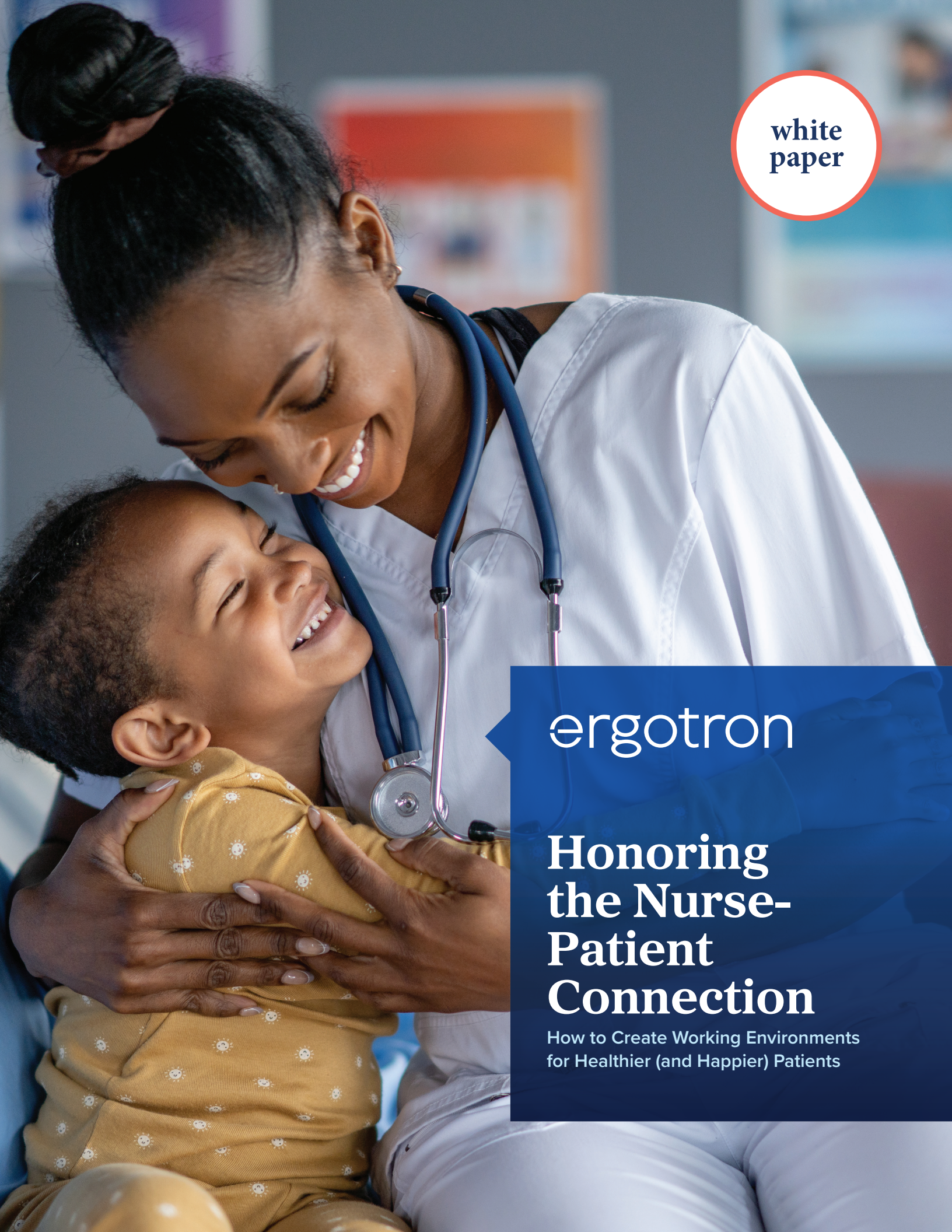


white paper

ergotron

Honoring the Nurse-Patient Connection

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

Contents

A holistic hospital view reveals the importance of relationships: The relationship between compassionate leadership and a healthy environment, between a healthy environment and satisfied staff, and finally, between satisfied staff and exemplary patient care.

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 roadblocks 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. Finally, nursing is 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 workflow, 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. In other words: when the environment improves, outcomes improve.

When nurses are more satisfied with their working environment, patient satisfaction scores imporve, as do clinical outcomes, including reductions in hopital-acquired conditions and readmission rates.

Caring spaces

From reduced fatigue to more direct patient time, simple changes in hospital design can transform care.

The nurse-patient connection

The connection between nurses and patients is one of the strongest drivers of positive healthcare outcomes. Studies have shown that when caregivers have more time to engage with patients, hospital stay times are shorter, injury rates fall and the number of hospital-acquired infections drops. 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 other method 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 creating the best environment for nurse-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 workspaces.

---

1 Lee, W., Jang, I. (2023). Effect of Nurses' Professionalism, Work Environment, and Communication with Health Professionals on Patient Safety Culture (AHRQ 2.0.): A Cross-Sectional Multicenter Study. Journal of Nursing Management, Wiley Online Library. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1155/2023/1591128/

2 Tokareva, I., & Romano, P. (2023). Failure to Rescue. Patient Safety Network, Agency for Healthcare Research and Quality. Retrieved from https://psnet.ahrq.gov/primer/failure-rescue/

3 Friedel, A. L., Siegel, S., Kirstein, C. F., Gerigk, M., Bingel, U., Diehl, A., Steidle, O., Haupeltshofer, S., Andermahr, B., Chmielewski, W., Kreitschmann-Andermahr, I. (2023). Measuring Patient Experience and Patient Satisfaction—How Are We Doing It and Why Does It Matter? A Comparison of European and U.S. American Approaches. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC10048416/

4 Rosenbaum, K. E. F., Lasater, K. B., McHugh, M. D., Lake, E. T. (2024). Hospital Performance on Hospital Consumer Assessment of Healthcare Providers and System Ratings: Associations With Nursing Factors. PubMed Central, National Library of Medicine. Retrieved from https://pubmed.ncbi.nlm.nih.gov/38579145/

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. A growing share of every shift is consumed by documentation, electronic health record (EHR) management, and administrative tasks, leaving less time for direct patient care.

1. **Extended shifts**
   It's not uncommon for nurses to work extended shifts of 12 hours or 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 increases with the length of the original shift due to fatigue.
   - Nurses consistently reported that documentation and administrative tasks consumed nearly 40% of their shifts.[5]
   - Nurses who worked more than 12 hours committed more errors.[6]

2. **Documentation**
   According to an American Medical Informatics Association survey, it was revealed that nearly 75% of healthcare professionals—among them a significant number of nurses—reported that documentation impedes patient care, with over 77% saying it forces them to finish work late or continue tasks at home.[7]

   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.[8] According to U.S. News & World Report, the average salary for a registered nurse in 2023 was roughly $94,500 per year. That means an organization spends more than $6,000 per year, per nurse, for time that doesn't benefit the hospital or its patients.

---

5 Stites, M. (2023). Nursing Documentation Burden: A Critical Problem to Solve. American Association of Critical-Care Nurses. Retrieved from https://www.aacn.org/blog/nursing-documentation-burden-a-critical-problem-to-solve/

6 Shifting Shifts, Originally Published in Nursing Leadership, 17(3): 1–4 July 2004.

7 (2024) AMIA Survey Underscores Impact of Excessive Documentation Burden. American Medical Informatics Association®. Retrieved from https://amia.org/news-publications/amia-survey-underscores-impact-excessive-documentation-burden/

8 Westbrook, J. I., Duffield, C., Li, L., & Creswick, N. J. (2011). How Much Time Do Nurses Have for Patients? A Longitudinal Study Quantifying Hospital Nurses' Patterns of Task Time Distribution and Interactions with Health Professionals. BMC Health Services Research, 11(1), 319.

3. **Walking time**
   For all of their 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.[9]

   How nurses move is just as important as where they are going. When nurses must make extra stops, retrace their steps, or deviate from their path, hundreds of feet can be added to their walking burden, which can already be up to 3.6 miles per day.[10]

4. **Medication administration**
   Medication administration is also subject to errors and/or inefficiencies. One study discovered that nurses are essential healthcare team members who spend up to 40% of their time giving medications to patients and they must help prevent medication errors that kill about 7,000 Americans each year.[11]

9 Westbrook, J. I., Duffield, C., Li, L., & Creswick, N. J. (2011).

10 Chang, H. E., Cho, S. H. (2022). Nurses' Steps, Distance Traveled, and Perceived Physical Demands in a Three-Shift Schedule. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC9548108/

11 Tuvor, D., Kumah, A., Abiti, R., Afakorzi, S. H., Agbemade, P. K., Ahiale, C., Dzodzodzi, M., Dogbedo, A. B., Worlasi, A. P., Obot, E., Tornyi, J. M., Issah, A. R., Dzubey, I., Kanamitie, D. T., (2025). Medication Administration Error Reporting Among Nurses: A Descriptive Qualitative Study. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC12068686/

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.

1. **Added documentation time**
   When EHRs were first introduced, the healthcare community assumed that they streamline workflows and reduce time spent on paperwork. Instead, many nurses report the opposite: Documentation has become more time-consuming and complex. A study by PubMed Central found that nurses actually spent approximately 25% of their shifts on documentation, with more time on the computer screen (charting and reviewing information in EHR). They're often working at computers outside patient rooms rather than providing direct bedside care, thus increasing the probability of missing important details.[12]

2. **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 an estimated 33% of newly licensed registered nurses leave their first job within two years.[13] EHR activities comprised nearly one-third (31%) of nursing work, surpassing indirect care (23%) and direct care (21%). Design flaws caused considerable frustration, such as complex navigation requiring multiple clicks for patient information, complicated shift handovers, and additional charting obligations for boarded patients. Healthcare professionals frequently report exclusion from system design processes and perceive that these platforms emphasize documentation and financial concerns over clinical decision-making and patient coordination.[14]

12 Yen, P. Y., Kellye, M., Lopetegui, M., Saha, A., Loversidge, J., Chipps, E. M., Gallagher-Ford, L., Buck, J. (2018.). Nurses' Time Allocation and Multitasking of Nursing Activities: A Time Motion Study. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC6371290/

13 Tate, S. (2024). Registered Nurses Leaving the Profession in the First Two Years. The Online Journal of Issues in Nursing, Volume 29 (02).

14 Bakhoum, N., Gerhart, C., Schremp, E., Jeffrey, A. D., Anders, S., France, D., Ward, M. J. (2021). A Time and Motion Analysis of Nursing Workload and Electronic Health Record Use in the Emergency Department. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC11216543/

3. 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.[15]

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.

15 The Joint Commission (2015). Sentinel Event Alert.

Causes for healthcare IT-related adverse events

Physical strain

Nursing is a demanding profession—physically, mentally, and emotionally. Each shift can involve long hours on their feet, manual patient handling, repetitive movements, as well as navigating crowded or less-than-ideal care environments. These conditions increase the risk of musculoskeletal disorders (MSDs) and cumulative trauma disorders (CTDs), such as low back pain, shoulder strain or carpal tunnel syndrome. These injuries aren't just short-term discomforts; they can have lasting effects that drive absenteeism, turnover and, ultimately, compromise patient care.

Musculoskeletal Disorders and Cumulative Trauma Disorders

Data from the United States Department of Labor's Statistical Office (2022) shows nursing professionals lead all career fields in workplace-related musculoskeletal disorders. Persistent pain lasting over three months affects 33-50% of people worldwide and can severely impact nursing professionals. The Centers for Disease Control and Prevention (CDC) reports higher chronic pain rates among women, which is concerning since nursing is predominantly female, placing these healthcare workers at elevated risk.[16]

Work-related musculoskeletal disorders (WMSDs) were frequent occurrences, with one study finding that the lower back was the most affected (62%), followed by neck injuries (46%) and elbow problems (32%).[17]

Reducing these risks requires system-wide changes, not just individual coping strategies. Workstations designed with ergonomics in mind, sit-stand options and supportive environments can significantly lower fatigue and injury risks. Reducing lifting demands further improves staff satisfaction and elevates patient care.

Physical strain is only part of the challenge. Nurses also face heavy emotional burdens while caring for patients during difficult times. High patient acuity, understaffing and emotional stress contribute to burnout. Without adequate support—rest breaks, peer networks, mental health resources, proper equipment—nurses become vulnerable to compassion fatigue.

When healthcare organizations address both physical ergonomics and mental health, they help caregivers thrive. Well-designed tools, supportive environments, and sufficient recovery time enable nurses to protect their wellbeing and deliver safer, more compassionate patient care.

16 Ren, Z., Yang, J., Huang, C., Yu, Q., Li, X., Chen, Z., Zhang, D., Bin, C., Ning, M., Liu, Y., Yuan, J., Li, Y., Tian, Y. (2025). Prevalence and Associated Factors of Chronic Pain Among Nurses: A National Cross-Sectional Study. BMC Nursing 24, 979.

17 Nemera, A., Eliyas, M., Likassa, T., Teshome, M., Tadesse, B., Dugasa, Y. G., Tura, M. R. (2024). Magnitude of Work-Related Musculoskeletal Disorders and Its Associated Factors Among Ethiopian Nurses: A Facility Based Cross-Sectional Study. BMC Musculoskelet Disord 25, 452.

Unsuitable workstations

Mobile and wall-mounted workstations are designed to reduce walk time, bring technology closer to the point of care and improve ergonomics. Yet, in practice, they can introduce new obstacles if not thoughtfully selected or deployed.

Lack of workstations is a major factor to consider. Equipment hunting consumes 21-60 minutes of nurses' shifts, creating substantial healthcare inefficiencies and reducing patient care time. Research shows nurses spend about 12% of their time in searching for equipment, while preventable waste accounts for one-third of total work time. With nurses representing one-third of hospital staff, addressing this inefficiency could dramatically improve productivity and patient outcomes while reducing costs.[18]

Mobile and wall-mounted workstations have the potential to streamline care delivery; however, their impact depends on how well they match the realities of nursing. Choosing solutions that are lightweight, ergonomic, and supported by reliable technology—while ensuring there are enough units to meet demand—helps caregivers focus less on equipment and more on patients.

Increased nurse satisfaction and direct patient care

A growing body of research confirms what many in healthcare already know: Nurse satisfaction directly shapes both patient experience 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: deliver safe, high-quality patient 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.[19]

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".[20] Ergonomics implemented correctly can relieve nurses of many physical strains, reducing CTDs and MSDs.

There's 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

18 Bennafield, M., Frericks, G. (2023). Applying RTLS Technology to Improve Nurse Efficiency and Patient Care. Healthcare Information and Management Systems Society (HIMSS). Retrieved from https://legacy.himss.org/resources/applying-rtls-technology-improve-nurse-efficiency-and-patient-care

19 Montalvo, I. (2007). The National Database of Nursing Quality Indicators® (NDNQI®). OJIN: The Online Journal of Issues in Nursing. Vol. 12 No. 3, Manuscript 2.

20 Habibi E., Pourabdian S., Atabaki A.K., & Hosseini, M. (2012). Evaluation of Work-Related Psychosocial and Ergonomics Factors in Relation to Low Back Discomfort in Emergency Unit Nurses. International Journal of Preventive Medicine, 3(8), 564–568.

patients is tangible. Ergonomics can have a very real impact on patient treatment, staff satisfaction and a healthcare organization's bottom line.

Proper workplace ergonomics prevents injuries and errors by supporting healthcare workers' physical needs. Ergonomic furniture, adjustable equipment and supportive tools—such as specialized ultrasound chairs for sonographers—prevent strain and improve job satisfaction. When staff are comfortable, they avoid fatigue-related mistakes and maintain better focus. Ergonomic design in surgical suites and computer workstations ensures precision during critical tasks while minimizing physical stress that could compromise patient safety.[21]

Workstation Improvements

The physical setup of nursing units plays a critical role in workflow efficiency and satisfaction. Well-placed, thoughtfully designed workstations can minimize wasted steps, reduce interruptions, and improve communication across teams.

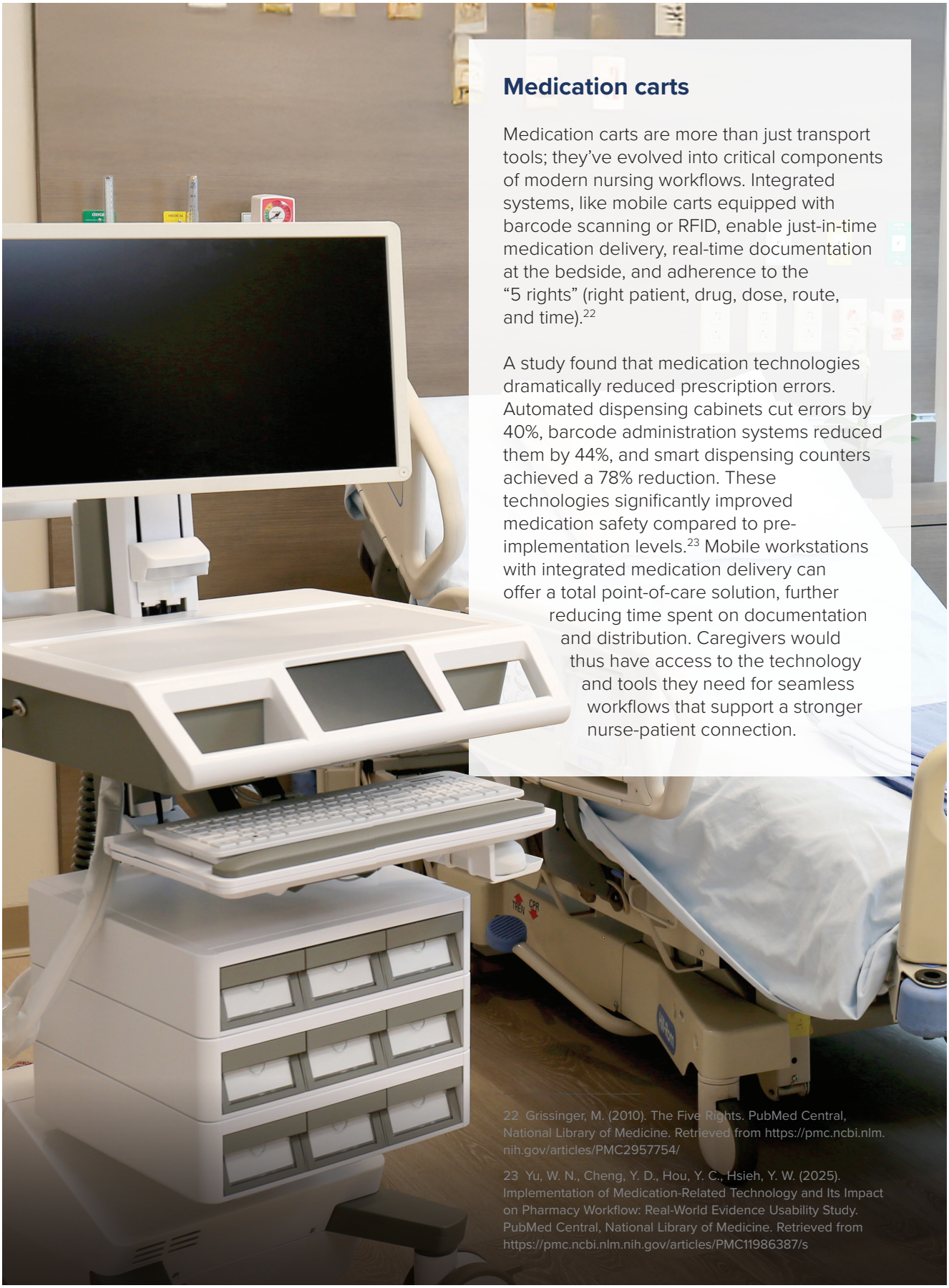
- Wall-mounted workstations serve as quick, accessible points for documentation, best positioned in patient rooms or hallways. Integrated with single sign-on systems, they allow seamless, secure access to records while keeping nurses close to their patients.
- Mobile workstations provide flexibility, functioning as portable hubs that travel with the nurse throughout the shift. These are especially valuable for continuity of care, enabling clinicians to stay logged in and connected all day.

An often-overlooked factor is power management. Dead batteries or unavailable carts interrupt workflows, add stress, and ultimately reduce patient-facing time. Investing in reliable power solutions ensures clinicians have the right tools when and where they need them.

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.

21 Guilmore, S., Olszewski, K. (2024). Enhancing Healthcare: The Role of Ergonomics for Safety & Efficiency. Retrieved from https://disa.com/news/enhancing-healthcare-the-role-of-ergonomics-for-safety-efficiency/



Medication carts

Medication carts are more than just transport tools; they've evolved into critical components of modern nursing workflows. Integrated systems, like mobile carts equipped with barcode scanning or RFID, enable just-in-time medication delivery, real-time documentation at the bedside, and adherence to the "5 rights" (right patient, drug, dose, route, and time).[22]

A study found that medication technologies dramatically reduced prescription errors. Automated dispensing cabinets cut errors by 40%, barcode administration systems reduced them by 44%, and smart dispensing counters achieved a 78% reduction. These technologies significantly improved medication safety compared to pre-implementation levels.[23] Mobile workstations with integrated medication delivery can offer a total point-of-care solution, further reducing time spent on documentation and distribution. Caregivers would thus have access to the technology and tools they need for seamless workflows that support a stronger nurse-patient connection.

22 Grissinger, M. (2010). The Five Rights. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC2957754/

23 Yu, W. N., Cheng, Y. D., Hou, Y. C., Hsieh, Y. W. (2025). Implementation of Medication-Related Technology and Its Impact on Pharmacy Workflow: Real-World Evidence Usability Study. PubMed Central, National Library of Medicine. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC11986387/s

Conclusion

Stronger care starts with stronger support for nurses. When organizations prioritize ergonomics, reduce unnecessary strain, and give caregivers the right tools at the right time, both staff and patients benefit. Workstations designed for comfort and accessibility, reliable medication carts as well as closer point-of-care access free nurses to focus on what matters most: direct patient care.

Today's healthcare landscape is fast-moving and data driven. Technology holds incredible potential, but it must be designed around people. Nurses need solutions that simplify documentation, streamline workflows, and eliminate wasted steps—not systems that add stress or turn clinical roles into clerical ones.

Nurses are the backbone of care delivery, guiding patients and families through some of life's most pivotal moments. To honor their role and sustain their ability to provide exceptional care, organizations must ensure that workstations and environments are designed to support both their physical and emotional needs. When caregivers thrive, so do their patients.

USA & Canada: 800.888.8458 | +1.651.681.7600 | customerservice@ergotron.com
EMEA: +31.33.45.45.600 | info.eu@ergotron.com
APAC: apaccustomerservice@ergotron.com
Custom: oemsales@ergotron.com

250030