CHAPTER 1

Making the Case for Addressing Stress and Burnout and Pursuing Engagement in Healthcare Organizations

I realized on day one that my job was going to be more stressful than I had anticipated. For a while I tried to deal with it, to cope, I guess. But after a few months, I just couldn't take it anymore.

—Former physical therapist in a community hospital, now an insurance claims representative

I was burned out. I would show up to work but was completely checked out. I know I wasn't as careful as I should have been and probably made some pretty bad mistakes. It sounds bad, but I just didn't care.

—Pharmacist in an academic medical center

WHY YOU NEED TO CARE ABOUT STRESS AND BURNOUT AMONG YOUR STAFF

Stress is an easy thing to ignore. It seems normal. Everyone is stressed, right? If you aren't a little stressed, are you really doing your job? In some ways, the answer to both questions is yes. Even the earliest stress theorists and researchers concluded that some degree of stress (or perhaps better framed as "arousal") was required to accomplish

daily activities. In fact, our mere state of wakefulness means that we are experiencing stress.

However, we also know that too much stress can cause problems. In this chapter, I will review the significant impact that stress can have on healthcare professionals and administrative staff. In doing so, I will make a business case for caring about stress among healthcare staff. My goal isn't to tug at your heartstrings by arguing that a caring manager needs to worry about how stressed their staff is. That might be true, but there is also a very real cost associated with stress and burnout. For better or worse, leading healthcare organizations are more likely to pay attention to the financial argument. I am convinced that after I lay out these consequences, you will also be convinced that stress and, in its extreme form, burnout are issues that you need to strongly consider because of the impact on both your heartstrings and your purse strings.

COMMON CONSEQUENCES OF STRESS AMONG HEALTHCARE PROFESSIONALS

I hesitate to lump clinical and administrative professionals together when sorting out the negative impact of stress. As outlined in the introduction, not everyone experiences stress in the same way. Moreover, as discussed in chapter 2, the sources of stress vary according to the type of clinical work. However, when we study the impact of stress on the working professional, we see that the patterns are remarkably consistent across occupations.

Burnout Leads to Lower Performance

One of the more consistent findings in the literature is that stress, especially when it reaches the point of burnout, has a negative impact on job performance. Performance is considered a multiplicative function of one's ability and motivation. In other words, to perform

a job, one must have both the ability (e.g., the requisite skills and knowledge) and motivation to do the job. Stress and burnout tend to have a greater impact on the motivation side of the equation. When employees are burned out, they generally retain the ability to do the work but their desire to complete the work markedly declines. Consider the implications of this finding for a moment: We have a workforce that can do the job but has little desire to do it. What a waste of human potential!

The underlying reason for the lack of motivation is essentially a resource allocation problem. In the introduction, I suggested that stress results from a mismatch between the demands of the job and the resources available to meet those demands. When we face demands at work, we allocate some of our resources to meet each new demand we face. For example, when a new patient is transferred to a floor, the nurses on that floor have a new set of demands on their time, skills, material resources, and even physical energy (in terms of burned calories). We repeatedly make decisions about how we will allocate or invest our resources.

What we tend to find is that people allocate their resources strategically, though that strategy is typically focused on short-term avoidance of further loss. When we are less burned out, we may not think twice about helping another employee who seems to be having trouble. We may take a little more time to double-check our work (e.g., check a medication order twice to make sure the dosage is correct). But as our stress increases to the point where our resources are severely diminished, we naturally allocate our resources more carefully. Suddenly, we're not sure whether we have the time to help that colleague—unless we determine that doing so may benefit us soon after offering the help (i.e., we believe the colleague will reciprocate).

Burnout Affects How Work Gets Done

This resource allocation process has important implications for how work gets done in healthcare organizations. Over the years,

I've conducted a number of research studies on the concept of work-arounds—creative solutions for addressing blocks in workflow. It will come as little surprise that healthcare professionals are constantly dealing with blocks as they go about their work. Supplies are not available because supply chain issues persist, patients' charts are missing information, or medication orders are not properly filled. Some of these blocks may be intentional, such as the forcing functions embedded in bar code medication administration technologies that make the employee stop and think about what they are doing. But most of the blocks are not intentional; they are, instead, problems with work design or coordination.

However, when an employee is burned out, these blocks are interpreted differently. For example, scanning the medication and armband in a bar code medication administration system is not a big deal when stress is low. But in the face of burnout, a nurse might feel that the task is inconvenient and taking up valuable time. Some nurses make copies of the patient armbands and place them close to the medications to eliminate repeated trips to the bedside for scanning. This shortcut saves them time as they administer medications, but it also eliminates the safety advantage that was built into the bar code system.

We researchers have applied this idea not only to patient safety, but also to the safety of the healthcare professional. In the same way that nurses (and other professionals) may work around patient safety features, they may shortcut safety procedures meant to protect themselves. We find that when nurses experience higher levels of burnout, they engage in risky practices such as not asking for assistance when moving patients. As a result, they increase their possibility of incurring occupational injuries such as musculoskeletal damage.

Taken together, our work (e.g., Halbesleben, Rathert, and Williams 2013; Rathert et al. 2012) suggests that when stress mounts, healthcare professionals focus their resources in ways that allow them to get the tasks done in the moment but don't have the resources to consider the underlying issues that led them to have to create work-arounds. As a result, that may suboptimize their outcomes.

If they are reallocating their resources repeatedly, they may come to feel that they are not a good fit for the job.

Burnout Leads to Higher Turnover

Turnover, and particularly thinking about turnover, is the next potential consequence. Burnout is strongly linked to negative consequences such as job dissatisfaction, lower commitment, and eventual turnover. A recent analysis of more than 50,000 registered nurses in the United States found that of those who left their organizations, 31.5 percent reported leaving because of burnout (Shah et al. 2021). High levels of stress are shocks to an employee's system. What is interesting is that the stress, and the resulting shocks, lead them to focus less on the issues with their work that caused the stress and more on whether they should continue in the job or profession where they experience the stress.

Most healthcare professionals have spent a significant amount of time training for their professions. While that training might be stressful, it is typically completed with the idea that it will pay off in the end. When they take that job and realize that their expectations are not met, those professionals may start to wonder whether they took the wrong job or whether they took the wrong career path altogether. As a result, they start thinking about other options and may even begin a job search.

This effect appears to be particularly pronounced among early careerists (especially first-year professionals) and may explain why more than a quarter of nursing turnover occurs in the first year (Nursing Solutions, Inc. 2022). If someone is really burned out, they are unlikely to stick around for a long time. In many healthcare professions, this factor had already contributed to the well-documented staffing shortages before the COVID-19 pandemic. The perfect storm of baby boomers' retirement, high early-career turnover, and inadequate capacity in training programs had created a crisis in most healthcare professions—and the pandemic was gasoline

added to the fire, exacerbating already-known issues. In many ways, the pandemic created the ultimate shock for many healthcare professionals. The broader issue of the psychological processes leading to turnover is beyond the scope of this book; however, research consistently finds a relationship between high levels of stress and turnover across occupations.

Burnout Is Harmful to Health

A growing body of literature supports the idea that job stress is negatively associated with health. As this research becomes more popular and more sophisticated, the findings are revealing that stress, particularly when it reaches the point of burnout, has a greater impact on occupational health than initially realized. Researchers have consistently linked stress and burnout to negative health outcomes, including cardiovascular disease, lower-rated self-health, type 2 diabetes, and male infertility.

The link between stress and health outcomes is not necessarily direct. Instead, there are various intervening processes, both physiological and behavioral, at work. Stress can affect development of areas of the brain that support stress responses (Hambrick, Brawner, and Perry 2019). Further, stress activates an autonomic response involving our neuroendocrine and immune systems, and those responses are commonly associated with sleep disturbances (Demichelis et al. 2022).

As studies have shown, another way of connecting stress with negative health outcomes is to look at problematic behaviors that people use to cope with stress. Examining a data set of nearly 3,000 people, Jackson and colleagues (2010) found that stress was associated with overeating and substance use, particularly for people in already-challenging environments that made these forms of coping easily available. In view of this data, the link between stress and symptoms of diabetes and cardiovascular disease is not surprising.

Burnout can also lead to injuries while engaging in some of the work-arounds I mentioned earlier. Findings from some of my published research suggest that burned-out nurses and sonographers are more likely to engage in work-arounds related to safety equipment and procedures that are meant to protect them. As a result, they are more likely to be injured on the job. One would hope that would prompt those health professionals to reduce their work-arounds, going back to the processes as they were intended. However, what I found is that those injuries lead them to be even more burned out and even more likely to engage in safety work-arounds.

Consequences of Stress and Burnout for Healthcare Professionals

- Decreased performance
- Problematic (even dangerous) adjustments to work processes
- Higher turnover
- Poorer health

Vicious Cycles

As if these consequences weren't enough, emerging research suggests that people who are burned out tend to enter a vicious cycle that worsens their burnout over time. The idea is pretty straightforward: As our resources are depleted, we are left with fewer options for investing our remaining resources; thus, we are more likely to lose those resources. For example, if we have barely enough resources to do our job, we are not likely to exhibit extra behaviors that would make us a candidate for promotion. As a result, we are stuck in a job that is draining our resources.

The good news is that we as healthcare leaders can use these cycles to our advantage at times. We can also create *virtuous* cycles if we can attain a critical mass of resources. Employees then can allocate

their resources in a way that continually generates new ones. When this model is achieved, the result is a highly engaged workforce.

Burnout from the Healthcare Professional's Perspective

In putting together all the processes mentioned here, a picture emerges that will resonate with a lot of readers. A healthcare professional, regardless of whether they are in a clinical, leadership, or support role, enters the profession with the noble goal of helping others and saving lives. As they start their careers, they realize those outcomes are more difficult than they imagined, which causes stress. To deal with stressors, they make work-arounds that work in the short term but end up causing other problems later. Their physical health starts to deteriorate. Eventually, stress accumulates to the point where they become burned out. They start thinking about whether their organization cares about their well-being and whether there's a better option for them out there. They may even start thinking about whether they are a good fit for their role. In the end, they realize that it is unlikely that they will ever reach their original goals of truly helping people, so they consider an entirely different profession.

All that sounds pretty bad from the perspective of the individual. In the next section, we will explore how that pattern of individual thinking ends up aggregating to create significant problems at the organizational level.

THE IMPACT ON ORGANIZATIONAL PERFORMANCE

The impact that stress makes on organizational performance is less clear. While stress certainly has a marked effect on healthcare professionals as described earlier, research that sorts out the relationships between stress and its effects is difficult to conduct for many reasons. Stress has

a delayed effect on organizations. It may build among employees for years until the full cost is realized. Therefore, causal research designs at the organizational level are nearly impossible to implement. However, if we extend our discussion of the impact of stress on individuals, the organizational-level consequences become clear.

We have already made the connection between burnout and outcomes, such as the link between performance and turnover. Lower performance and higher turnover have real costs in terms of human resource losses. The lost productivity associated with lower performance is pronounced. While no figures specific to healthcare are available, the American Institute of Stress (2022) estimates workplace stress to cost more than $300 billion in the US economy alone. This figure is largely based on accidents, absenteeism, reduced productivity, medical costs, worker's compensation claims, and other associated costs. Again, while this figure is for the entire United States, a conservative estimate of 15 percent to represent the portion of the economy represented by healthcare would still add up to about $20 billion. Imagine how that money could be used constructively in the healthcare sector.

Turnover

A good bit of that $20 billion comes from costs associated with turnover. When someone quits their job, there are direct costs associated with recruiting and selecting someone to fill the position (e.g., advertising the position, working with a search firm, paying for candidate travel for interviews), training a new person once they take the job, and lost productivity (including lost clinical income, in some cases) resulting from the temporary reduction in staffing and the learning curve for the new hire. These costs don't even include the indirect costs associated with lower morale when someone vacates a position.

The costs associated with turnover vary significantly, depending on the occupation. While the actual cost will vary due to a significant

number of factors (e.g., local economy, supply and demand in the profession), the rule of thumb is that the replacement cost is about two times the salary of the employee being replaced. To gain a sense of what turnover is costing your organization, the American Medical Association has created a calculator that specifically refers to physician burnout but could be easily adapted to any profession (https://edhub.ama-assn.org/steps-forward/module/2702510).

The numbers also should be put in a proper perspective based on turnover rates. Although the cost of replacing a nurse may be much lower than for a physician, the overall costs may not be much different because of the higher number of nurses who need to be replaced. A recent NSI report (Nursing Solutions, Inc. 2022) found that the turnover rate for nurses was just under 19 percent. Considering the number of nurses in a facility, the cost to replace each one, and that level of turnover, the report found that the average hospital in the study was losing between $3.6 million and $6.5 million *per year*. Put another way: Just a 1 percent change in turnover can either cost or save a facility upwards of $270,000 a year. One can find similar—even higher—turnover rates for other healthcare occupations such as sonographers.

Of course, we cannot attribute all turnover costs to stress. Turnover happens for any number of reasons including promotion, retirement, or relocation. We cannot eliminate turnover, nor would we want to do so. Turnover can serve a purpose, such as in the case of an employee who doesn't fit the culture or is underperforming. Turnover can also be useful to manage the workforce size when demand or the economy weakens (e.g., using attrition rather than layoffs or terminations to reduce the workforce).

However, the relationship between stress (especially burnout) and turnover is strong. We cannot stop people from retiring, nor can we stop someone's spouse from accepting a job elsewhere. And we certainly wouldn't want to prevent promotions! What we can do, however, is prevent most stress-related turnover.

I can imagine a potential response to these arguments: *If employees can't hack it, why should we prevent their stress? Why not just*

find someone who can cope? Unfortunately, some leaders have taken this thinking so far as to use "stress interviewing" to test potential employees' responses to stress. Unfortunately, such approaches rarely yield the intended effect of weeding out potential employees who can't handle stress. That line of thinking also ignores an important reality: There aren't enough healthcare professionals in the labor market as it is, and relying on temporary solutions such as travel registered nurses is extremely costly. In the end, investing in solutions to reduce stress and its associated turnover will almost always be a better long-term investment than dealing with the churn of stressed-out employees in a tight labor market.

The effect of stress on turnover and retention may be even more insidious than I have already described. Two parallel findings from my research are of serious concern. First, when significant events cause people to consider their job situations, the top-performing employees leave their jobs first. And on the other hand, a surprisingly large group of employees would prefer to leave a stressful environment but, for whatever reason, are stuck in their job. Because of their lower productivity, these "stuck" employees may engender just as negative an impact on an organization as the employees who left. I can think of few situations worse than losing top employees to stress while keeping lower-performing employees.

Health-Related Costs

Beyond turnover, there are other human resource costs associated with stress, particularly those directly associated with health. For example, the seminal 2008 report from Higgins and colleagues found that high levels of role overload (a form of stress) are associated with more than $6 billion per year in physician visits, emergency department visits, and inpatient hospital stays in Canada. While these data represent all occupations, they could apply to healthcare professions as well. These findings also indicate a significant burden

on healthcare system utilization as a result of stress, which only adds to the stress of healthcare professionals.

A related issue is worker's compensation claims for stress-related issues. Regardless of the legitimacy of such claims, they exist and may be something your organization will face. Even if direct claims of stress in the context of worker's compensation are disallowed, stress may be associated with compensable claims for traditional workplace injuries such as needlesticks and musculoskeletal damage, so it still must be considered a worker's compensation risk.

The relationship between stress and health suggests a link between stress and sickness-related absence from work. Again, this issue is muddy and difficult to sort out. If you catch a cold, you will have difficulty attributing it directly to stress. Regardless, any human resources director will tell you that absences related to sickness have a significant cost. Higgins and colleagues (2008) estimate that absenteeism from work stress creates direct costs of $1 billion per year in Canada. Obviously, such absences are not always preventable, especially in healthcare where exposure to illness is higher than in other industries because of the nature of the work. However, absences resulting from sickness that is indirectly related to stress should decrease if stress is addressed.

Organizational Consequences of Stress and Burnout

- Higher turnover
- Higher healthcare costs

THE IMPACT ON PATIENTS

So far, I have highlighted the direct and indirect costs associated with stress from the perspective of clinical staff, administrative staff, and the organization as a whole. If you aren't convinced yet about the gravity of the issue, try looking at it this way: Stress among your employees significantly affects the quality of care they provide

to their patients. It leads to medical errors, near misses, and lower patient satisfaction.

A meta-analysis of data from more than 200,000 healthcare providers in 82 studies found compelling links between burnout and quality of care and safety. (A meta-analysis combines studies of a topic into one big analysis to significantly increase the sample size of the research and enables you to address broader questions.) This particular meta-analysis found that burnout was consistently associated with lower quality care and lower patient safety (Salyers et al. 2017; see also Jun et al. 2021 for a systematic review focused on nurses). Digging deeper, studies are revealing that burnout is associated with higher levels of infection, medical errors, and post-discharge recovery time (Cimiotti et al. 2012; Montgomery et al. 2021; Tawfik et al. 2018).

Of course, some problems with quality of care and safety result from the turnover discussed earlier. An increasing body of evidence suggests that nurse turnover, staffing shortages, and related issues severely affect the quality of patient care. Such research is well established and familiar to most healthcare executives, so let's focus on the other ways that stress can have on patients.

Recent studies suggest that the relationship between burnout and patient outcomes is driven by problems such as less teamwork and lower adherence to infection control protocols (Colindres et al. 2018; de Lima Garcia et al. 2019), both of which require an investment of resources.

The links between burnout and patient safety are growing and startling. While we still cannot attach an exact figure to the number of avoidable medical errors attributable to stress and burnout, the literature supports the idea that there is a relationship between the two.

Research suggests that burned-out healthcare professionals who report medical errors likely see reporting as a necessary resource allocation, or at least realize that the costs of not reporting are simply too high (Halbesleben et al. 2008). However, a growing body of research suggests that they may be less likely to report near misses—that is, instances in which an error did not occur but likely would have if

someone had not intervened (Arnetz et al. 2017; Hall et al. 2019). Near-miss reports are typically voluntary, in the sense that no one would know about these events if they weren't reported. As a result, healthcare professionals may see reporting as an extra part of the job and feel that resources should not be allocated for it. Near-miss reports present an extraordinary learning opportunity, but burnout seems to be keeping organizations from learning from them.

One of the more established patient consequences of burnout is lower patient satisfaction. This relationship has been the crux of most burnout outcomes research and is consistently replicated. There is a host of possible mediating factors, such as poor communication, that help to explain this relationship; however, burnout seems to be the point at which problems start.

TAKEAWAY POINTS: THE COST OF STRESS AND BURNOUT TO HEALTHCARE

An absolute dollar figure cannot be placed on the cost of stress and burnout to the healthcare profession. There are too many variables involved and too many connections that have yet to be solidified. The effects of stress are too individualized, context sensitive, and time dependent to be pinned down to a firm figure.

Moreover, although evidence clearly links stress with these serious outcomes, we will never be able to come up with absolute causal links between stress and the outcomes described in this chapter. I doubt many healthcare organizations and their employees would be willing to volunteer for a randomized, controlled trial of stress and outcomes in which one group is randomly assigned to the "high stress group" and observed for such things as lower performance, injuries, turnover, insurance claims, and medical errors.

This impossibility, however, doesn't diminish the main message here: There is a *significant* long-term cost of stress among healthcare professionals. To summarize, here is the straightforward case for

why you should be concerned about stress and burnout in your organization:

- Stress and burnout are associated with lower employee performance, turnover, and diminished health.
- As a result, stress and burnout represent significant financial costs to healthcare organizations.
- Stress and burnout also are associated with lower-quality care as a result of medical errors and lower patient satisfaction.
- The negative consequences of stress and burnout are at least partially preventable.

The bottom line is that stress and burnout in healthcare organizations lead to considerable financial and human costs and must be addressed. Of course, to address burnout, we must understand how it develops. We'll turn to that process in the next chapter.

FURTHER READING

Bakhamis, L., D. P. Paul III, H. Smith, and A. Coustasse. 2019. "Still an Epidemic: The Burnout Syndrome in Hospital Registered Nurses." *Health Care Manager* 38 (1): 3–10. https://doi.org/10.1097/HCM.0000000000000243.

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