, the weighting of KPIs can be optimized to incentivize behaviors and outcomes that are most critical for achieving desired organizational outcomes while maintaining balance and fairness across different performance dimensions. In the Figure 2. example incentive structure, the KPIs and their weighting were chosen as simple example KPIs not particularly applicable to any certain healthcare facility, as driving KPIs should be selected by individual facility's selection committee.

In practice, the selected KPI's should be based on the prevalence specific problems, service-user safety, potential for improvement and controllability by health or social care system/professionals. Problems in healthcare can be identified as important if it is associated with significant morbidity and mortality, has high service-user volumes, or is costly to treat. Serviceuser safety, a core domain of healthcare quality that measures data such as mortality rates, HAIs, and adverse events, can be used to identify patterns and trends can demonstrate the need for improvement in models of care (HIQA 2017). The weighting of each of these KPIs would require similar in-depth collaboration, resulting in a balanced score card for each discipline. Approaches like the "Three Es" framework offer different perspectives by encompassing 'Economy', 'Efficiency', and 'Effectiveness' to ensure a comprehensive view of organizational performance. These discussions would include aspects such as service user perspective, internal management, continuous improvement, financial perspective, economy, efficiency, effectiveness, and various performance domains (Audit Commission 2000). Incorporating structure, process, and outcome classifications into the methodology further aids in developing a well-rounded set of KPIs for assessing healthcare systems. Criteria that should be paramount in these selection discussions include the following: sensitivity, reliability, evidence based, acceptability, feasibility, sensitivity, specificity, relevance, balanced, tested, safe, non-duplicative, and timely (HIQA 2017).

Identifying individual scores based on performance against established benchmarks is essential for recognizing and rewarding nursing excellence at the individual level. Through performance tracking systems, such as EHRs and HR management systems, nurses' contributions can be accurately assessed and quantified. HR information would include metrics such as shift location or hours worked, while EHR information would include nurse-to-patient ratios and patient outcome data. This data-driven approach allows for objective evaluation of performance, enabling managers to provide targeted feedback, support professional development, and allocate rewards accordingly.

The scores derived from individual performance assessments serve as multipliers to nurses' base salaries in the compensation model. This means that nurses who consistently exceed performance expectations and demonstrate exceptional performance across key areas receive proportionally higher compensation. By directly linking compensation to performance outcomes, the model incentivizes continuous improvement, fosters a culture of accountability, and motivates nurses to deliver high-quality care consistently. Additionally, there are no direct penalties for nurses who score below their expected performance marks. Many situations may arise that have impacts on care that are out of nurses' abilities to address and by recognizing the inherent unpredictability of some conditions or procedures, nurses would not face penalty for variations in Scores should not be calculated for nurses who have not fulfilled all training outcomes. requirements of the organization, as their performance may not accurately reflect the organization's standards or objectives and would produce misleading results not reflective of their or their team's effectiveness potential. The focus of the PFP lies on providing incentives for high performance rather than punitive measures for underperformance. A PFP aims to foster a supportive environment where nurses are motivated to excel through positive reinforcement and rewards, rather than fear of repercussions.

Many of the quality metrics and outcomes identified as nurse sensitive indicators by healthcare delivery organizations, such as patient satisfaction, readmissions, hospital-acquired conditions, etc. are influenced by the collective performance of the entire care team on a nursing unit. (Lockhart, 2018) Implementing pay-for-performance at the unit/team level allows organizations to leverage data they may already be tracking, such as unit-level patient satisfaction scores, staff turnover rates, etc. as performance indicators. Unit-based incentives can foster greater teamwork, collaboration, and shared accountability among nurses, which is critical for achieving good patient outcomes (Clarke, 2008). Tying incentives to unit performance provides more frequent touchpoints and opportunities to engage nurses, provide feedback, and make adjustments compared to annual individual evaluations. From an operational standpoint, unit-level incentives may be easier to implement and manage initially versus complex individual-level performance tracking systems.

Overall, the design and implementation of a robust compensation model for nursing require careful consideration of relevant KPIs, collaborative decision-making processes, individual performance tracking mechanisms, and the strategic use of performance scores as multipliers to base salaries. When executed effectively, such models not only drive performance improvements but also contribute to enhanced patient outcomes, increased job satisfaction, and retention of highperforming nursing professionals.

3.3 Organizational Benefits

Implementing a PFP model in an organization offers numerous organizational benefits, both direct and indirect. Direct benefits include improved workforce efficiency, as nurses are motivated to excel in their roles to achieve financial rewards, resulting in heightened productivity and enhanced patient care delivery. Cost control and increased return on investment (ROI) are also direct advantages, as the model encourages optimal resource utilization and can lead to cost savings by aligning compensation with nursing performance metrics. Moreover, PFP initiatives contribute to the attraction and retention of top nursing talent, as high-performing nurses are recognized and rewarded for their contributions, fostering a culture of excellence and loyalty within the nursing workforce. Recognizing high-performing nurses not only enhances morale but also serves as a means to retain skilled professionals crucial for maintaining quality patient care standards.

In addition to these direct benefits, the nursing PFP model yields several indirect advantages. Optimized use of performance data is facilitated, as the program requires robust metrics and analytics to measure and evaluate nursing performance, providing valuable insights for strategic decision-making and quality improvement initiatives. Data-driven decision-making becomes inherent within the organization, empowering nursing leaders to make informed choices based on objective performance indicators rather than subjective assessments. Furthermore, the PFP model promotes a culture of continuous improvement among nurses by encouraging them to constantly seek ways to enhance their performance to attain rewards, thereby fostering innovation and growth within nursing practice. Goal alignment and strategic execution are facilitated, as nurses' efforts are directed towards achieving organizational objectives linked to financial incentives, ultimately contributing to improved patient outcomes and organizational success. Finally, enhanced nursing engagement is observed, as the transparent and merit-based nature of the PFP model instills a sense of fairness and empowerment among nurses, driving greater commitment and satisfaction with their nursing practice. Overall, the implementation of a PFP model in nursing yields significant organizational benefits, ranging from improved efficiency and cost control to a culture of continuous improvement and heightened nursing engagement, all of which ultimately translate into enhanced patient care quality and outcomes. This assertion does assume that the observed benefits are equally applicable to all direct care providers within the nursing domain, beyond just nurses. While the PFP model in this paper specifically targets nursing staff, its core principles may apply to other direct care providers with tailored adjustments to the model to match specific job responsibilities and motivations. The expectations and preferences of individuals within each role can vary significantly, so the implementation of a PFP model beyond nursing staff would require careful consideration of KPIs, drivers, and desired outcomes to ensure alignment with the unique motivations of each group and their role in their organization.

4.0 Pay for Performance Implementation

4.1 Pay for Performance Incentive Program Parameters

Designing this PFP Incentive Program Parameters would involve a meticulous approach to align incentives with desired outcomes while ensuring fairness and transparency. The program would utilize a multifaceted evaluation system comprising various KPIs tailored to reflect the complexities of nursing responsibilities and patient care environments.

Potential metrics the program would monitor include nurses' Total Time Spent Caring for Patients, recognizing the fundamental importance of direct patient care. Time accrued in different care environments, considering factors such as nurse-to-patient ratio and individual patient acuity levels, would additionally inform bonus calculations. Moreover, a Patient to Nurse Ratio Coefficient could be incorporated to compare nurses' actual responsibilities against national standards, accounting for workload distribution variances between staff of the same roles (with consideration to variability in applicable regulations, laws, and union agreements). The type of care provided would be considered, with additional incentives offered for nurses working in intensive units or caring for patients with higher acuity conditions. This would be aligned with the site's patient diagnosis and service area, reflecting the varied demands of different care settings. Data collection for these non-tangible criteria that are not already being tracked would be required and would require the development of new EHR features or add-ons that would allow for the tracking or entry of this data, such as the tracking of nurses assigned to certain floors or total time spent per patient based on frequency or intensity of orders performed. Adequate resources enable nurses to focus on direct patient care, enhancing efficiency and effectiveness and it is essential to recognize that many hospitals and healthcare delivery centers may not have similar resources levels. An expansion of these metrics to ensure resource parity in calculations could include factors such as equipment and supply availability, support staff availability, and facility infrastructure. Integrating these indicators into the model ensures a more comprehensive approach to incentivizing nursing performance and reflects the multifaceted nature of nursing practice within healthcare settings.

Individual patient satisfaction, such as clarity of discharge instructions, readmissions rates, and perceived quality of care, and nurse specific indicators, such as patient safety/standard protocol adherence, medication errors, and nursing hours per patient day, would be pivotal KPIs as they directly impact patient outcomes and reflect nursing excellence. These patient satisfaction scores and adherence to safety protocols would be linked to individual nurses, providing tangible measures of their performance. Although patient satisfaction is already collected through HCAPS, which only collects a sample of patient feedback, this data would have to be collected through Point-of-Care feedback surveys or from surveys given via post-discharge follow-up contact with patients. These metrics would be benchmarked against a baseline score reflecting job expectations determined from a panel with appropriate weighting to each metric and a diligent oversight committee to ensure expectations are fair and aligned to drive care excellence and meet organizational values. This panel must contain a mix of patients, administrators, physicians, nurses, and all other direct care providers along the patient care journey. This would also ensure that performance incentives incorporate input from all stakeholders and are tied to exceeding performance expectations and delivering high quality care.

Furthermore, the program could be based on Diagnosis-Related Groups (DRG), with standardized treatment procedures decomposed into employee process actions with relative completion times and accuracy requirements. In a work process standardization concept presented in their paper, (Pan et al., 2023) researchers from China explored the idea of a fully standardized nursing service system constructed for Covid-19 patient care creates nursing service standards that could be investigated for further clinical investigation. Elaborating upon this concept to assume every CMS defined MS-DRG (CMS, 2020) could have a unique standardized operating procedure with individual hospital system defined expectations, such as procedural task time, ensure consistency in treatment approaches but more importantly, establish expectations for care delivery methods for each CS-DRG. Thresholds relative to distance from target performance could be developed with deviations, both positive and negative, from expected performance reflecting the performance efficiency and accuracy of a nurse or nursing team while performing care. The compensation structure could be designed to reward nurses for achieving performance goals above these thresholds. For instance, nurses surpassing a set percentage of their expectations would receive additional pay proportional to their exceeded performance, without chance for penalty for underperformance. This expectation level should be careful calculated to value clinical judgment and would correspond to a variable-pay component that would be given to nurses in addition to base pay. Clear communication of the PFP model to nursing staff would be paramount, to clarify how KPIs will be measured, performance goals established, and compensation determined. Regular monitoring and reviews of performance would be conducted to track progress, identify areas for improvement, and provide necessary support or training.

In essence, the design of the PFP Incentive Program Parameters encompasses a comprehensive framework that incentivizes excellence in nursing practice, ensures fairness and transparency, and ultimately enhances patient outcomes and organizational performance.

4.2 Data Collection and Compensation Delivery

Continuous collection and compilation of performance data is imperative for the effectiveness of the PFP Incentive Program. This data would be aggregated and reviewed on a standardized schedule, termed a performance period, which could occur monthly, bi-weekly, or as determined by organizational needs. At the conclusion of each performance period, an aggregated score would be calculated from all KPIs to create a comprehensive score for each participating nurse. This score would then be applied to a predetermined scale to determine the rate at which their bonus will be calculated, ensuring fairness, consistency, and transparency in bonus allocation.

Following the finalization of the bonus calculation, a manager would conduct a brief review of the performance record with each respective employee during pre-existing periodic 1on-1s. This review process would provide an opportunity for constructive feedback, recognition of achievements, and identification of areas for improvement. Subsequently, a human resources representative would enter the performance bonus into the organization's HRM system for compensation processing, ensuring timely and accurate distribution of rewards.

It's essential to account for exceptions in the data collection process to maintain fairness and accuracy. For instance, downtime entries would be necessary to reflect adverse events, such as a delayed diagnosis or wrong side surgery, that are beyond the nurse's control or scheduled work breaks such as lunches. These unique situations, where typical nurse responsibilities are not applicable or measurable, would require a mechanism for nurses to enter downtimes into an HRM. This ensures that performance assessments accurately reflect nurses' efforts and circumstances, enhancing the integrity and reliability of the PFP program.

Prior to implementing a PFP compensation program, administrators could pilot a preplanned program with historic data to best forecast its effects on their operations and finances, work through design efforts, and further refine their individual model. This testing typically involves a small pilot to uncover issues like data collection gaps. Prior to the pilot, a clear plan should outline criteria for site selection, pilot duration, participant training, and desired information. Important questions to address include validity and reliability of data, usefulness in decision-making, impact on service quality, consistency in data recording, necessary additional measures, and potential modifications to KPI specifications. The pilot validates KPIs against selection criteria and confirms that incentives are aligned with only outcomes that are beneficial to both nurses and patients and will indicate whether the program will provide enough cost savings to fund itself and its own administrative management. Upon testing completion to satisfaction, a final rollout plan for the project can be designed and fully implemented.

5.0 Discussion

The implementation of a PFP in healthcare settings, particularly within nursing departments, presents a multifaceted approach to enhancing organizational performance and patient care outcomes. One of the primary topics of discussion revolves around the theoretical foundations supporting the PFP model and how various theories provide insights into how financial incentives can serve as motivators for nurses, they represent the psychology of the general populace and may not be directly representative of the psychology of direct care providers.

Additionally, the metrics used to illustrate how the PFP may work would be entirely subject to the unique needs, motivations, and goals of individual nurses, patients, and organizations. These metrics were conceptualized based on established theories and generalized health administrative principles. However, in a practical setting, these metrics would be subject to the unique needs, motivations, and goals of individual nurses, patients, and organizations. Moreover, individual nurses may have diverse motivations and goals that influence their performance and response to incentives. Some nurses may prioritize professional development opportunities, while others may value financial rewards or recognition. Similarly, patient preferences and healthcare needs vary widely, necessitating flexibility in the choice of metrics to assess the impact of the PFP model on patient care outcomes. Metrics that resonate with one patient demographic or medical condition may not be applicable or meaningful for another. Furthermore, organizational factors such as culture, resources, and strategic objectives play a significant role in shaping the metrics used to measure the success of the PFP model. Examples include teaching hospitals, as they are more heavily focused on education, research, and complex patient cases. Metrics for academic centers would potentially consider teaching quality, research productivity, and supervision of trainees

alongside clinical outcomes. Incentives should align with the broader mission of training healthcare professionals and advancing medical knowledge. What works for one healthcare institution may not be suitable for another, highlighting the importance of tailoring performance metrics to align with organizational goals and values.

The implementation of a PFP in a competitive market could additionally begin a medical arms race among organizations for top nursing talent with competitors, assumed to have implemented a nursing PFP, poaching competition by offering slightly higher bonus compensation. To counter the possibility of this, PFP incentives could be designed with capped maximum payouts, so there is a limit to how much above market-rate an organization would pay. PFP incentives could also be re-calibrated periodically based on current market wages, rather than allowing compounding year-over-year increases or could introduce non-financial incentives like recognition, professional development, etc. to complement monetary incentives to motivate performance without continually increasing wages. A health system's PFP programs should also be standardize across their market to prevent disruptive wage competition to prevent cannibalization of talent.

Before implementing a PFP in healthcare, it would be crucial to anticipate and mitigate any unintended consequences or potential adverse effects that may arise. One significant concern is the possibility of skewed incentives, where nursing staff might prioritize meeting performance goals solely to earn bonuses, potentially compromising patient care. To address this, strict oversight of patient safety standards and enforcement of repercussions for non-compliance are essential. For instance, suspension of incentive pay eligibility could be implemented for infractions, with the length of suspension increasing for repeated offenses. Emphasizing patient safety and successful outcomes over other incentive metrics is paramount to maintaining quality care. Additionally, there may be risk of creating a promotion-averse workforce, where higherskilled nurses may prioritize financial gains over vertical career advancement. To counteract this, clear career advancement pathways must be developed and promoted within the organization. This ensures that nurses have opportunities for professional growth and development, even within the framework of the PFP model. Addressing potential challenges and proactively implementing measures to mitigate risks, healthcare organizations could navigate the transition to a performancebased compensation model while maintaining quality patient care and fostering employee satisfaction and development.

Appendix A Appendices and Supplemental Content

Appendix A.1 Figure 1



Figure 1

Appendix A.2 Figure 2



Figure 2

Bibliography

- Audit Commission (2000). On Target: the practice of performance indicators. Audit Commission for Local Authorities and the National Health Service in England and Wales; http://www.auditcommission.gov.uk/Products/NATIONAL-REPORT/266D51B7-0C33-4b4b-9832-7484511275E6/archive mptarget.pdf
- Austria, M.-J. (2023). Shared Governance: A Foundation for a Culture of Nursing Excellence. Accelerate, University of Utah Heath. https://accelerate.uofuhealth.utah.edu/improvement/shared-governance-afoundation-fora-culture-of-nursing-excellence
- Clarke, S. P., Raphael, C., & Disch, J. (2008). Challenges and Directions for Nursing in the Payfor-Performance Movement. Policy, Politics, & Nursing Practice, 9(2), 127–134. https://doi.org/10.1177/1527154408320419CMS. (2020). ICD-10-CM/PCS MS-DRG v37.0 Definitions Manual. In CMS.gov. Center for Medicare and Medicaid Services. https://www.cms.gov/icd10m/version37-fullcode-cms/fullcode cms/P0001.html
- CMS. (2023). How do we determine MIPS eligibility? QPP. Qpp.cms.gov; CMS (Centers for Medicare & Medicaid Services) - Quality Payment Program. https://qpp.cms.gov/mips/how-eligibility-is-determined
- Edmondson, A., & Mortensen, M. (2021, April 19). What Psychological Safety Looks Like in a Hybrid Workplace. Harvard Business Review. https://hbr.org/2021/04/whatpsychological-safety-looks-like-in-a-hybrid-workplace
- Hilgard, E. R. (1967). Kenneth Wartinbee Spence: 1907-1967. The American Journal of Psychology, 80(2), 314–170. http://www.jstor.org/stable/1420998
- Health Information and Quality Authority. Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality: February 2013 (Version 1.1). Dublin: Health Information and Quality Authority; 2013.
- Holcomb, B. R., Hoffart, N., & Fox, M. H. (2002). Defining and measuring nursing productivity: a concept analysis and pilot study. Journal of Advanced Nursing, 38(4), 378–386. https://doi.org/10.1046/j.1365-2648.2002.02200.x
- Horne, J., Foley, V., & Flora, B. (2014). Race to the Paycheck: Merit Pay and Theories of Teacher Motivation. Journal of Academic Administration in Higher Education, 10(1), 35–39.
 Education Resources Information Center (ERIC). https://files.eric.ed.gov/fulltext/EJ1140899.pdf

- Lawter, L., Kopelman, R. E., & Prottas, D. J. (2015). McGregor's theory X/Y and job performance: A multilevel, multi-source analysis. Journal of Managerial Issues, 27(1-4), 84-101. https://digitalcommons.sacredheart.edu/wcob fac/408/
- Lockhart, L. (2018). A pay for performance primer. Nursing Made Incredibly Easy!, 16(3), 55. https://doi.org/10.1097/01.nme.0000531880.09273.33
- McPhie, N., & Sapin, B. (2006). Designing an Effective Pay for Performance Compensation System. In U.S. Merit Systems Protection Board. U.S. Merit Systems Protection Board. https://www.mspb.gov/studies/studies/Designing_an_Effective_Pay_for_Performance_C ompensation System 224104.pdf
- Pan, A., Zhao, Y., Yu, W., Chen, L., Wu, X., Liu, J., Zhao, Y., Wang, Y., Wang, J., & Zhan, L. (2023). The construction and practice of a standardized nursing service system based on the designated hospital for the treatment of COVID-19 in China. Archives of Medical Science, 19(1), 292–297. https://doi.org/10.5114/aoms/158550
- Savitz LA, C Jones and S Bernard. "Quality Indicators Sensitive to Nurse Staffing in Acute Care Settings," in Advances in Patient Safety: From Research to Implementation, invited manuscript accepted with revisions, Rockville, MD: Agency for Healthcare Research and Quality (US), AHRQ Publication No. 05-0021-4, pages 375-385, May, 2005.
- Syptak, M., Marsland, D., & Ulmer, D. (1999). Job Satisfaction: Putting Theory Into Practice. American Academy of Family Physicians, 6(9), 26–30. https://www.aafp.org/pubs/fpm/issues/1999/1000/p26.html#:~:text=Frederick%20Herzbe rg%20theorized%20that%20employee,more%20productive%2C%20creative%20and%20 committed.