

Technology and Your Nursing Retention Strategy



Technology and Your Nursing Retention Strategy

Summary

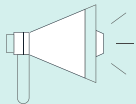
The ongoing pandemic highlighted the importance of the protection, safety, and well-being of nurses. **During the Great Resignation, 30% of all nurses quit. Hospitals and ASCs responded with a host of new benefits to attract and retain nurses. The root causes of this exodus, though, predate the pandemic.** An effective strategy for nurse retention needs to identify and address these causes, and to use existing and new technologies to improve their work experience.¹

The Aim

Develop a more robust understanding of how the work experience of nurses is shaped by:

- The stress of caregiving.
- The complex relationship between care and agency.
- The efficacy of healthcare technologies.

Such an understanding is key to improving the work experience, retention, and recruitment of nurses. **The final section highlights what value analysis committees should look for when considering the acquisition of new technologies.**



For the TLDR crowd: see the Takeaways on [page 3](#) and [page 10](#).

The Takeaways

01

Share with nurse managers the latest research on nurses' work experience and well-being. Invite them to propose ideas inspired by the research. Even if the yield is moderate, your nursing staff will take note that you're taking the problem seriously.²

02

A sense of control fosters optimism and resilience. Nurses' input on the acquisition and implementation of new technologies can contribute to the psychological and physical well-being of the nursing staff.

03

Nurses play a key role in the successful implementation of new technologies. For current technologies in the workplace, seek their input on the benefits, limitations, and the work-arounds they've developed. Ask them about which technologies serve them well (and which don't). Select your vendors accordingly.

The Problem

The celebration of nurses as “healthcare heroes” has not stopped them from leaving the profession in record numbers—and for good reason. Some have joined the gig economy as traveling nurses. Others continue to work long days under difficult conditions, taking some comfort from new benefits, including tuition reimbursement, financial wellness packages, and self-care practices.

Two facts highlight the dire situation in US healthcare:



By 2025, the nursing shortage could be as high as 450,000.



Courses on mental health required for RN licensure in select states now include modules on how to prevent fellow nurses from attempting suicide.

Prior to the pandemic, a nurse manager in northeast Ohio described her struggle simply to keep patients alive and breathing, due in part to short staffing:

“We are clearly working in Maslow’s basement.”

Labor-saving devices have long helped humans attend to **Maslow’s hierarchy of needs**, which include basic needs (food, shelter, and safety), intermediate needs (love, belonging, and esteem) and, on occasion, advanced needs (e.g., self-actualization). For women, though (and US nursing remains 90% women), technology has often failed as a labor-saving device. From the vacuum cleaner to the fetal heart monitor, such devices have often had unintended effects. Instead of saving labor time, vacuum cleaners produced new standards of cleanliness. Widespread use of the fetal heart monitor led to a steep rise in C-section births. It also diminished the work experience of nurses, increased long-term costs for patients and providers, and failed to produce better patient outcomes.³



The Goal

Foster a scientifically rigorous, financially sustainable, and healthy work experience for nurses. Such an understanding includes an analysis that ranges in scope from mental health measures to global labor markets.



01 The Biochemistry of Nursing

The right pair of running shoes allows us to run better, farther, and more comfortably. Care work, though, comes with hazards not easily amended by technologies. Research conducted before the pandemic indicates that different modes of care diminish the life of the caregiver. In a 2001 study, researchers found that caregivers of patients with clinical dementia have increased rates of depressive illness. A study of pediatric nurses in 2018 found that nurses with four to 12 years of experience had higher rates of stress, anxiety, and depression than less experienced nurses in the same field. The team leading the 2001 study concluded their article on a depressing note:

“The biological mechanisms by which the stress of caring can lead to mood disorders is not well understood.”

It’s nearly certain, though, that new benefits such as tuition reimbursement will have modest effects—if any—on such mood disorders.⁴

The Takeaway

01

Share with nurse managers the latest research on nurses’ work experience and well-being. Invite them to propose ideas inspired by the research. Even if the yield is moderate, your nursing staff will take note that you’re taking the problem seriously.

02 The Complexity of Care and Agency

“Given the deterioration of nurses’ mental health during COVID-19 and an increasing shortage of nurses worldwide,”

writes Professor Caroline Frankfurter and her co-authors,

“There is an urgent need to re-evaluate and better understand the relationship between nurse-reported mental health and perceived quality and safety of patient care.”

The ethic of care has long informed the practice of nursing. This feminist-inspired model, with emotional knowledge at its core, often serves patients well, but to the detriment sometimes of the caregiver. In a 2000 study, researchers measured nurses’ perceived sense of agency and emotional duress. Not surprisingly, the study concluded that “perceived degree of control is instrumental in enabling nurses to cope with stress and burnout.” The work process—as well as the pace of that process, and decisions about the best tools for the job—is a key area where nurses exercise and perceive their sense of control.⁵



When work involves the promotion of human life and, in turn, the loss of human life, the nurses’ perception of limited agency and the loss of control can take a heavy physical and psychological toll.

The Takeaway

02

A sense of control fosters optimism and resilience.

Nurses' input on the acquisition and implementation of new technologies can contribute to the psychological and physical well-being of the nursing staff. In the UK, the NHS established KPIs for every facility on staff health and well-being. The piecemeal nature of US healthcare is likely to prevent such a development.

Still, there's no end in sight for the nursing shortage. Nurses in the US are likely to maintain individual and collective leverage in terms of salaries and working conditions, and to choose facilities that are proactive on nurses' well-being and sense of agency.

03 How to Ensure Medtech Works

The introduction of electronic health records (EHR) over the past 25 years has yielded positive results for most adopting hospitals. A study of 470 US hospitals found that the adoption of EHR led to more effective quality improvement campaigns, as well as improved performance in terms of mortality rates and patient satisfaction.

With other, technologies, though, the results are mixed. Whether the subject is how to relieve nurses of unskilled tasks or how to offset the nurse shortage, few studies indicate a positive effect between the use of new technologies and improved work metrics. In fact, researchers in a 2012 study concluded:

“Hardly any technology has been researched intensively enough to produce conclusive results. Studies [with] a high level of evidence . . . lack for most technological areas. Heterogeneous results in some areas indicate that effects may depend strongly on the mode and specific context into which the technologies are introduced.”

Put another way: workplace culture doesn’t passively accommodate new technologies. Winning consent for productive integration of such technologies requires a nurse-centric strategy and a plan of action.⁶

The Takeaway

03 Nurses play a key role in the successful implementation of new technologies. For current technologies in the workplace, seek their input on the benefits, limitations, and the work-arounds they’ve developed. Ask them about which technologies serve them well (and which don’t). Select your vendors accordingly.

Healthier Nursing Through the Right Technologies

Hospitals and ASCs can take multiple steps in order to ensure nurses' buy-in and, in turn, the maximum efficacy of new technologies. Those steps include vetting medtech vendors on the metrics below. The best companies score well in the following areas.

Understand, in order to be understood.

During the R&D stage of new devices, staff of medtech companies work like anthropologists. They develop a deep understanding of the work process of the end users. They observe and ask plenty of questions—about training, skill sets, work cadence, and where they see room for new efficiencies.

Safety first.

In 2023, it'll be 50 years since the Supreme Court struck down the Hippocratic oath as a guide to medical ethics and practice.⁷ The principle of "do no harm," though, rightly endures. **Development of new technologies for the OR, ICU, and ER should improve safety and efficiency for patients, doctors, nurses, and SPDs alike.**

Inclusive conceptualization of end users.

For many medtech design teams, the primary user is the physician. Secondary users play essential roles, too. Leading medtech companies think through every touch of the device, and come up with a detailed response to the following question: **How can our team make this technology even more effective for the clinician—and for every person who supports that clinician?**

Simplicity: a close second.

"Everything should be made as simple as possible—but no simpler." In healthcare, Albert Einstein's first principle of design remains as true as ever. The strobe and din of flashing lights and beeping monitors divide nurses' attention into smaller and smaller bits. Distraction is responsible for 39% of slips, trips, and falls in the workplace. Less is often more, especially for nurses.⁸



Medical technologies should create cognitive space for nurses—not cognitive overload.

A federal response may help temper this crisis, but seems destined to fall short of solving it.

What steps can you take to help ensure the retention and resilience of your staff?

To talk to a member of the Lazurite team about medical technologies and your retention strategy, email us at contact@lazurite.co.

Notes

1. An estimated 5 million workers in the US quit their jobs or their career field during the Great Resignation. From April 2020 to March 2022, the healthcare field lost up to 30% of its nurses. David Weldon. "The great resignation's toll on healthcare." *healthleaders.com*. March 16, 2022. <https://tinyurl.com/26rn524b>.
2. Research and innovation are key for the improvement of the nursing experience. See Julie Vincent's "Strengthening and improving the nursing experience through research and innovation." American Hospital Association. July 28, 2022. <https://tinyurl.com/4c2t3v2d>. See also: Katie Manoy. "How to retain your most experienced nurses." *Wolters Kluwer*. May 2, 2022. <https://tinyurl.com/36rnew55>.
3. On the long-term nursing shortage, see Victoria Bailey. "200K to 450K nursing shortage expected by 2025 without action." *xtelligent Healthcare Media*. June 8, 2022. <https://tinyurl.com/5n6er9fu>. On suicide prevention by nurses for nurses, see: Kentucky Suicide Prevention course. Nursing CE central. nursingcecentral.com/lessons/kentucky-suicide-prevention/. Last accessed October 12, 2022. On Maslow's basement: Nurse quoted by Laura Manns-James, PhD, associate professor of midwifery and women's health, Frontier Nursing University, meeting October 1, 2022. On the oddities of C-sections, see Emily Oster and W. Spencer McClelland's "Why the C-Section rate is so high." *The Atlantic*. October 17, 2019. www.theatlantic.com/ideas/archive/2019/10/c-section-rate-high/600172/; and Anna Gorman's "How one hospital reduced unnecessary C-sections." *The Atlantic*. May 13, 2015. www.theatlantic.com/health/archive/2015/05/how-one-hospital-reduced-unnecessary-c-sections/392924/.
4. The offset quote is from Da Roza Davis J, Cowen P. Biochemical stress of caring. *Psychological Medicine*. 2001;31(8): 1475-1478. doi.org/10.1017/S003329170105398z. Huiling L, Wei T, Yuanyuan H, et al. Stressors, coping styles, and anxiety and depression in pediatric nurses with different lengths of service in six tertiary hospitals in Chengdu, China. *Translational Pediatrics*. 2020;9(6):827-834. dx.doi.org/10.21037/tp-20-439.
5. The offset quote is from Havaei F, Tang X, Smith P, Boamah SA, Frankfurter C. The association between mental health symptoms and quality and safety of patient care before and during COVID-19 among Canadian nurses. *Healthcare (Basel)*. 2022;10(2):314. www.mdpi.com/2227-9032/10/2/314. Schmitz N, Neumann W, Oppermann R. "Stress, burnout and locus of control in German nurses." *International Journal of Nursing Studies*. 2000;37(2): 95-99. [doi.org/10.1016/S0020-7489\(99\)00069-3](https://doi.org/10.1016/S0020-7489(99)00069-3). On the UK's National Health Service, see House of Commons, Health and Social Care Committee. "Workforce burnout and resilience in the NHS and social care." House of Commons. June 8, 2021. committees.parliament.uk/publications/6158/documents/68766/default/.
6. Restuccia J, Cohen A, Horwitt J, Shwartz M. Hospital implementation of health information technology and quality of care: are they related? *BMC Medical Informatics and Decision Making*. 2012; 12:109. doi.org/10.1186%2F1472-6947-12-109. Huter K, Krick T, Domhoff D, Seibert K, Wolf-Ostermann K, Rothgang H. Effectiveness of digital technologies to support nursing care: Results of a scoping review. *Journal of Multidisciplinary Healthcare*. 2020; 13:1905-1926. doi.org/10.2147%2FJMDH.S286193.
7. Indla V, Radhika MS. Hippocratic oath: Losing relevance in today's world? *Indian Journal of Psychiatry*. 2019;61(Suppl 4):773-775. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6482690/>.
8. Electrolab Ltd. 2015. "Solving Slips, Trips, and Falls, Once and for All." Safestart. tinyurl.com/mv29dyp6. Last accessed November 8, 2022.

© 2024 Lazurite Inc. All Rights Reserved.

Lazurite and the Lazurite logo are trademarks of Lazurite.

All other brand and product names are trademarks or registered trademarks of their respective holders.

1066/20241.1