

Implementation of a Flexibility-Based Compensation Structure in a Large Multihospital Health Care System Creates Sustained Value

Brent Dunworth, DNP, MBA, CRNA, NEA-BC

INTRODUCTION

- In an era where health care dollars are in short supply and patients who require anesthesia care are living longer (and requiring more complex care), innovate strategies are needed to achieve value and access to anesthesiology services. Leveraging the professional interests of Certified Registered Nurse Anesthetists (CRNAs), the implementation of a flexibility-based compensation structure can optimize overall staffing requirements to meet patient care demands, particularly in the face of recruitment challenges.
- Traditionally, anesthesia staffing at the hospital or facility level is determined by peak expected demand by hour of day. Shortfalls of staffing, due to vacancies, high vacation burden, or family medical leaves of absence are often covered with the use of overtime of employed staff or through the use of agency (locum tenens) personnel or a dedicated group of staff who are employed, yet able to provide services at multiple locations.
- An enterprise-wide review of daily demand compared to staffing revealed that peak demands rarely overlapped across hospitals. Through modeling based on actual demand, a more efficient approach to enterprise coverage became apparent.
- A large multihospital system comprised of sixteen disparate locations (at the time of implementation) faced this very situation and was tasked to meet an ever-growing demand for Certified Registered Nurse Anesthetist (CRNA) professional services.
- The CRNA team had the ability to share in the cost savings by earning additional compensation, based upon each individual's desire to offer flexibility to the integrated health system.

LITERATURE REVIEW

- Although predictive labor data is somewhat contradictory, the United States appears to be experiencing a rapid demand for CRNA services across many regions.
- While the Health Resources and Services Administration (HRSA) produced workforce projections in 2016 suggesting a surplus of 10,070 CRNAs by 2025¹, RAND Health projects a shortage of 1,282 CRNAs by 2020 with 60% of states reporting a current shortage of CRNAs².
- Schubert, et al., described the continued increase of case mix index, a measure of case complexity, among Medicare recipients³.
- This trend of living sicker and longer intensifies the resources needed in the practice of anesthesiology as patients, particularly the elderly, present for surgical and procedural intervention.

RESULTS

- Within two years, the elimination of locum tenens expenses reduced approximately \$2 million to payroll expenses.
- Concurrent to this, recruitment efforts were enhanced through the hiring of new CRNAs who were eager to practice across campus locations while, at the same time, enjoying the ability to earn additional income.
- This phenomenon allowed staffing across the health system enterprise to be adjusted to 94% (instead of 100%) of total demand since capacity, in terms of closed anesthetizing locations, could be met more efficiently through the flexible contributions of CRNAs. This alone, allowed for a budget savings of \$3.9 million.
- As the pace of anesthesia demand continued to grow, nearly 175 additional full-time equivalents (FTE) CRNAs were added to the enterprise over the course of four years.
- In the same time period, overtime expenses were reduced by 28%. The program, which has been in place for ten years allows a continued cost avoidance to the health system of approximately \$2.5 million annually.

TABLES

Table 1: Description of the high-level goals and benefits of the flexibility-based compensation program, both to the CRNA employee and to the health system, are described.

Employee Benefits	Examples
<ul style="list-style-type: none"> Menu of choices that are self-directed Potential income enhancement for additional commitment Clinical and professional diversity 	<ul style="list-style-type: none"> Employee elects level of comfort for clinical familiarity with movement in between facilities; no mandatory reassignment if not interested in participating in program Employee buy-in to system integration is rewarded financially Ability to practice in a variety of settings and subspecialty practices
Health System Benefits	Examples
<ul style="list-style-type: none"> Enhanced flexibility between locations to meet dynamic O.R. volume changes Fiscal predictability Ability to staff to less than 100% of demand calculations Quick method to accommodate rapid expansion in services that continue to occur throughout a growing health system Objective measure tied to compensation Innovative approach to CRNA compensation Ability to compete more on a national level with compensation benchmarks 	<ul style="list-style-type: none"> Rapid ability to meet expansion needs and serve critical shortages across hospitals. Current "per diem" incentive is variable and difficult to predict Enhancement of productive work efforts and ability to cover more locations in an efficient manner. More rapid adaptation for expansion of services, including non-operating room anesthetizing locations Criteria clearly defined and monitored New method to engage staff in an integrated delivery system New graduates who enter the system at a higher tier level would experience a more nationally-competitive wage

Table 2: This schematic of the flexibility-based compensation model depicts the levels of opportunity of participation (as well as compensation adjustment) that were presented to CRNAs as a part of the program.

Category	Level 1	Level 2	Level 3	Level 4
Suburban Facility	Work at surgery center only	<ul style="list-style-type: none"> Work at community hospital that involved call and/or weekend scheduling, OR Surgery center employee who is credentialed at 1 additional facility 	<ul style="list-style-type: none"> Credentialed at 1 or more additional suburban locations, AND Credentialed at one urban facility 	At least three of the following: <ul style="list-style-type: none"> Credentialed at 1 or more additional suburban locations Credentialed at 1 urban location Pediatric anesthesia Obstetric anesthesia
Urban Facility	Work at home location only	<ul style="list-style-type: none"> Credentialed at one additional location (any category) 	<ul style="list-style-type: none"> Credentialed at 2 additional locations in urban category, OR Trauma/Transplant team member 	At least three of the following: <ul style="list-style-type: none"> Credentialed at 2 additional urban locations Trauma/Transplant team member Pediatric anesthesia Obstetric anesthesia
Salary Adjustment	0	+4%	+8%	+12%

FIGURES

Figure 1: Results over thirteen initial quarters demonstrate the ability of the program to reduce need for agency staff in exchange of the use of employed CRNAs who are accomplishing a similar benefit and are more familiar with health system operations.

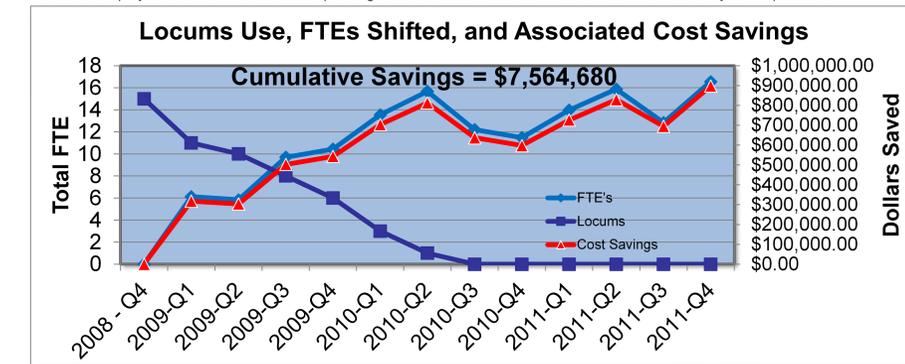


Figure 2: Demonstration of the cost factors associated with the program implementation based on the number of full-time equivalents (FTEs) that were moving flexibly between hospital locations. The gray line indicates the avoided cost of agency staff by quarter. The blue line indicates the avoided cost of hiring to 100% demand without the flexibility option, which reduced demand need to 94%. The orange line indicates the true cost of the program implementation that was returned to employees through enhanced compensation of approximately \$30,000, in aggregate, per quarter.

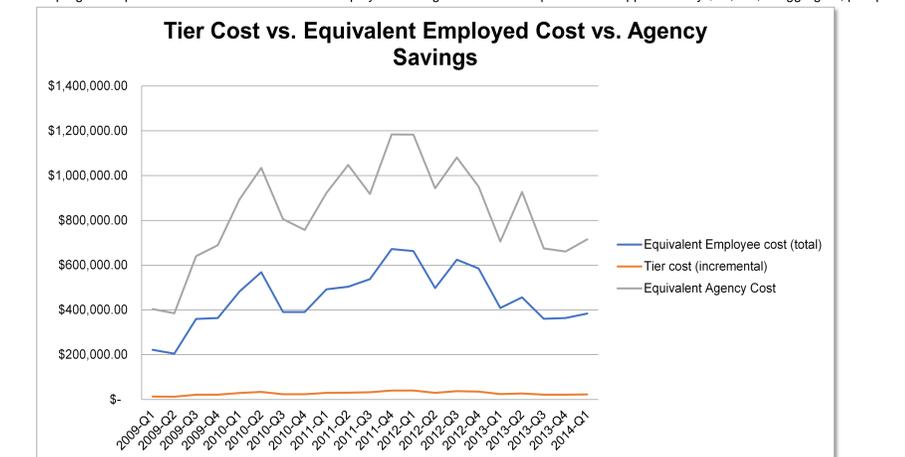
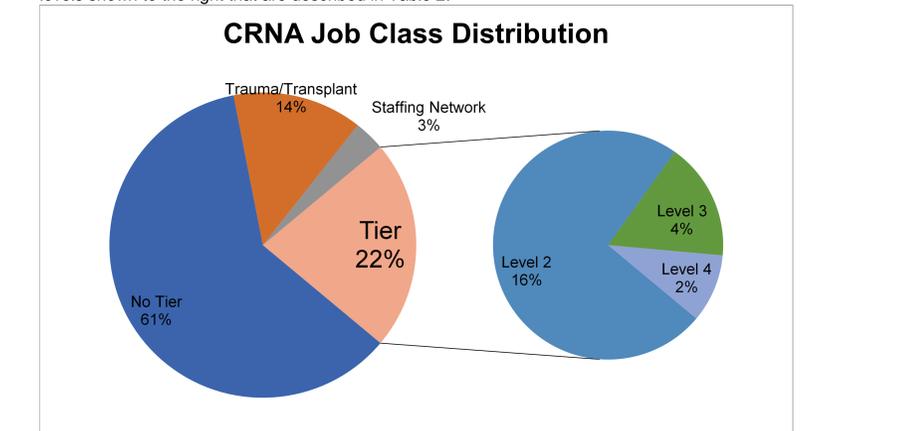


Figure 3: Depiction of the distribution of staff who elected to participate in the flexibility program, labeled "tier." Of those participants, they were distributed, by individual election, into each of the levels shown to the right that are described in Table 2.



REFERENCES

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