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Inclusive Interdependence in the Health Care Context

What exactly does inclusive interdependence mean? Google (via Oxford Languages) defines these terms as:

"Inclusive, or inclusivity: not excluding any of the parties or groups involved in something."

"Interdependence: the dependence of two or more people or things on each other."

Seems the same, right? Not quite ...

Inclusiveness is proactive; it implies intention without enforcing action. Inclusion is an act of kindness and positive human interaction. As a child, being included in your group, or clique, meant everything — being excluded usually resulted in tears and running home to mom. When two or more people or things are dependent on each other, each requires the presence of the other and implies trust that both will perform their duties. A perfect balance, such as in the ancient philosophy of yin and yang, demonstrates mutual reliance. Thus, interdependence has limits and requirements. In health care, the failure to address inclusiveness and interdependence can have more serious impacts than hurt feelings — it can be a matter of life and death.

Conversely, basic human interactions such as communication, compassion and empathy can lead to health and well-being.

Inclusion: The New Advantage

In corporate initiatives of recent years, inclusiveness often starts as part of a mission statement to catalyze and create a more diverse workforce. Recently, enlightened organizations have moved beyond the boardroom to realize that to attract and retain the best and brightest talent, an inclusive culture is not simply necessary and desired, it is an essential element of good business practice.

In her book, Inclusion: The New Competitive Business Advantage, Shirley Engelmeier discusses the shift from diversity initiatives to creating an inclusive culture. With Gen Y's collaborative and team-focused approach in business and their presence in the workforce of nearly 40% by 2025, "the old command and control management approach will not result in peak efficiency." A study by sociologist Martin Ruef looked at Stanford Business School graduates and found that those who had the most diverse friendships also scored higher on the innovation scale, suggesting that diversity and inclusion lead to better business outcomes.

As a health architect, I believe inclusiveness is also good design, and so does the American Institute of Architects. In 2015, the AIA launched their Equity in Architecture Commission to address the inequities in the profession. More than one year of study, discussion and meetings with a vast



We have an obligation to prioritize relational care as reflected in our code of ethics by respecting the uniqueness and dignity of every person and treating everyone fairly.

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Source: FAMILY PRESENCE POLICY DECISION-MAKING TOOLKIT FOR NURSE LEADERS (planetree.org)

array of professionals resulted in recommendations to expand equity, diversity and inclusion in all areas of practice. From these early discussions, the AIA has continued to keep inclusion front and center in design. In their document, Framework for Design Excellence, the subject of designing equitable communities is one of 10 elements that "seek to inform progress toward a zero-carbon, equitable, resilient and healthy built environment."

One of the most compelling aspects of this framework is designing for health and well-being.



Including what some may say are the obvious aspects such as daylight, thermal comfort and indoor air quality, designing for happiness is by far the most inclusive.

The point is: equitable environments make people feel they are respected and that their opinions matter, ultimately resulting in authentic experiences, more productive and happier spaces — and better patient outcomes.

Health Care Use Case Types and Their Solutions

This essay's hypothesis offers a question: Are we designing our health care facilities for happiness? Are they inclusive by nature of the care provided? To illustrate, let's examine four use cases experienced in health environments and how their physical solutions might enable or enhance inclusion.

- Care provided TO us:
 - Think of surgery ... the act from surgeon to doctor is one-directional. The surgeon performs the act of surgery TO the patient. The patient in this case is (very) passive; in fact, anesthetized and unable to participate.
- To succeed, this act demands inclusive and interdependent behaviors from the entire surgical team.

The nurse anesthetist, anesthesiologist, residents, environmental services, sterile supply and many others all play a role in the act of surgery for that patient.

- To serve comprehensively for successful outcomes, health care professionals must be inclusive, engage in collaborative conversations and include all the information necessary.
- Surgical activities are interdependent; surgeons cannot perform surgery without clean instruments, a sterile field, appropriate medications and anesthesia, and training. Surgery is like a well-orchestrated play, which is why the operating room is sometimes called "operating theater."

Care provided FOR us:

- Vaccinations, examinations and patient room visits fall into this realm. We are present as patients, but the care act is one-directional. The caregiver, nurse or doctor may conduct a clinical exam, check a surgical incision or perform any number of activities. The caregiver may ask you, the patient, questions, but the physical nature of the interaction is one-directional.
- In care FOR us, interdependencies are few, but still present, in that we may have some follow-up from this interaction. Examples include bandage changes, medications, etc. We may also have questions for our providers and need additional follow-up.

Care provided WITH us:

- For this use case, think of physical rehabilitation. Key interdependencies occur here. The therapist assists you through the movement. You attempt the movement, with assistance. Gradually, you work your way toward doing the movement on your own.
- Interdependencies are frequent for these types of activities, as are their attending physical and emotional interactions.

Activities (or care) we do ALONE:

- -This use case might involve educational materials provided to you or your loved ones, perhaps medical information, prescriptions, discharge instructions and the like. Our care team asks us to do these follow-up items on our own after our exchange.
- -Let's use physical therapy as an example again we are given exercises and stretches to do on our own at home, and then come back to the next WITH session prepared with questions and to do a review of our progress.
- -What about family support? Having someone with you to hear the discharge instructions is critical to the healing process, a family member or care partner that knows the patient and can identify changes in behavior and mood, helps to clarify needs. Many studies have demonstrated that having a family member present is not only inclusive, but good medicine.

The Environment's Role

How do health care environments relate to these kinds of use cases, activities and interdependencies? To move from functions to physical space, an analysis of a few common space types may help in understanding.

Patient Care Spaces

Can you imagine if an exam room did not have a side chair for someone to aid you during your visit? Or if your elderly parent had to meet with their caregiver alone? Think about exam room or patient room ... the arrangement of a physician stool, family side chair(s) and exam table or patient bed, while seemingly an easy and mundane design task, should be taken seriously, and should, in fact, be very intentional. According to the Centers for Disease Control and Prevention, over 50% of Americans have a chronic disease, and with that, 80% of our health care spending is on treatment of chronic disease, most often in a primary care setting or clinic. This makes the design of these spaces, and much of the environment affected by the collaborative, inclusive and interdependent "FOR" and "WITH" environments crucial to health and well-being.

Having a place for conversations to engage with the patient and family member, such as in a consultation space, allows for the exchange of critical information toward health and wellness. Having gone through the cancer experience with my mother, in a variety of these spaces (both poorly and appropriately designed), the environment makes a difference in how information is heard, received and comprehended.

Collaborative Team Centers

The debate over centralized versus decentralized team care spaces (nurse stations) has been ongoing for several decades. In some organizations, having the nurse close to the patient's bedside is the primary goal. In those cases, a decentralized model is preferred and is usually built. But recent research suggests other options as well. A study published in the Journal of Nursing Administration in June 2020 concluded: "Although the design of the decentralized unit positions staff members closer to patients, many feel isolated, while the centralized units seemed to better promote staff proximity and access to supplies." This is one option that supports interdependence and inclusion in nursing practices.

Finally, to share a personal anecdote, several years ago I was involved in a project that adopted a hybrid model. It included bedside charting, decentralized workstations located between two rooms, a centralized team care space, and a private conference space located adjacent to the nurse station. During our post-occupancy evaluation, guess which space we observed being used most frequently? It was the team care space (familiarly known as the nurse station). By observation, the staff seemed to prefer this space, allowing for collaboration and discussion regarding patient care as well as the opportunity for social interaction — something most staff at this facility placed as a high priority for their professional satisfaction. The bedside charting stations were used to discuss care plans with patients and family while in the room; however, the touch-down stations located between each room were infrequently used, except for storage.



Touch Down Stations, photo courtesy author

Healing Gardens

When Roger Ulrich first published his study regarding "positive distractions" for patients post-surgery, the industry had no idea this would lead to more inclusive design parameters in hospitals. In his study, patients who had a view of a garden were administered less pain medication and were discharged sooner than the patients with a view of the brick wall. Later, in 1995, Marcus and Barnes published a study regarding healing gardens in hospital settings. Their conclusion? Outdoor spaces, specifically designed for ALL patients, staff and supporters in a health care setting, are not only good for the psyche, but are also

supportive of healing, well-being and inclusivity. The excerpted tip below is an excellent example of one such approach.

Although this overview only examined three solution types, the potential of the environment to support, nurture and enable inclusion seems clear. Intuitively, architects and designers leverage their knowledge toward inclusivity, and, by definition, buildings function interdependently because of the myriad of systems installed. The missing link, however, and the one factor that supports both aspects is PEOPLE.

Place smooth, tree-covered paths around that are inviting for taking walks and can accommodate wheelchairs and those patients with assistants. Provide light furniture that can be easily moved into either the sun or the shade so as to encourage conversation and interaction between people, with plants that attract birds, squirrels and other small wild animals that can be watched.

— Marcus and Barnes

Teamwork Required

One organization that believes that inclusive interdependence is critical to patient outcomes: Planetree International. Founded by a patient in 1978 on the core principles to personalize, humanize and demystify patient experiences, Planetree has been working for decades to educate and transform health care systems around the world on the importance of inclusivity and positive human interactions.

Having had the honor and pleasure of working with Planetree for five years, I listened repeatedly to patients, families and caregivers share their stories about the care experience and how their care experience was enhanced by their caregivers' constancy in communication. Sadly, some also shared stories of the lack of inclusive behaviors, often leading to negative outcomes. Communication and inclusiveness need to march arm-in-arm, and as suggested above, the physical environment can support these actions.

Each of us has personal anecdotal evidence that environments are rarely neutral. We are impacted by them in either positive or negative ways. The difference is the experience we have with the PEOPLE in the place. We can design beautiful environments, but if patients are not properly welcomed, included alongside their care partners and supported by trusting teams, they are confronted with negative care experiences.

In short, person-centered design is simply being inclusive with the community, creating interdependence in the user experience and innovating to yield unique, personalized, exceptional health care experiences.

As architects, we have the opportunity to design spaces that give freedom to nurses, doctors, therapists and the entire staff to perform at the fullest extent of their personal and professional capabilities and contribute to creating these positive or negative experiences. At its core, this is the basis of inclusive design and is how the design industry can lead in designing inclusive and interdependent environments.

Doing the Right Thing

The growing complexity of our health care systems demands that we work in teams.

In our collective quest to provide inclusive healing facility designs, informed designers are increasingly challenged to collect the right data, to know it all themselves while being innovative and creative. In a 2012 McKinsey survey of what innovation leaders say they do right, the results showed that innovative teams not only aspire to discover methods of innovation, but must accelerate and mobilize these efforts to achieve optimal solutions in their businesses. These outcomes are not easy and take time, but the best organizations and the practitioners commit and steadfastly incorporate these attributes into their corporate cultures.

In a prescient foreshadowing of our broader responsibilities and team-based practices, Florence Nightingale famously said:

"Let whoever is in charge keep this simple question in her head (not, how can I always do this right thing myself, but) how can I provide for this right thing to be always done."

Her quote presents the challenge well. In today's context, I would amend it slightly: how can WE provide for this right thing (and all the right things) to be done in an inclusive and interdependent manner? If we design in context — with all the interdependent participants and factors in mind — we'll be off to a good start.

Kim Montague is the executive director of health research and partnerships for Kimball International. A senior health care architect, Kim has spent her career advocating for, and designing with, patients, families and staff to create healing environments in communities around the world. A passion for research-focused and evidence-based design, she serves on the AIA Academy of Architecture for Health Board, AIA Michigan Board of Directors as a Detroit representative, and is the president of the incubating chapter of Women in Healthcare - Michigan.