Space that Heals: A Case for Nursing-Focused Design

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This paper highlights how current hospital design criteria fail to recognize the critical role of nursing. Given that nursing represents 50% of the total salary and wages budget of the average Canadian hospital, it is imperative that special attention be made to ensure the Ministry of Health, Architects and Planners understand the tangible and intangible benefits of humanistic design on the working environment of nurses.

Nursing is one of the most demanding and stressful of the professional vocations. A 2006, Statistics Canada study on the work and health of nurses found that in the previous year, 29% of nurses were physically assaulted at work, 44% were verbally abused, 48% had needle or other dangerous cuts, 25% experienced chronic back pain, 9% experienced depression (two times the rate among the general population) and 37% had injuries that required time off. This equates to 16 million hours lost to illness and injury, or the equivalent of 9,000 full-time jobs each year¹.

In addition to working in an “unhealthy” work environment, the work of caring for patients is becoming more and more demanding and complex as the acuity of admitted patients continues to rise. Patients with two, three or more co-morbidities have become the norm in hospitals and other health care delivery settings. Competence in applying new and innovative bedside technologies is a mandatory part of modern nursing practice. Retraining and endless in-services are required in order to remain current. Enhanced patient expectations and knowledge of their conditions and treatment options places greater demands on nursing professionals. Managing relationships with and between patients, their families, physicians and other members of the multi-disciplinary team is hugely demanding. Language challenges and cultural sensitivity has changed the nursing paradigm radically over the past few years. Balancing 12 hour shifts with the responsibilities of family life is becoming near impossible. Nursing, is an extremely intense profession.
Is it any wonder therefore, that nurses are experiencing burnout at an unprecedented rate? Is it surprising that recruitment into the profession is being outpaced by nurses leaving the system? In Canada, the nursing shortage is targeted to rise to 113,000 by 2011.² Has retaining staff ever been more of a challenge than today? According to the lead researcher in a recent study on nursing job satisfaction,

“if the work environment doesn’t improve,
there is a chance we’ll lose the nurses already in
the system and won’t be able to attract new
people into the profession”.

Nurses are exhausted and drained. If nurses feel this way then our patients are going to feel exhausted and drained. Clearly not an ideal context for healing.

Who heals-the-healers?

So, who is responsible for healing-the-healers? Who is going to finally show some of the compassion toward nurses that they are expected to show toward their patients?

Over the past 5 years, Nurses have done an excellent job getting the message to Government that more resources earmarked for nurses are needed urgently. Since coming into office, the Ontario Liberal Government has committed over $470 million toward nursing training, education, safety, recruitment and salaries. No one argues that more is better. However, nurses know that they cannot count on government funding support being there in the long-term. So what else is needed?

In addition to simply adding more resources, clearly, individual hospitals must develop strategies to respond to this crisis. Hospital administration and nursing management have a responsibility to create organizational climates within their hospitals that recognize the demanding current nursing environment. Environments that support and rejuvenate staff are critical, so nurses can “re-discover” the joy and rewards that nursing practice can deliver. As an example, recently, many hospital organizations have embraced “value-based-leadership” models that have gone a long way to refocus organizational behaviors on a common set of values.⁴ Organizations that embed values into their Mission Statements will help nursing and all staff to legitimately reclaim the higher ground they rightfully deserve.

However, staff has grown skeptical of management trends. As senior leadership changes within an organization, so too often does the management philosophy. It is common in good economic times to see many organizations proudly proclaim that their employees are their “#1 priority”. We know from experience, however, that during an economic downturn, hospitals tend to manage their budget challenges by simply laying-off their “#1 priorities” in record numbers! This cycle does little to establish a culture of trust and loyalty.
So who can nurses rely on?

The Ontario Ministry of Health and Long Term Care and the Ministry of Infrastructure Renewal is currently rolling out long overdue announcements approving plans to redevelop and renew our dilapidated capital stock of aging health care facilities. The Ministry estimates that over $5 Billion worth of hospital infrastructure development is required in Ontario. The average age of a health care facility in Ontario is 43 years compared to 17 years for our neighbours to the south-- poachers of some of our finest nurses.

What has this got to do with inspiring, re-charging and renewing the spirit of nursing?

While management trends and economic swings will come and go, the physical space in which you carry out your healing, caring and supporting responsibilities on a daily basis, will be with you for your entire career.

Therefore, it is only logical that we acknowledge the importance of ensuring that the design of the physical working environment for nurses in all new facilities must inspire, support and encourage nurses to become fully engaged in their professional practice.

Setting Design Standards that matter

In an effort to ensure that public money is spent wisely, there is a desire on the part of the Ministry of Health to establish a set of universal design standards or called GOS (general output specifications). The intent is to maximize design efficiency and hopefully minimize overall capital costs. Although the intent has merit, there is great concern among the design community, that the result of this push to help ensure “value-for-money” will be a set of incentives to create hospitals that are efficient and utilitarian, at the expense of the more intangible aspects of “quality design”.

The Governments’ new “Alternative Financing and Procurement” model adds more risk to “design that matters” The consortium lead process has gained government support partially because they believe it will allow new hospitals to be built “faster”. In fact, the incentive to consortia is to design and build as fast as possible because they only get paid when the new facility is completed and handed over to the owner. Obviously, this creates a disincentive to spend “unnecessary time with users”. Without dedicating appropriate time to the user-group process the potential for appropriate nursing-focused design solutions is greatly at risk. With over $5 billion of new hospital construction on the immediate horizon, without demanding a bigger role in design, we risk being left with a legacy of hospitals that are uninspiring workplaces, reminiscent of utilitarian, totalitarian, health factories. Nurses, we believe, must demand a central role in the design process and must push for a standard that guarantees enough time for nurses to develop a “critical eye”™ to be able to distinguish “new space” from “good design”.
Why create a design focus on Nursing?

Clearly, we all agree that our priority in health care is the health and well-being of all patients. However, by far the single largest profession within the multi-disciplinary aspects of health care is nursing. Social research studies have shown that nurses are consistently ranked at the top of the list of the most trusted of the health care providers and always rank above physicians.7

We know that nursing represents approximately 50% of the salary and wages budget of the average community hospital in Canada. Nurses deliver front-line care. We believe, therefore, that it must be a priority to direct specific design efforts to address the physical working conditions for this significant proportion of the hospital labour force. We believe nursing is a profession worthy of more than bare-minimum working conditions. In fact, nurses deserve an environment that helps to reduce stress (not increase it!), lift their spirits, and facilitate their daily responsibilities.

What will happen if nursing-focused design is not on the Ministry of Health’s’ radar screen? Unless nurses demand such a focus, they will miss this once-in-a-generation opportunity to influence their working environment: an environment where nurses will spend more of their adult waking hours in than they will in their own home. We believe strongly, that an environment that helps to “heal-the-healers” will ultimately benefit the patient and helping patients is what nursing is all about.

Dr Beverly Malone, General Secretary of the Royal Colleges of Nurses in the UK, said:

‘Nurses constantly see how the design of their working environment impacts on staff and patients. Having to walk along miles of corridors every day and care for patients in small, poorly designed wards has a negative impact on healthcare professionals and is not conducive to a quick recovery for patients. Campaigning to place this higher up the healthcare agenda is crucial and could make a dramatic difference to the experience of both patients and nurses alike.’8

What do we mean by “work-life enhancing and nursing-focused design”?

What exactly do we mean when we speak of designing environments that inspire nurses to perform at the top of their game? What do we see as the design principles most influential to supporting the work you do? If you begin by asking “what goes on inside”, as does the Danish architect Erik Asmussen when considering design solutions that facilitate nursing, you begin to understand the requirement to consider a more holistic array of issues. According to Asmussen, buildings must be designed to serve the physical and technological functions while at the same time, meeting the psychological and spiritual requirements of the whole human being. They must express the inner spirit of the life that they contain while supporting in a practical way, all the activities that occur within them.9
For example, physical implications such as walking distances, accessibility of supplies, access to private consultation spaces, adequacy of storage spaces, security of assets, medications and self and ergonomic issues must be addressed in design solutions. In addition, when considering “what goes on inside”, recognition of the emotional aspects of nursing is equally legitimate. For example, over the course of an average day, staff may experience emotions of joy, fear, sadness, guilt and relief. What design solutions are appropriate to address such powerful emotional realities of your work? We believe that work-life enhancing design must, therefore, consider both physical and emotional realities of nursing.

Given this, some suggested standards of design may include:

- **Let there be light!** In recent hospital projects, we have done a good job ensuring that patients, where feasible, benefit from views of nature and thus the beneficial affects of natural light. The ability of natural light to lift our spirits and connect us to the natural environment is well known. We all have an innate tendency to turn to nature for support and inspiration during our darkest times. But how many nursing care centres have been designed around a principle that maximizes the penetration of natural light? Impossible? We think not. The principle of maximizing staff exposure to natural light should become a guiding principle for all planners.

- **Create off-stage spaces.** The notion of “healing gardens” for patients and visitors is gaining recognition as a valuable offering to those recovering from illness and those family members trying to cope. If the evidence is overwhelming that nursing is a stressful occupation, then why is it not legitimate to create dedicated spaces, on or near each nursing unit in which nurses can momentarily escape the emotionally charged clinical environment? If the Ministry of Health truly wishes to attract and retain nursing staff, then why is the notion of designing a healing garden or a meditative walking labyrinth dedicated for staff considered as a “non-essential, wasteful capital expense? We believe, “off-stage” spaces dedicated to nursing staff are critical to ensure staff has a chance to recharge physically and emotionally during the course of the day. These spaces, we believe, should become a design standard, sacred cow!
• **The importance of first impressions.** Some organizations have recognized the benefits of creating welcoming spaces for patients and visitors. Beautiful atriums and lobbies that integrate natural light, art, natural materials, texture, scale, commercial amenities with inviting aromas all support the philosophy of creating a welcoming “first-impression”. Such spaces serve to reduce patient anxiety, create distraction, inspire healing and hope. However, how common is it for staff to enter the hospital via a poorly lit, narrow, dark, unsafe, “back door” that leads to a sterile corridor and stairwell, to a cold, overcrowded, locker room? What message are we sending to our healers? Doesn’t it make sense to try in at least some symbolic way to elevate the spirits our nursing staff immediately before they see their first patients of the day? Why doesn’t the importance of first-impressions apply to our staff?

• **The healing influence of Art.** Enlightened organizations have introduced Art into their facilities in lobbies, corridors and on occasions, into nursing units. The prime motivation for doing so, however, is typically to use art as a way-finding device. We know, however, that in general, society recognizes the inspirational and emotive aspects of art. Why then, is it not legitimate to include space in our hospitals not only for art, but also for the artist? Who decides that such a space does not provide “value-for-money”? Offering such support to art and artists sends a strong message to our community that we wish to use all we can to heal them and at the same time, break down the barriers that exist between our institution and the community. This “normalizing” of the hospital environment also brings joy and inspiration to patients and staff alike.

• **Do no Harm.** In the 1800’s Florence Nightingale espoused a baseline tenant for the profession. Above all else, we must “do no harm”! However, new hospitals have the potential to harm not only our patients but our staff. Patients today are discharged on average, after 3-4 days. Staff, however, remain in the building day after day. Given that air quality standards are typically established by measuring exposure to hazardous substances during an 8 hour work shift, what is the potential negative effect of the exposure to known and unknown carcinogens from the “off-gassing” experienced from new carpets, fabrics, paints, tiles, glues and other industrial building materials, for nurses who work 12 hour shifts? A requirement to specify only building materials and interior finishes in all new hospital construction that do no harm to nurses and patients, is a design standard that we would like government to impose on the industry.
Where else should we be looking?

Clearly, research is needed to substantiate the assured benefits of such design and we must encourage efforts to explore how design solutions can best address the specific challenges to nursing. On the eve of over 5$ Billion worth of hospital renewal in Ontario, now is the time to engage research to apply methodology that measures the pre- and post impacts of work environment for nursing.

Suggested research may include how design can best influence:

- Nursing recruitment.
- Nursing retention.
- Nursing job satisfaction.
- Medication error rates attributable to Nurses.
- Nursing personal safety relating to infectious disease.
- Nursing security regarding violent patient management.

What are the hidden, but true costs and potential savings system wide that nursing-focused design can affect? What proportion of the costs incurred when our most experienced nurses leave the profession prematurely because they feel emotionally exhausted or unsafe in their work environment, could be saved through mindful and consistent design that is actually intended to support nurses in their work? Investment in design is insignificant relative to the lifetime costs of operating the building. However, the potential benefits of nursing-focused design to patients and staff are immense.

Summary and Conclusions

Given the current rate of change, nurses can't be expected to stand up to the strain of their profession. The facts are clear:

- Approximately 66% of employed nurses are over forty years of age, up from 58% a decade ago.
- In the high stress world of nursing, 56 is a far more typical retirement age than 65.
- If predictions are correct, more than 20,000 RNs will leave the system imminently.
- Between 7,000 and 8600 full-time jobs, Canada-wide, is being performed by nurses working overtime.
- Over the course of a year, some 16 million nursing hours are lost to injury and illness in Canada, equaling about 9,000 fulltime jobs.
According to research, nurses tend to leave their jobs well before mandatory retirement age precisely because their work is dangerous, increasingly difficult, physically demanding and insufficiently rewarding.

As designers, we cannot change the total pool of nursing resources, but we can help retain those that want to stay in the profession they love. We cannot reduce nursing workload, and we can’t reduce the inherent stressful nature of the work. However, we can help create environments that facilitate day to day activities that inspire nurses to continue, refresh them when they are down, raise their spirits and keep them safe. There are design solutions that will help attract nurses to their profession, will nurture them when they are at work and will help to keep them doing what they love to do. Their work environment will be with them their entire career. It is in their interests to help us raise the awareness and importance of Nursing-Focused Design on the eve of a new wave of hospital capital projects.

**Call to Action**

1. **Ask Ministry of Health officials where they stand on this issue?** Put them on the spot and educate them to the benefits that healing design standards can have on nurses and the profession as a whole.

2. **Get involved right away.** Most design and construction decisions are made months and often years before the first hole is dug in the ground. If you show up to the table too late, your voice will not be heard. Ask your administration how you can get involved in committees that should set the guiding principles for the design of your new hospital. Get involved before the architect is hired. Try to influence the architect selection criteria so that it includes demonstrated experience and understanding of humanism in design and healthy building design. Nurse involvement will result in buildings that are healthier for all it touches.

3. **Put your heart and Soul into the message.** Expect to see obstacles and roadblocks on your journey. The more passion you have for these design principles, the more the message will be heard.

Ian Sinclair is Principal, Capital Planning and Strategic Services at Farrow Partnership Architects, a full service design firm in Toronto that specializes in hospital architecture and humanism in design. The firm recently received a $100,000 grant from the Change Foundation and $100,000 in matched donations to complete an evidence-based design research project (Queen’s University) to evaluate the tangible and intangible benefits of humanistic design principles at the new Carlos Fidani Cancer and Ambulatory Care Centre at The Credit Valley Hospital in Mississauga Ontario.
Endnotes:


2. Work and Health of Nurses, Statistics Canada, 2006

3. Heather Laschinger, Associate Director, Nursing Research, Faculty of Health Sciences, University of Western Ontario, Healthcare News, September 22, 2004.

4. The Credit Valley Hospital and Trillium Health Centre in Mississauga Ontario have implemented “Value-based Leadership” models.

5. Minister of Public Infrastructure Renewal, The Honorable David Caplin, August 23, 2005

6. “Critical Eye™” is a Trade Marked process developed by Sharon Vanderkaay of Farrow Partnership to help clients make better and more informed decisions during design.

7. Gallup’s December, 2005 annual Honesty and Ethics poll and the 1998 Pollara Public Trust Index both ranked Nursing as the #1 most trusted profession ahead of pharmacists and physicians.

8. Dr. Beverley Malone, General Secretary of the Royal College of Nurses in the UK as quoted in a CABE/PwC 2004 Study on the role of hospital design in the recruitment, retention and performance on NHS nurses in England.
