- Asking family if and how they want to be involved in care
- Asking people how they feel about their experience
- Adapting practices to meet individual needs, such as carefully assessing the appropriateness of two hourly turns for a person in the very last stages of their life
- Making sure we tell people what they specifically have done well

Putting Compassion First

Compassion occurs at a deeply personal level, person to person. However, when organizations reorganize standard processes and structures to put compassion first, the results—as demonstrated in the two field examples that follow—can be extraordinary.

Field Example: **Easing Child and Family Emotional Distress in Lumbar Punctures**

Royal Children's Hospital, Melbourne, Australia

At The Royal Children's Hospital in Melbourne, Australia, children with cancer need to have regular tests where bone marrow and spinal fluid are removed by inserting needles into the pelvic bone and into the spinal column. These procedures need to be repeated many times on each child, sometimes up to forty times during two years of treatment. Traditionally, the procedures have been painful, and many children found them distressing or terrifying. The level of sedation was often unsatisfactory. Parents described their children becoming anxious days before each procedure was due. For the past twelve years, a team led by Dr. Catherine Crock has worked to change this by improving partnerships with the patients and families. The medical staff worked

closely with the parents to identify problems and seek solutions; many changes were made. This has led to a service where families say they feel safe and secure when they come to the operating theatre for their child's procedure.

The patient-centered approach has been developed and implemented in partnership with families at every stage. The aim is for children to go to sleep calmly and wake up happily. To assist with this, theatre scheduling has been redesigned to suit the families, not the hospital. Families arrive as little as 30 minutes before the time of their procedure. A music therapist is present and plays with the children. The child stays fully dressed in street clothes and can play games on an iPad or listen to specially composed *HUSH* music (www.hush.org.au) while going to sleep. They have their choice of ten flavors (such as cola or chocolate) to put in the gas masks. Children can choose whether to go to sleep quickly or slowly, on their parent's knee or on the bed. They may elect not to have a mask and have an intravenous injection via a vein to which numbing cream has been applied. They may prefer to talk to the anesthetic technician about football or even sing their team's theme song. Parents are supported by an extra person, and given a hug or reassurance after their child is asleep. Parents are invited into the recovery room before their child is awake so that the child wakes up to the comforting of their parents. The child leaves the theatre with his or her parents a total time after arrival of perhaps an hour.

Redesigning the service from a patient-centered viewpoint has led to quite startling results. The most obvious is the change in the children themselves, with several children commenting that their favorite part of hospital visits is having their lumbar punctures! Less obvious but equally important has been the change on the health professionals themselves. Developing a culture of respect for families has also nurtured a culture of respect between the staff. Each member of the team is prepared to take the time to figure out what approach works best for each patient and family. Each member of the team trusts and looks after other team members as they work. Quick review sessions are held with parents to check that the plan for their child is working, and with other team members to confirm that all is going well. Job satisfaction has soared.

One mother, Jen, describes how her eight-year-old son, Josh, has benefited from this approach. "The presence of compassion in the operating theatre has significantly reduced the stress and fear associated with having a child … my child … my Josh, diagnosed with a life-threatening medical condition. The empathy shown by the the-

atre team, and their encouragement for parents to be involved in the decision making, has allowed me to experience some positivity and to feel useful, rather than hopeless or helpless—even in the face of the most pronounced pain and fear I have ever experienced." She goes on to add, "The greatest gift they bestowed on me, however, is that they have made Josh feel protected and secure. When Josh is feeling scared and vulnerable he is anxious and unhappy—which adversely affects his health and treatment. But Josh has very quickly learned that he can trust Catherine, and the adults around her, and he has become resilient, brave, and empowered."

Field Example: **Taking the Sting out of the Lab**

Sharp Coronado Hospital, Coronado, California, USA

The Sharp Coronado Hospital laboratory team goes above and beyond their duties by creating exceptional experiences for patients and a uniquely positive culture within the laboratory department. Certainly, it is not one of life's most pleasant experiences to have one's blood drawn. However, this team has come up with innovative ways to make the process better and less painful

for patients, and in so doing improved their work lives and team spirit. When patients enter the lab, they are invited to unwind in a designated patient lounge before their appointments. The team advocated for turning the lounge into a spa-like environment, where soft music, lovely works of art, and the aroma of lavender have a calming effect. As the person is escorted from the lounge to the drawing area, the experience continues to surprise and delight. Phlebotomists begin by providing hand massages to patients during their blood draw as a soothing way to increase blood flow, release tension, and help reduce stress and anxiety. With patient-centered care in mind, team members offer gentle encouragement during the procedure because tender touching promotes a deeper sense of connection and a feeling of being cared for. As patients leave to reenter the lobby they are offered spa water and fruit as appropriate.

In addition to incorporating human touch and complementary modalities into their practice, the lab technicians went one step further by launching a unique, personalized service called "drive-through phlebotomy." This simple and thoughtful innovation was devised when the lab team realized that many community residents required frequent blood draws but had limited mobility or difficulty getting dressed. After caring for many

Planetree Design Principles

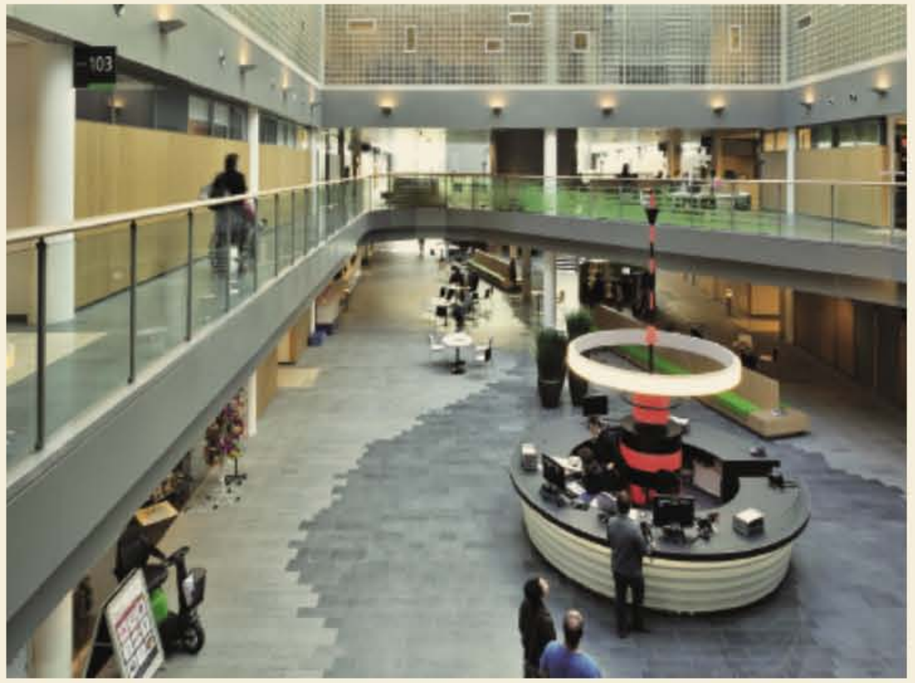
Roslyn Lindheim, a founding board member of Planetree and professor of architecture at the University of California, Berkeley, emphasized that the design of health care settings should (Arneill and Frasca-Beaulieu, 2003):

- Welcome the patient's family and friends
- Value human beings over technology
- Enable patients to fully participate as partners in their care
- Provide flexibility to personalize the care of each patient
- Encourage caregivers to be responsive to patients
- Foster a connection to beauty and nature

Through field examples, in this chapter we will spotlight how health care organizations around the world have applied these design principles.

Field Example: **Maasziekenhuis Pantein, Beugen, The Netherlands**

Figure 7.1 Maasziekenhuis Pantein



Maasziekenhuis Pantein is a newly built regional hospital which opened in April 2011. Throughout the design process, special attention was given to incorporating Planetree design principles. The building has a tranquil architecture and boasts a welcoming atmosphere and a touch of home.

Featuring a square pond, a garden, and generous footpaths, the setting is inviting. A spacious entrance gives way to a welcoming reception area and a restaurant with an outdoor terrace. Natural light flows throughout the

coupled with proactive systems and practices that promote partnerships between patients and caregivers to meet patients' sleep needs. Taking into account patients' sleep patterns when scheduling routine procedures such as blood draws and vital signs is one way of addressing this aim. The Department of Veterans Affairs New Jersey Health Care System uses a sleep assessment tool to ascertain patients' sleep patterns and preferences, as well as to enable the patient to identify nonpharmacological sleep aids (such as sleep masks, sound machines, warmed blankets, and aromatherapy) that he or she may find useful. This sleep assessment opens up a dialogue about why sleep is important and becomes the foundation for supporting more comfortable sleep for patients that will yield the well-documented health benefits of uninterrupted rest.

For those requiring outpatient procedures, having an environment where disruptive and jarring sounds are kept to a minimum will promote an atmosphere that is quiet and soothing and could help in reducing stress. Using finishes and furniture to help reduce sound reverberation will also enhance the peacefulness of the surroundings as well as improve speech intelligibility. Appropriately designed full- or half-height partitions in check-in and check-out areas can assist in affording visual and auditory privacy to patients.

Healing Design Is Safe Design

An aesthetically beautiful health care environment is diminished in value if it is not also functional. Safety is, of course, a chief measure of functionality in any health care building. The interrelation of patient-centered care and patient safety are reinforced by an examination of the healing environment:

- Providing private patient rooms is not only a significant patient satisfier, it also promotes safety by limiting patient transfers, reducing hospital-acquired infections, and supporting more open communication between patients and caregivers. Longitudinal studies and literature reviews indicate significant improvements in ratios of available nurse time for patient care, reduction in medical errors, and reductions in inpatient length of stay (Hendrich and others, 2004; Chaudhury and others, 2003).
- Shifting from centralized to decentralized nurses' stations which keep nursing staff closer to a cluster of patient rooms enables higher levels of observation of patients, which can result in improved assistance and fewer falls (Hendrich and others, 2004). For instance, when The Center for Health Design Pebble Partner Methodist Hospital/Clarian Health Partners in Indianapolis, Indiana, integrated a decentralized nurse station design layout for means of facilitating increased patient observation, measurements of patient falls five years after implementation indicated a 75 percent reduction from previous rates (Center for Health Design Pebble Project Alumni, 2013). This configuration also contributes to noise reduction and reducing interruptions which may lower the risk of medical errors.
- The installation of patient lifts in patient rooms further promotes patient and staff safety. A study of both acute and long-term care health care facilities that had installed patient lifts in rooms indicated a 95 percent reduction in both musculoskeletal injuries and lost days due to injury in clinical staff (Evanoff and others, 2003).
- Ensuring easy access to sinks and handwashing and sanitizing stations promotes hand hygiene and infection prevention in the most practical of ways. Research indicates that improved compliance in hand hy-

giene by health care personnel can reduce nosocomial infection rates by as much as 40 percent (Kampf and others, 2009).

- Corridor clutter not only is a safety hazard, making it difficult to maneuver in hallways and to find needed equipment; it can also convey a sense of disorder and inefficiency to patients and loved ones. Creating storage solutions such as centrally located equipment alcoves that keep corridors clear and equipment organized reassures patients that they are in good hands.

Many patients and family members interpret the state of the physical environment of their health center as an indication of overall quality of care. This obliges health care organizations to stay attuned to patients' assessments of the physical environment. Furthermore, a recent study found that hospitals in the highest quartile of performance on patient experience questions related to the environment of care had a lower incidence of selected infections due to medical care (Isaac, Zaslavsky, Cleary, and Landon, 2010).

In an analysis of the root causes of sentinel events in hospitals, communication (or lack thereof) is consistently the most frequent cause at the root of these occurrences. There are numerous design elements that can help to establish connections between patients and caregivers, which support effective partnership and communication, among them:

- Decentralized nursing stations which enable nurses to be more responsive to patients
- Call buttons that emit directly to personal devices held by staff
- Furniture that enables providers to speak to patients at eye level
- Communication boards in patient rooms where caregivers capture the plan for each day, the names of the members of the care team, and patients' goals
- Placement of computer equipment such that

caregivers can maintain their personal rapport with patients even as they are inputting information

Balancing Healing Design and Safety in Behavioral Health Settings

Perhaps nowhere is this delicate balance between patient healing design and safety more apparent than in behavioral health settings. In the interest of protecting patients and staff from harm, the environments of many behavioral health providers have come to more closely resemble prisons than patient-centered hospitals. A number of pioneering patient-centered behavioral health organizations are demonstrating that safety and healing design *can* coexist in behavioral health settings. As just one example, a "soft suicide prevention door" (SSPDoor) has been developed that eliminates many of the hanging hazards associated with a typical door. The door may be easily removed by staff and used as a shield against an attacking patient, and can have calming artwork printed on its face. This door cannot be locked or latched in any manner.

Other ways to incorporate elements of healing health care design without compromising safety include adoption of a well-designed, noninstitutional-feeling color palette, and applying homelike finishes wherever possible to decrease the distance between hospital and home by emphasizing the familiar. Visual access to natural views and daylight provide an empirical link to patients' sense of well-being. Positive distractions such as murals and artwork with calming natural themes also can be a source of stress reduction.

Patients should be able to control their social contact. Design areas enable patients to choose socializing or privacy. Provide enough areas for social gathering so there is not an issue with overcrowding space, and also allow for flexibility in the layout of seating options. Whenever possible, upholstered furniture should be used in both social support and patient rooms to create a comforting atmosphere. Furniture that is heavy and stable and resistant to damage is optimal. Environmental enhancements like these can go a long way toward minimizing the institutional feeling of behavioral health settings, and create an environment that is supportive of healing.

Conclusion

The centerpiece of any patient-centered approach to care is the human interaction that occurs between patients, family members, and caregivers. As this chapter illustrates, however, thoughtful design of the spaces where those interactions occur can serve to either promote or undermine those interactions. When compassionate human interactions occur within a space designed to calm, comfort, and heal, the potential for a transformational health care experience can be realized.

References

Arneill, B., and Frasca-Beaulieu, K. "Healing Environments: Architecture and Design Conducive to Health." In S. B. Frampton, L. Gilpin, and P. A. Charmel (Eds.), *Putting Patients First: Designing and Practicing Patient-Centered Care*. San Francisco: Jossey-Bass, 2003.

Beauchemin, K. M., and Hays, P. "Dying in the Dark: Sunshine, Gender and Outcomes in Myocardial Infarction." *Journal of the Royal Society of Medicine*, 1998, 91(7), 352–354.