Unveiling Overtime’s Total Costs
How OT May Be Harming Your Business and Your Patients
The collective challenge to build a financially sustainable and safe healthcare industry, one where patient satisfaction is the norm, not “an aspirant goal,” remains a top priority, if not a mandate. Achieving a new performance plane requires solutions that can move the needle—incremental approaches will fall short with the frenetic pace of change. As staff are the most important and most expensive asset in healthcare, transformation has no better ally than its workforce.

The healthcare industry is in the throes of arguably its most challenging period. Payers, purchasers, consumers, and regulators have all trained a laser focus on driving better outcomes and reducing spending. The facts lead to an undeniable conclusion – without marked improvement, healthcare will continue to be the most expensive and most dangerous US industry. In 1999, the Institute of Medicine awakened the industry to its safety issue by proclaiming that 100,000 people are killed unnecessarily each year by medical errors. Today experts believe that number to be more than four times that—a staggering 440,000 (the equivalent of nearly 990 fatal jumbo jet accidents each year).

Overtime’s Expensive and Pervasive Challenge

Labor accounts for upwards of 55% of a hospital’s expense. Nursing is a core driver of this expense, accounting for 18%-25% of operating costs. Embedded in these figures are the significant overruns for nursing overtime. Unchecked, overtime can reduce already fragile bottom lines at a time when north of 50% of hospitals have low single-digit margins, and nearly a quarter have negative operating margins.
According to national studies, over 50% of full-time nurses work overtime. And, it’s not small amounts of incremental overtime, but rather an average of seven hours per nurse, per week.\(^6\) For many hospitals, nurse overtime accounts for 7-10% of total hours worked.\(^7\) While overtime has and will continue to remain a solution for filling open shifts, unmanaged overtime in the 10% range is costly, roughly $3 million for a 300 bed hospital. By reducing nurse overtime from 7.5% of total hours to 2.5%, this same hospital can save north of $1.2 million annually.\(^8\) However, the return on managing nurse overtime extends far beyond hard dollar savings. The longer nurses work, the more they become dissatisfied, they are more prone to turnover, they have a marked propensity for medical errors, and they contribute to lower patient satisfaction scores. Thus, measuring overtime solely in dollars and cents fails to account for true costs—medical errors and patient safety must enter into the equation.

**Are Truckers Safer than Nurses?**

In July 2013 the Federal Motor Carrier Safety Administration (FMCSA) implemented new rules to limit the amount of hours a truck driver could work in a week by nearly 15%. The Secretary of Transportation proclaimed that “safety is our highest priority. These rules are common sense and data-driven changes to reduce truck driver fatigue and improve safety for every traveler on our highways and roads.” The FMCSA noted that “working long daily and weekly hours on a continuing basis is associated with chronic fatigue, a high risk of crashes, and a number of serious chronic health conditions in drivers.”\(^9\)
Trucking and nursing share similar risk factors, and numerous studies demonstrate that when nurses work long shifts or long work weeks, overtime contributes to a significant risk of more medical errors. At a time when new research demonstrates the gravity of medical errors is far greater than the industry believed, healthcare desperately needs solutions that will reverse this endemic challenge. With preventable medical errors resulting in more than 1,000 deaths per day, medical errors rank as the third leading cause of death behind heart disease and cancer.\textsuperscript{10}

While regulation may not intercede on a national level as it did in the trucking industry, the question remains—how will healthcare deal with the danger of tired nurses? Sixteen states have begun to address this through passed and pending regulations that limit mandatory overtime.\textsuperscript{11} Yet while there is no national standard, groups like the American Nurses Association (ANA) are trumpeting reform. The ANA recently updated its policy on this matter calling for changes to nurse schedules such as 12-hour work shifts and limiting nurses to 40 hours in a seven-day period.\textsuperscript{12} As the industry grapples with solutions to address medical errors and patient safety, there is perhaps no greater clarion call for improving patient safety than controlling overtime. Consider the following:

- The risk for making an error more than doubled when nurses worked 12.5 or more consecutive hours.\textsuperscript{13}

- Medication errors and hospital-acquired infections are 3.71 and 3.39 times more likely respectively when nurses work more than 40 hours per week.\textsuperscript{14}

- Patient falls and pressure ulcers are 3.36 and 3.50 times more likely respectively when nurses work voluntary overtime.\textsuperscript{15}
Overtime will continue to play a role in staffing, but when overtime becomes part of a hospital’s fabric, executives must reconcile the attendant threats. These threats impact not only patients, but also the system’s financial health. Many of these errors are costly, unreimbursable never events. For example, MRSA, central line infections, and pressure ulcers cost more than $40,000 per incidence. While it is unreasonable to think that healthcare’s systemic workforce supply and demand challenges will be resolved easily, organizations do have the power to proactively manage overtime and diminish the exposure to medical errors.

**Satisfied Staff + Satisfied Patients = Financial Returns**

A hospital’s business model increasingly depends on satisfied patients. In many markets, patients have a choice, their financial responsibility is growing, and they have access to a growing amount of data that helps them to evaluate hospital performance. In many ways, consumerism has arrived, and not just for individuals. Medicare shares similar aims, and has instituted value-based purchasing bonuses or penalties that can impact up to 1.5% of a hospital’s Medicare reimbursement. In recognition of patients’ voices, Medicare derives 30% of these metrics from patient satisfaction surveys called Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).
Similar to its impact on medical errors, nurse overtime hampers patient satisfaction. With nurses spending 40% of their shifts in direct patient care, nurses arguably represent the most visible interface with the patient. Yet the longer nurses work, both in terms of hours and shifts, the more dissatisfied both they and their patients become. Nurses working shifts of thirteen hours or more are 2.7 times more likely to be burnt out, 2.38 times more likely to be dissatisfied in their jobs, and 2.57 times more likely to intend to leave their job in the next year than nurses who work 8-9 hours. Patients feel the impact of long shifts too. Patients reported higher satisfaction when higher proportions of nurses worked eleven or fewer hours and less satisfaction as nurse shifts extended beyond thirteen hours.

The connection between patient satisfaction and the length of a nursing shift can impact financial performance. As nurses work more hours, patients are more likely to rank hospitals 6 out of 10 or below in HCAHPS. JD Power and Associates provides key inputs to monetize the power of poor HCAHPS scores. Patients who score a hospital less than a 7 on HCAHPS have a 38% likelihood of returning to the hospital, whereas patients who score the hospital with an 8 or higher are more than twice as likely to return (80%). This evidence is supported by other studies demonstrating that the percentage of patients who would “definitely recommend” a hospital to their loved ones decreased 2 percent for every 10 percent of the nurses who expressed dissatisfaction with their jobs. These data sets reinforce the power of staff satisfaction and its contribution to satisfied patients.

Closing Thought
With healthcare changing almost daily, executives face an extraordinary set of challenges. The shorthand of this mandate reads like this: Make the hospital safer, do it cheaper, and keep the “customer happy.” Moving the proverbial needle will be difficult, but controlling overtime can be a force multiplier. Rare is the opportunity to attack cost, patient safety, and patient satisfaction with one metric. When properly managed, overtime can deliver on that promise.
About API Healthcare
API Healthcare (www.apihealthcare.com) is focused on workforce optimization solutions exclusively for the healthcare industry. The company’s staffing and scheduling, patient classification, human resources, talent management, payroll, time and attendance, business analytics, and staffing agency solutions are used by more than 1,600 health systems and staffing agencies. Founded in 1982, API Healthcare has been rated by KLAS in the Top 20 Best in KLAS Awards Report (www.KLASresearch.com) as the top time and attendance provider system for the last 12 years (2002-2013) and the top staffing and scheduling solution in 2012 and 2013.

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8Sage Growth Partners Analysis.
15Ibid.
21Ibid.
22Ibid.