



Honoring the Nurse-Patient Connection

**How to Create Working Environments
for Healthier (and Happier) Patients**

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EXECUTIVE SUMMARY

A holistic hospital view reveals the importance of relationships: the relationship between compassionate leadership and a healthy environment, between a healthy environment and a satisfied staff, and finally, between a satisfied staff and exemplary patient care. The cumulative takeaway? When you improve the environment, you improve the outcomes.

Research supports the notion that happier nurses equal happier and healthier patients. When nurses are more satisfied with their work environment, patient satisfaction scores and clinical outcomes improve, including reductions in hospital-acquired conditions and readmission rates.

Several road blocks stand in the way of the best work environment for nurses. Many nurses are unable to effectively allocate their time, sometimes negatively impacting patient care. Nurses also struggle with navigating electronic health records (EHR), which can cut into direct patient time. Nursing is also a physically demanding job that can put significant strain on the human body and lead to long-lasting medical conditions for caregivers.

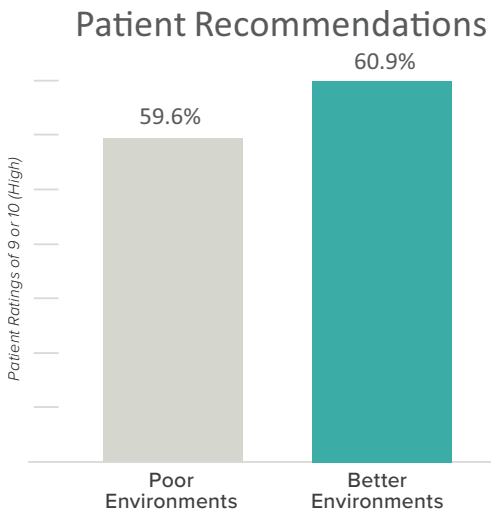
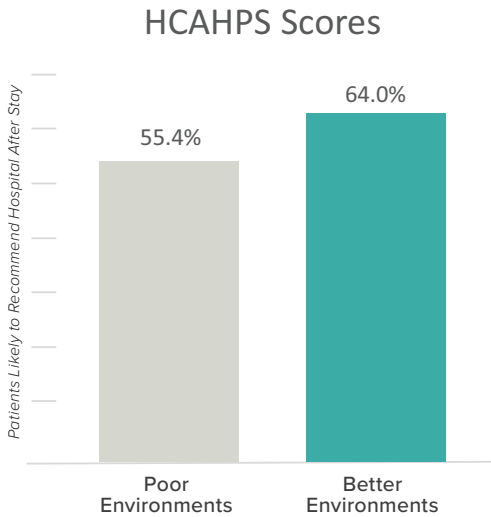
Fortunately, there are ways to improve the working environment for nurses. By addressing substandard physical spaces, improving work flow, and enhancing workplace ergonomics, organizations can help nurses reduce documentation time, decrease time spent walking the unit, and minimize the physical stress of the job—improving working conditions and, in turn, the patient experience.



WHEN NURSES ARE MORE SATISFIED WITH THEIR WORKING ENVIRONMENT, PATIENT SATISFACTION SCORES IMPROVE, AS DO CLINICAL OUTCOMES, INCLUDING REDUCTIONS IN HOSPITAL-ACQUIRED CONDITIONS AND READMISSION RATES.

Better Work Environments Increase Patient Recommendations and Improve HCAHPS Scores

Source: Kutney-Lee et al. 2009



The Nurse-Patient Connection

The connection between nurses and patients is an important one that can have a major impact on a patient’s experience and their clinical outcomes. Studies have shown when nurses have more time to personally interact with patients, hospital stay times are shorter, injury rates fall, and the number of hospital-acquired infections drop. So do incidents of “failure to rescue”—a term used to refer to deaths that occur after a treatable complication [1,2].

Time spent with patients is just one factor in the quality-of-care matrix. Another is nurse morale. Research shows that when nurses feel satisfied with their work environment, they provide better service, which results in better outcomes and positive patient feedback.

One way to measure patient satisfaction is how likely they are to recommend the hospital to friends and family. Hospitals with better work environments are more likely to receive a recommendation than those with poor environments. Additionally, the quality of the work environment is linked to Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores: the better the environment, the higher the scores [3,4].

Four obstacles stand in the way of the best environment for nurse and patient connections: how nurses are able to allocate their time, the ease with which they can interface with EHRs, the daily toll on their bodies, and the physical layout of their workspace.

ALLOCATING TIME

Throughout the workday, nurses are pulled in multiple directions, and how they allocate their time has profound effects on both work satisfaction and patient care. Of course, nurses prefer to spend as much time as possible working with patients, but administrative and other duties fight for their attention.

Extended shifts

It's not uncommon for nurses to work extended shifts of 12 hours and more. Many nurses prefer working longer shifts when it means consecutive days off to spend with family along with more continuous patient care, but there are drawbacks. For instance, the likelihood of making errors accelerates with the length of the original shift due to fatigue.

- Nurses who worked more than 12 hours committed more errors.
- Nurses who worked overtime or more than 40 hours a week committed more errors [5].

Documentation

According to several studies, nurses spend up to one-third of their time on documentation, rivaling or surpassing the amount of time spent on direct patient care [5,6].

Nurses have expressed dissatisfaction with the time spent on “excessive paperwork” and “wasted time” tracking down documents or equipment. One study found 6.6% of a nurse's time was categorized as waste [7]. According to U.S. News & World Report, an average nursing salary is \$66,640 per year. That means an organization spends nearly \$4,000 per year, per nurse, for time that doesn't benefit the hospital or its patients.

Walking Time

For all of these activities, nurses need to move between patient rooms, supply cabinets and the nursing station. Research suggests more than 25% of a nurse's time is spent walking the hospital floor [7].

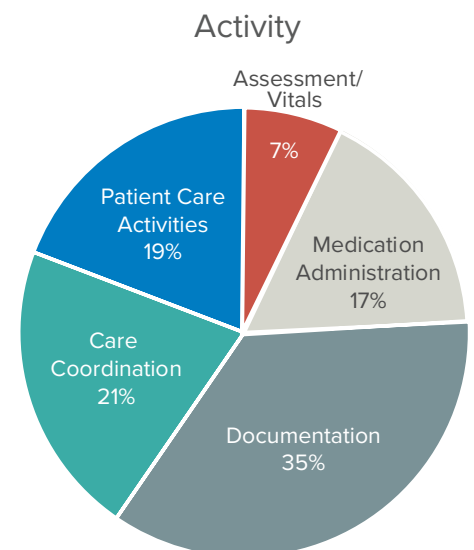
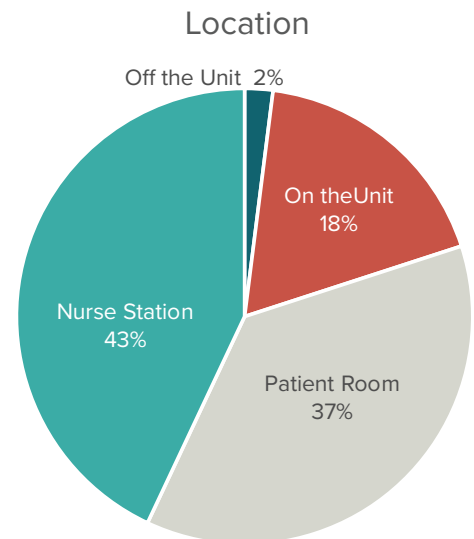
How nurses move is just as important as where they are going. When nurses have to make extra stops, retrace their steps, or deviate from their path, hundreds of feet can be added to their walking burden [8], which can already be up to five miles per day [7].

Medication Administration

Medication administration is also subject to inefficiencies. One study discovered that for drug administration, nurses spent nearly two-thirds of their time on drug delivery and the other third on drug preparation.

Nurse Location and Activity by Time Spent

Source: Hendrich et al. 2008



* Percentages may not add up to 100% due to rounding



Grappling with the EHR

Source: Philipsen et al. 2014 & Stowkowski et al. 2013

73%

Nurses self-reporting half of each shift spent with the EHR

15–26%

Increase in documentation time after EHR system implementation

72%

Nurses staying after their shift to finish charting

EHR DIFFICULTIES

EHRs improve healthcare by offering greater connectivity, transparency, decentralization, mobility and access to vast amounts of data, but they can be difficult to implement and navigate. Currently, many hospitals are still adapting and searching for ways to refine their EHR practices. The process may take years and impact the amount of time caregivers can devote to patients.

Added Documentation Time

When EHRs were first proposed, the healthcare community assumed that they would represent a “huge step forward in patient care,” and that they were going to be “more accurate, safer, timelier, and faster” [9]. EHR proponents argued that documenting via a computer would free up nurses to spend more time with patients. However, nurses have reported that often the opposite is true, and documentation is “taking longer than ever” [9].

One informal survey discovered that a majority of nurses were now staying past their scheduled shifts to complete daily documentation [9]. This has increased labor costs for hospitals forced to pay overtime. In other instances, nurses have “clocked-out” and are documenting on their own time, negatively affecting work-life balance and contributing to fatigue.

EHRs Contribute to Stress

Nurse fatigue is an epidemic in hospitals, leading to high rates of attrition. The Robert Wood Johnson Foundation’s RN Work Project showed that 33.5% of newly licensed registered nurses leave their first job within two years [10]. In one study, 67% percent of nurses expressed that they were under a great deal of stress because of their job [11].

In the same study, nurses complained that EHRs have increased their work volume, are inefficient, and at times, make their role seem more clerical than clinical. They believe the systems focus on payers rather than patients.

Some nurses felt they were losing the ability to provide high-quality care to patients, leading them to reduce their clinical time, move to other clinical practice types, or leave medicine altogether.

The Joint Commission and EHR Effectiveness

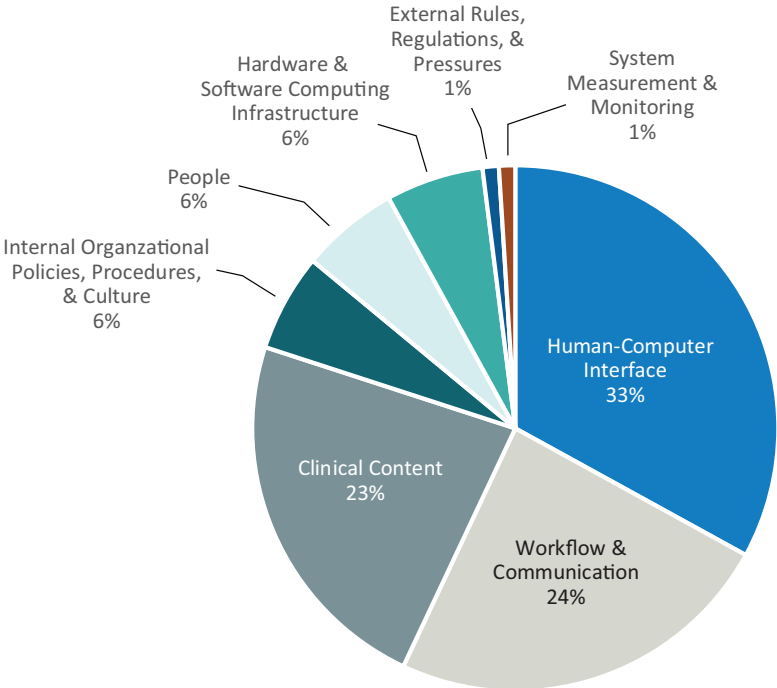
Since the widespread adoption and use of EHRs, the Joint Commission, in its charter to identify adverse events, high risk conditions, and the underlying causes, found that incorrect or inaccurate information entered into EHRs contributed to a significant number of adverse events. In the 2015 Joint Commission Sentinel Event Alert, 120 sentinel events identified over a three-year period were directly related to EHR usage. Some examples cited included a chest X-ray being ordered for the wrong patient, incorrectly labeled injections and inconsistency in pharmacy ordering. The primary causes attributed to the reported events were problems with the human-computer interface (33%), including ergonomics and usability issues [12].

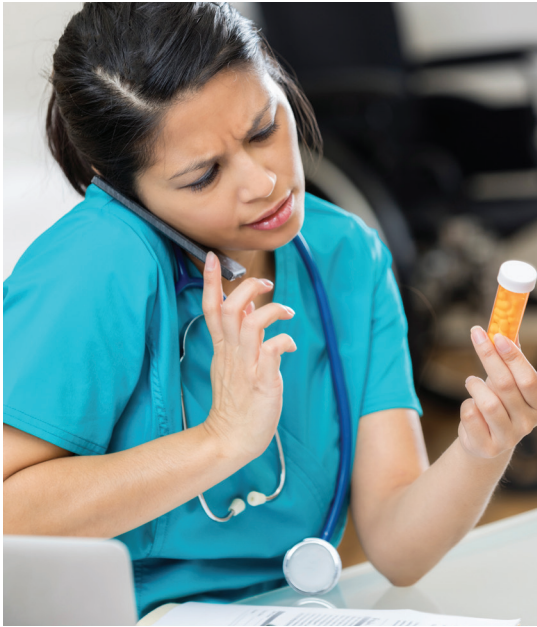
As a result, the Joint Commission recommends that clinicians should have access to workstations every 50 feet, minimizing the potential for misplacing or misremembering important patient information before entering it into the system. In the instance of adopting EHRs, this emphasizes the importance of understanding both the application of the EHRs in the workflow and the support of caregivers and patients within this workflow. It also provides healthcare facilities a starting place to review inherent issues in processes to better understand how they stack up against these alerts and what actions should be taken as a result.



Causes for Healthcare IT-Related Adverse Events

Source: The Joint Commission (2015)





PHYSICAL STRAIN

Nursing is a physical job. It involves manual patient handling, spending long stretches standing, performing repetitive tasks, and often working in less than ideal physical environments, which can lead to cumulative trauma disorders (CTDs) such as carpal tunnel syndrome, low back pain, and other musculo-skeletal disorders (MSDs). Finding ways to minimize the physical impact on nurses is vital to improving nurses' job satisfaction and ultimately, the patient experience.

Musculoskeletal Disorders and Cumulative Trauma Disorders

Nurses and nursing assistants have some of the highest rates of MSDs and CTDs of any workers from across all industries. CTDs, such as carpal tunnel syndrome, occur in nurses due to highly repetitive work, such as documentation and involve recurrent and persistent pain that can progress in severity over time [13].

Low back pain is another contributing factor to nurse discomfort. It is one of the most common work-related occupational health problems and is particularly common among nurses because of improper body mechanics, manual patient handling, repetitiveness and continuous standing [14].

Alleviating MSDs, CTDs and low back pain involves improving the ergonomics of nursing workstations by balancing sit-stand times, creating physical spaces that promote good posture, and reducing fatigue-causing conditions.

Let's not forget about mental strain. Nurses care for their patients' needs both physically and mentally, so it should come as no surprise that nurses themselves may find themselves needing support to deliver the best medical care they can. Mental resilience in the face of suffering patients and their family members can be difficult to maintain, even among the most experienced healthcare practitioners, yet nurses are expected to retain their professionalism while treating distressing symptoms, pain and suffering.

Nurses that have access to properly-designed equipment and the right amount of rest have the ability to manage self-care and more effectively cope with mental strain on the job.

UNSUITABLE WORKSTATIONS

Mobile and wall-mounted workstations can resolve many issues nurses face: walk time, unsuitable ergonomics and proximity to patients. However, some mobile and wall-mounted workstations come with their own sets of problems.

One study found that hospitals had not purchased enough workstations, forcing nurses to waste time searching for available units. Additionally, some mobile workstation models were heavy and cumbersome, requiring significant strength to navigate them through hallways. Finally, nurses have had problems with long EHR reboot times on both stations and uncharged portable table scanners on mobile workstations [5]. While mobile and wall-mounted workstations can improve nurses' workflows, choosing the right workstation, based on nurses' needs and the physical layout of the unit, is important to avoid potential difficulties that can come with their use.

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Satisfied Nurses Lead to Better Clinical Outcomes

Source: National Database of Nursing Quality Indicators 2013

5–20%

Quality of care increased

87%

Infection rate decreased

17%

Injury falls decreased

59%

Hospital-acquired pressure ulcers decreased

INCREASED NURSE SATISFACTION AND DIRECT PATIENT CARE

Numerous studies show that nurse satisfaction and more direct patient care deeply affects patient satisfaction and clinical outcomes. When hospitals take steps to improve the working environment, nurses are able to dedicate more time to patients and do what they do best—provide clinical care.

The National Database of Nursing Quality Indicators, which charts performance and outcomes at the unit level, discovered a clear correlation between satisfaction levels of nurses and clinical outcomes for patients. On units with high nursing satisfaction levels, patient care excelled according to several metrics: quality of care, infection rates and on-unit patient injuries [2].

Ergonomics

The Occupational Safety and Health Administration defines ergonomics as “the science of designing the job to fit the worker, rather than physically forcing the worker’s body to fit the job” [15]. Ergonomics implemented correctly can relieve nurses of many physical strains, reducing CTDs and MSDs.

There is arguably no environment where ergonomics is more important than in a healthcare facility, where poorly designed equipment has the potential to harm those who heal. There are tremendous physical demands placed on caregivers, and the negative impact that fatigued and uncomfortable caregivers may have on patients is tangible. Ergonomics can have a very real impact on patient treatment, staff satisfaction and a healthcare organization’s bottom line.

Ergonomic improvements can include customizing workstation desk heights for each worker, setting proper monitor viewing heights and distances from the viewer, and upgrading older workstations that were not designed to accommodate computer use [13].

Workstation Improvements

Restructuring the physical environment to better fit nurses has a significant indirect influence on job performance. When nurses are more comfortable in their physical space, they can do their job more efficiently, communicate with other nurses and physicians more easily, and complete tasks with fewer interruptions [16].

Nurse workstations may “represent an opportunity for design process and improvement” [7]. The placement of free-standing or wall-mounted terminals throughout the unit can decrease nurses’ walking time, which increases the amount of time nurses are able to spend with patients. Likewise, mobile workstations can save time by allowing nurses to work where they are instead of spending time moving between stations.

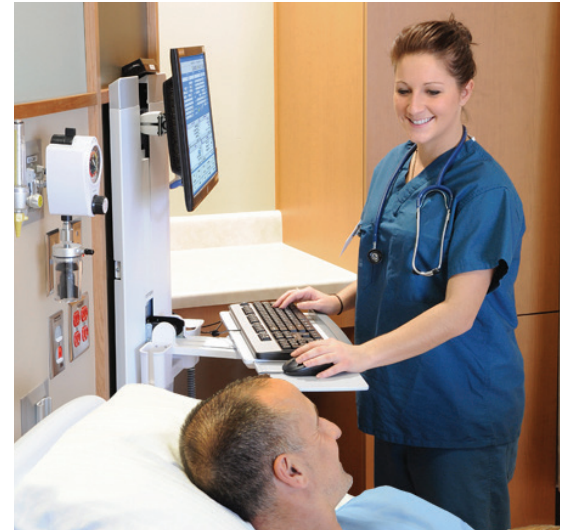
Wall-mounted workstations are generally compact and best placed either in the patient room or in the unit hallway as touchdown points for accessing or entering information for brief periods. With a single sign-on system, clinicians can easily move from one wall-mount unit to the next without reentering login credentials.

Mobile workstations require more floor space, since they are typically loaded with supplies and a computer terminal. They act as a mobile office that is immediately accessible and allows caregivers to stay logged into their system all day.

Managing workstation power systems is one way to alleviate caregiver stress. When caregivers approach a workstation with low or no battery power, searching for alternative equipment disrupts patient care, adds unnecessary steps, and may erode trust.

Before purchasing wall-mounted or mobile workstations, organizations should fully understand the ergonomic needs of its staff—as determined by a worker assessment—and the ergonomic profile of the proposed workstations.

When assessing the current physical environment and planning for improvements, organizations should consider sit-stand heights, ease of adjustment, storage, security, weight and mobility. Consulting with an ergonomics expert can help educate decision-makers about which system is the best fit for their organization. With the right workstations, caregivers can work comfortably and efficiently to better serve their patients.



WHEN NURSES ARE MORE COMFORTABLE IN THEIR PHYSICAL SPACE, THEY CAN DO THEIR JOB MORE EFFICIENTLY, COMMUNICATE WITH OTHER NURSES AND PHYSICIANS MORE EASILY, AND COMPLETE TASKS WITH FEWER INTERRUPTIONS.



Medication Carts Make Work Easier and Reduce Medication Incidents/Accidents

Source: Rochais et al. 2012

80%

Nurses who agreed medication carts made work easier

64%

Nurses agreed medication carts reduce risk of medication incidents/accidents

MEDICATION CARTS

Using medication carts helps contribute to nurse satisfaction and overall patient care. One study surveyed 195 nurses about their experiences with medication carts and found a consensus for “the adoption of medication cart technology and its benefits” [17].

Mobile workstations with integrated medication delivery can offer a total point-of-care solution, further reducing time spent on documentation and distribution. Having workstations and medication carts in the same unit can mitigate the potential for erroneous medication delivery as nurses have more immediate means of reviewing health records before administration. With one workstation, caregivers have the technology and tools they need for seamless workflows that support a stronger nurse-patient connection.

CONCLUSION

Improving the working environment for nurses has an indisputable effect on the health and happiness of patients. Access to equipment that addresses concerns such as ergonomics, distance between patient rooms and the nursing station, point-of-care access to patient health records, and effective medication administration can help any organization improve the working environment and, in turn, the patient experience.

Understanding the integral relationships across the whole hospital, between leaders, staff, patients and the work environment encourages organizations to invest in equipment and work environment improvements that makes a difference for both caregivers and patients. These improvements not only enhance the surroundings—they improve outcomes.

Driven by advances in technology, the future of healthcare will foster greater connectivity, transparency, decentralization, mobility and access to vast amounts of data, which will help shape the next generation of care. To usher in this new era, organizations need to place caregiver well-being and workflows at the forefront. As everyday heroes, they walk with patients through pivotal, life-changing moments. To ensure they thrive—and provide exceptional patient care—they need comfortable workstations that allow them to complete documentation efficiently and the best work environments to do their changing work. A greater collaboration between leadership, caregivers and patients will ensure we honor all roles for the value they bring to the care environment.

For more information about ergonomic healthcare solutions, visit healthcare.ergotron.com.

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