

DESIGN AND THE BOTTOM LINE:

*Practical Patient-Centered Approaches
to the Physical Environment*

JERRY EICH, AIA, LEED® AP
PRINCIPAL, HEALTHCARE PRACTICE LEADER
HMC ARCHITECTS

KIMBERLY NELSON MONTAGUE, AIA, EDAC, LEED® AP
DIRECTOR, DESIGN CONSULTATION SERVICES
PLANETREE

REBECCA HATHAWAY, RN, MSN, EDAC
SR. OPERATIONS EXECUTIVE
TEMECULA VALLEY HOSPITAL, UNIVERSAL HEALTH SERVICES

HMCArchitects



In the multi-priority world of hospital administration, it is a rare and precious occurrence when “the right thing to do” coincides with business opportunity. However, an established and still-growing body of data, both hard and anecdotal, indicates that a patient-centered approach to the planning and design of hospitals, medical clinics, outpatient facilities, retirement villages, and continuing care facilities is the rare case where “too-good-to-be-true” is simply a fact. The implications are broad-ranging. Industry experts now agree that the physical environment where care is received, in conjunction with other patient-centered care principles, provides enormous opportunity for improving the quality of patients’ healthcare experience and actually accelerating the healing process. It is not simply that patients fare better in an environment that provides for their social, cultural, and intellectual needs — it is that hospitals that create environments conducive to fulfillment of these needs can expect to see significant improvements in patient satisfaction, positive patient outcomes, and employee engagement that ultimately save money.

FOUR PRIMARY CATEGORIES COMPRISE THE BUSINESS CASE FOR INVESTING IN THE DESIGN OF PATIENT-CENTERED CARE ENVIRONMENTS:

- 1** Outcomes that are produced in the hospital: the success rate of individual procedures, including the need for follow-up care, and reduction in the length of average stays. (The latter is a source of substantial savings.)
- 2** Attracting users: creating an inviting and navigable setting for both patients and their families, and for staff that provides varied areas for privacy, interaction, family time, contemplation, and contact with the outdoors.
- 3** Human resources impact on the bottom line: the number of productive hours per patient day at all staff levels, impact on staff retention, and effect on recruitment.
- 4** Repeat business: Reputation in the community; continued patient and family patronization, especially in choice-driven scenarios such as obstetrics and pediatrics; the ability to attract new patients and garner additional donations.

In addition, this paper discusses misconceptions about the long- and short-term costs associated with the evolution of a hospital or campus toward a patient-centered design, as well as the prevalent tendency to dismiss changes to the physical care-delivery environment as insubstantial or irrelevant to the organization’s bottom line. The perfect storm of more satisfied patients, better outcomes, less costly care, and staff who never want to leave can be achieved by incremental changes over time, as an integral part of a hospital’s capital improvement, renovation, or expansion budget.

THE HEALING VALUE OF DESIGN

Angela Thieriot, founder of Planetree, the nonprofit organization for patient-centered care, provides a compelling first-hand account of an all-too typical patient experience in a facility where design was a low priority.

Hospitalized in the mid-1970s, she was impressed by the technological and clinical prowess of the facility, but was also struck by how little it addressed, or even acknowledged, the harder-to-quantify “human” aspects of her stay. Thieriot was placed in a monotonous environment with little privacy and less information volunteered to her about her condition, which was life-threatening. Glaring fluorescent lighting exacerbated her discomfort. The hospital’s policies restricted her family’s time at her bedside, and the only homelike splash of color or visual interest was provided by an orchid her mother brought her. She would later say that her experience of her illness was not as bad as her experience of the hospital itself. This impression was reinforced over the next year, when Thieriot’s father and brother were both hospitalized and she had the same frustrating experience from the family perspective. Kept from effectively providing emotional support to her kin during this very stressful time, Thieriot decided that there must be a better way: one that was more respectful of patients’ and loved ones’ personhood. In 1978, she founded Planetree as a nonprofit organization devoted to “personalizing, humanizing, and demystifying the healthcare experience for patients and their families.” To this end, the organization assessed every aspect of a healthcare facility from the perspective of the patient, eventually arriving at the present 10 tenets:



1. We are human beings caring for other human beings.
2. We are all caregivers.
3. Caregiving is best achieved through kindness and compassion.
4. Safe, accessible, high quality care is fundamental to patient-centered care.
5. A holistic approach best meets people’s physical, intellectual, and spiritual needs.
6. Families, friends and loved ones are vital to the healing process.
7. Access to understandable health information can empower individual to participate in their care.
8. The opportunity for individuals to make personal choices related to their care is essential.
9. Physical environments can enhance healing, health, and wellbeing.
10. Illness can be a transformational experience for patients, families, and caregivers.

All of the above form part of the continuum that is Planetree’s mission, but the organization’s ongoing work in partnership with its clients and with architectural and interior design consultancies, continues to paint a compelling economic

backdrop for “the right thing to do.” To date, 200 US hospitals have qualified as Planetree affiliates (meaning that their caregiving environments satisfy each of 10 essential elements of patient-centered care), and 10 are “designated affiliates” (meaning that they have gone above and beyond, often with spectacular results in an increasingly competitive market. Many have waiting lists of nurses eager to join their staffs. Many have been featured on the *Fortune 100* or *500* lists, some for several years in a row. The correlation is compelling, and as more and more hospitals make that list, more are paying attention to what helps to get them there. The landscape is competitive, and a facility designed to foster Planetree’s 10 tenets is a clear differentiator.

While it is possible and, in many project instances, desirable to make incremental changes to the physical environs of a hospital once leadership has realized the value, imparting therapeutic or “healing value” goes beyond changing a few paint colors or lightbulbs. It requires a thorough understanding of the needs and expectations of patients and staff, the purpose and practices of the health care facility, and the psychological and social effects of design and planning. Because the cultural identity, type of illness, lengths of stay and physical/psychological constraints may vary substantially from one patient to the next, a successful patient-centered design must strive to foster a full spectrum of positive and uplifting psychological responses, including:

- Privacy and undisturbed rest/contemplation.
- Creating an inclusive environment that welcomes families and allows them to be involved in care.
- Mobility and exploration of communal areas.
- Separation between staff and patient areas, allowing staff to “go offstage.”
- Ownership/control of immediate surroundings.
- Socialization and interaction with others.

- “Bringing the outside in”: integrating patients with nature via views, artwork, landscape, and water features.
- Creating opportunities for patients to be outdoors where feasible.

California-based firm HMC Architects, which has been imbuing its projects with patient-centered values for decades, provides clear examples of success at Planetree affiliate hospital Loma Linda University Medical Center in Southern California. HMC’s involvement at Loma Linda is longstanding and ongoing for this large, multi-campus organization. East Campus CEO Michael Jackson, an advocate of patient-centered care and evidence-based design, worked closely with the team on one of its first projects with Loma Linda, a new 24-bed rehabilitation wing that completed construction in 2010. The facility clearly reflects patient-centered design principles, working to connect families, eliminate stressors, provide positive distractions, and enable choice. The overall atmosphere is Spanish-inflected and spa-like, with indirect lighting, places for pause and rest, and several interior courtyards embellished with teak seating, lush vines, and hummingbird feeders. Natural light encourages awareness of time of day for patients, visitors, and staff alike. On a functional level, accessibility, interactivity, control, and personalization are key elements for a user group whose mobility may be limited.

Prior to its East Campus work, HMC was involved in the Rehabilitation Park that serves as the primary green space connection to other parts of the campus and to parking. Mainly catering to patients who use prosthetics due to congenital reasons or resulting from amputation or trauma, as well as those with neurological disorders that impair mobility, the Rehabilitation Park includes a disabled-accessible playground for children

and young adults. A neighboring amphitheater is often used by the surrounding community for performances and other gatherings, bringing a welcome entertainment choice to hospital patients and staff.

Jillian Payne, Director of Community Development and Outreach for Loma Linda's East Campus, has been with the hospital since 2003 and has observed its evolution. She points out that for patients, design elements can reduce the anxiety associated with healthcare — even something as simple as a wood-grain façade where one would ordinarily be confronted with oxygen supply equipment can have a calming effect. She stresses that patient-centered design is less about beauty in and of itself, but rather about creating a home-like atmosphere that encourages family and friends to visit at length, providing the emotional support that underwrites recovery. In her experience at Loma Linda, Payne can also vouch for the efficacy of an incremental approach to design alterations. “Creating the opportunities for safety and comfort doesn't mean bulldozing the



“Creating the opportunities for safety and comfort doesn't mean bulldozing the building and starting again.”

building and starting again,” she says. “It's more about talking to patients and staff to determine the base-level needs and then adjusting what you

can, when you can.” Furthermore, Payne asserts that more and more patients are going “shopping” for optimal healthcare environments. “People are now much more savvy about elective surgeries,” she points out. “They are looking at Hospital Compare and at patient satisfaction scores for things like knee and hip replacements.” She adds, “This information is only going to become more and more transparent and available to the public.” For administrators who are still dragging

their heels in making patient-centered design improvements, Payne warns, “You may be behind the eight-ball.”

Loma Linda’s main campus masterplan, in its early stages at the date of this writing, will also have Planetree elements designed into it. Notably, a greenbelt will connect the different campus units. Because the campus serves a variety of patient needs, including pediatrics, the outdoor spaces differ in scale and spatial character and encourage both active and reflective uses as well as zones where children will have safe access to the outdoors — often a welcome change for long-term patients whose schedules are highly routinized.

Incremental approach to patient-centered care

As Loma Linda demonstrates, healthcare facilities share with academic campuses the potential for progressive development. While a hospital may be a single building of millions of square feet, a collection of smaller buildings, or a multi-campus conglomerate, the selective renewal or replacement of facilities that must occur anyway can be accomplished with a patient-oriented approach without undue cost. At Mid-Columbia Medical Center in The Dalles, Oregon, add-ons and remodels happen every few years. The original structure is more than 50 years old, with a wing added in the mid-1970s as the primary in-patient area. According to Joyce Powell-Morin, MN, RN, and Mid-Columbia’s Chief Cultural Officer, “Each time we upgrade, we take what we’ve learned about color, texture, art, rounded walls, and connections with nature and apply it, because we have seen the impact it has.” Visitors to the hospital, Powell-Morin says, often walk in and say, “This does not feel like a hospital at all.”

In addition to the primary hospital, other Mid-Columbia structures have utilized Planetree components. The 10-year-old Celilo Center,

which specializes in oncology, features a Center for Mindfulness with lounge chairs overlooking a healing garden. A water feature mimics the nearby Celilo Falls — a primary gathering and healing site for Native Americans for ten thousand years. Numerous artworks reference the healing power of water, and many large windows overlook a labyrinth garden, where walking meditation or sitting in the garden are available.

The Celilo Center, of course, was not a frivolous investment on the part of Mid-Columbia’s leadership. Prior to its construction, the patients in the community had to travel to receive oncological treatments, including radiation therapy. The hospital saw, in this business opportunity, the chance to gift the community with a care environment that is patient-centered. The gamble paid off. Initial doubts that the project would break even have been left in the dust by user volumes that far exceeded expectations.

A number of Mid-Columbia’s departments, including physical, occupational, and speech therapy and a sleep center, are housed at the new Water’s Edge: a health and wellness center completed in June 2010 in which Mid-Columbia is a one-third partner. Proximate to the Columbia River, the building itself is fairly simple and focused on the outside; looking out the window from water therapy, a patient is likely to see geese and other birds. Art in the facility, including green glass pieces that blur the line between interior and exterior, reflect the character of the Pacific Northwest and are placed throughout. A bistro offers healthy fare; a balcony offers fresh air and connection to the outdoors; and the overall sense is more reflective of hospitality than of medicine.

The healing power of design

Marcia Hall, CEO of California’s Sharp Coronado Hospital, can attest to the power of

Mid-Columbia's design — it stands out as one of the beacons that guided the incremental redesign of her own facility. In 2000, Sharp Coronado was struggling financially, and Hall led an effort to assess hospitals with similar demographics that had leveraged patient-centered care and design to emerge as market leaders. Mid-Columbia was one of several hospitals that Hall and her strategic planning group toured, gleaned insights that have now thrust Sharp Coronado back into a competitive position. Both Mid-Columbia and North Hawaii Hospital (on the state's Big Island) stood out to Hall as successes for blurring the threshold between the outside environment's culture and ambience and the healing facility itself. She admired the way Mid-Columbia had brought in not only the shapes and colors of The Dalles, but also its history — in the form of documented Native American petroglyphs, now submerged since the building of the Bonneville Dam. In Hawaii, Hall observed the way that island culture and healing traditions were incorporated into the design, particularly in space planning, which allowed for quiet rooms for meditation and prayer.

"In 2002, we didn't have the money to change much physically," Hall says. "We started with changes to the staff's attitude about showing up at work and delivering care, and the increase in volume we saw from that allowed us to begin altering the environment." Drawing on what she had learned in her tours of other hospitals, and working with a series of designers, Hall oversaw improvements that started with the hospital's "front doors": the areas where first impressions were made. These included the emergency room, front lobby, and outpatient centers. Getting rid of the "bowling-alley" feeling of the 1960s-era building was tantamount, as was bringing in elements of Coronado Island's color, texture, and sound. Sand, sea, and sky colors came to predominate, together with curved lines and indirect lighting.

Over the years, further incremental improvements at Sharp Coronado have included upgrades to wayfinding, nutrition, visitation, and sensory experience, with elimination of most overhead paging, the use of more natural-smelling cleaning products, durable faux bamboo flooring, and the installation cherry ceiling panels and nautilus motifs at directional junctures.

"You have to care for the caregiver," Hall says. Staff at Sharp Coronado have access to a range of "off-stage" spaces as well as to the Motion Center—a combination gym, physical therapy, and spa facility offering massage and acupuncture to patients and staff alike. Of the staff amenities, Hall has a particularly vivid memory of the grounds' outdoor labyrinth, a circular meditative path. She recalls a time when a new nurse had lost her first patient, and was taken by a friend into the labyrinth to cope with the impact of that experience. Hall is convinced that providing opportunities to use breaks in a meaningful way, such as walking the labyrinth, has contributed to the hospital's continued improvements in both patient and staff satisfaction.

Based on her experience with Mid-Columbia's ongoing evolution in terms of both design and service offering, Joyce Powell-Morin offers this concise observation: "At some point, you are going to have to renovate or expand, and you are going to have to have some kind of flooring and wall color and artwork at a minimum. Why not make [those choices] ones that improve the experience that the patients and their families have?" While money might not be plentiful, increasing numbers of healthcare facilities are finding that each dollar is better spent on environments that contribute to the wellbeing of patients, their loved ones, and their caregiving staff.

OUTCOMES, COSTS, AND BENEFITS OF THE PLANETREE APPROACH

One concern among hospital leaders who have not yet considered patient-centered design when budgeting for capital improvements is the idea that commitment to patient-centered care will mean dollars spent on “paint and pets” or “touchy-feely” staff training that will not be recouped.

At many hospitals and clinics, budgeting prioritizes technological improvement as the primary competitive marker. It is not difficult to discern the reason: the purchase of a new device and accompanying software and staff training is worthwhile on its own merits, but also has the benefit of carrying a finite cost. In contrast, because design and planning is only one part of patient-centered care and cannot succeed without some cultural or organizational change, executives contemplating the next quarter's or year's expenditures may be tempted to ignore the potential savings in favor of “business as usual.” Changing a few paint colors and holding a handful of targeted staff meetings will not accomplish patient-centeredness, and that a long-term commitment is necessary to attain the success that many Planetree affiliates have achieved. However, two principles apply. Firstly, the vast majority of these success stories were not constructing a

whole new hospital or even a whole new ward. Given their existing budgetary constraints and their vision of their facility's future, they worked with knowledgeable consultants to make the incremental changes that collectively resulted in exemplary patient-centered care. Secondly, upgrades to technology, equipment, or processes that worked five years ago must also be continually assessed as the science of healthcare advances. There is no real justification for doubting that design and planning must undergo the same evolution, and for making the same sorts of budgetary allocations. The ongoing journey entails scanning the horizon for the “next right thing” and a commitment to making small improvements when larger ones are not feasible for a particular fiscal period.

The first leg of a Planetree affiliate's journey is an average of three years, devoted to establishing a common mission and vision and enacting the goals



Kaiser Permanente West
Los Angeles Lobby //
Simple changes bring
positive results.



(including changes to the physical environment) that are necessary to create a patient-centered environment and atmosphere. After that initial period, the mission and vision must remain. To maximize the increase in employee engagement and repeat business associated with patient-centered care, they must be part of internal and external communications as well as budgeting. However, the rewards are substantial. A 2007 doctoral dissertation contrasted the results of two orthopedic post-surgical units in two hospitals located within 15 miles of each other in a large urban county, both of which served elective knee or hip replacement patients.¹ One was part of Sharp Coronado, a San Diego, California Planetree facility that has achieved “designated affiliate” status; the other was not (although both hospitals were managed by the same not-for-profit system). The study’s findings, obtained through examination of benchmark data provided by the facilities and by double-blind survey, indicated:

1. A lower mean length of stay at the Planetree unit for the years 2002–2006.
2. Lower costs-per-case than at the Planetree unit for the same period (partially attributed to shorter lengths of stay).
3. A significant increase in productive nursing hours per patient per day at the Planetree unit, primarily obtained by more effective allocation of higher-cost staff’s hours.
4. Higher overall patient satisfaction scores in seven of the nine dimensions measured.

¹Stone, S. “A Retrospective Evaluation of the Planetree Patient-Centered Model of Care Program’s Impact on Inpatient Quality Outcomes.” Hahn School of Nursing and Health Science, University of San Diego: San Diego, CA, 2007.

²Iacono, S. “Planetree Philosophy: A Study on the Relationship of Patient Satisfaction and Utilization of a Planetree Model in Care Delivery.” Planetalk: Derby, CT: 2002.

In addition, case studies indicate significant upticks in the second category of the business case for patient-centered care: attracting and retaining users. A 2002 study contrasting patient satisfaction scores at 12 hospitals one year before implementing a patient-centered approach to care, and two years subsequently yields some striking examples.² Griffin Hospital in Derby, Connecticut, saw a 24 percent increase in inpatient volumes after implementing Planetree ideas. This increase correlates neatly with steadily improving patient satisfaction scores, and outranked the 2002 state

average (14.4 percent) by nearly 10 percent. Similarly, Wisconsin's 13-hospital Aurora Health system observed significantly higher scores for both patient outcomes and satisfaction at its pilot patient-centered facilities, leading it to implement Planetree at an additional six of its hospitals.³

Also related to both Category 2 and Category 4 (repeat business) is the fact that for many if not most patients, the decision of which healthcare facility to patronize is determined by expedience, often defined as proximity to the home. People visit hospitals for specific reasons, and a simple test can result in follow-up procedures that render simple access (even if not to the preferred environment) a selling point. For this reason, many hospitals have felt secure in their consumer base,

expecting that locals will patronize and return to their establishment. But given the choice, people will go elsewhere — and will endorse or denounce a healthcare establishment based on their own experience much as they would a restaurant or a hotel. Patient choice and its impact are clearly illustrated by the repeat business of one group of patients for whom choice is not only possible but actively researched: first-time mothers, who are considering where to give birth. Their positive experience of a hospital for this generally happy visit correlates compellingly with the likelihood that they will use the facility for other services (and not just pediatric or gynecological). It also indicates that they are more likely to recommend that facility to other expectant mothers.

³ Charmel, Patrick A. and Frampton, Susan B. "Building the Business Case for Patient-Centered Care." *HealthcareFinancial Management: Westchester, IL: 2008.*

HUMAN RESOURCE-RELATED BENEFITS OF PATIENT-CENTERED CARE

Leaders unconverted to patient-centered care may also suspect that increased staffing will be needed to fulfill the objectives identified by Planetree.

In fact, the Planetree approach centers on maximizing available staff resources and creating efficiencies that require no such increase. One study of four Planetree hospitals over five years demonstrated that there was no change in RN staffing ratios or HPDs. Moreover, Category 3 (the human resources impact on the bottom line) cannot be overlooked in any assessment of the costs and benefits of patient-centered care, although it is often underreported. Darryl

McCormick, Senior Vice President for Talent and Culture at Connecticut's Griffin Hospital (cited previously for its increase in market share after implementing patient-centered care) guided an organization-side migration to Planetree principles in 2004 as part of a response to low patient satisfaction scores in the 1990s. In a significant correlation, in 2003, employee engagement scores at Griffin were in the 33rd percentile. In 2009, after Griffin had made significant strides in implementing

“Culture change is one person at a time. It starts with leadership and continues through to hiring....”

patient-centered care, employee engagement had vaulted to the 96th percentile.

For the ongoing success of any hospital, creating an environment where people want to work is essential, and evidence suggests that a patient-centered approach not only increases productive nursing hours per patient day by more appropriately delegating non-medical tasks, but that it also provides the sort of personal, professional, and cultural support that attracts staff and encourages them to give their all to any task or activity. This benefits the organization as a whole. (Griffin Hospital, for example, appeared on the Fortune 100 list for nine years in a row, concurrent with its steadily improving employee engagement scores.) A patient-centered approach to care shows significant promise in increasing the engagement levels of staff who are moderately committed, although perhaps not the highest performers (approximately 71 percent of any given organization).⁴

To be clear, there are costs associated with patient-centered care; the initial training of staff and ongoing education are examples. However, these initial costs are dwarfed by the long-term costs of poor HCAHPS scores, increased malpractice costs, HIPAA fines for violations, and turnover rates. The cost of replacing an employee is estimated to be no less than that employee’s annual salary, and often up to three times that much.⁵ This is due in part to the hard costs of recruitment (advertising, headhunting, etc.), and it is telling that Griffin Hospital, Mid-Columbia Medical Center, and Loma Linda University Medical Center have or have had waiting lists for applicants waiting for job openings (an ideal situation for a growing, thriving hospital).

Low turnover, of course, is not worth its salt if the employees who stay are not actively engaged

in their jobs and enacting the hospital’s mission, vision, and values. Although educating the patient and their family is part of a patient-centered approach, this does not mean that a brusque “information dump” is always appropriate. Integrated empathy training can instill in caregivers the ability to follow the patient’s lead about what, and how much information to volunteer, and this is an area where benchmarks for staff should be set. The organization must communicate that this is a critical part of its mission and that everyone, from neurosurgeons to front desk personnel, must make it part of their personal responsibility on the job.

While Category 3 concerns underwrite the financial health of a hospital, they are part of the interrelated set of cultural changes that ultimately comprise a successful transition to a patient-centered facility. Because his 20 years at Griffin Hospital have spanned one such transition, McCormick offers this advice: “Culture change is one person at a time. It starts with leadership and continues through to hiring. Once Planetree was an attitude rather than just a word, we knew what kind of employee we were looking for: someone who treated it as more than a job. Compassion, empathy, a good listener, a major team player,” he said when asked about the traits he hires for and expects from Griffin’s staff. “People who internalize the meaning of the word *caregiver*.”

The impacts for staff members implied by their workplace’s physical environment are also part of the patient-centered approach, which considers staff engagement and patient experience to be inherently interrelated. In terms of private or semi-private spaces, many facilities are looking to provide quiet off-unit retreat areas for their staff (one facility used a rooftop as staff break area, away from the public and patients). At Pacific Hospital Women’s Health Center, HMC Architects took this need seriously, creating clear separation

⁴ Towers Watson 2007-2008 Global Workforce Study

⁵ Kelleher, Bob (2010): *Louder Than Words: Ten Practical Employee Engagement Steps that Drive Results*. BLKB Publishing: Portland, OR: p.18.

between areas even where some impacts to circulation resulted. For example, exam rooms had a patient entrance and a staff entrance, with the intent of shielding the patient from the hustle and bustle of the “back room” and allowing staff to feel more relaxed in the execution of their pre-exam duties. Similarly, while the doctors’ lounge might imply an elitist “ivory tower,” the practicalities of the medical profession (including seeking peers’ opinions and conducting intrastaff conversations that should not occur in a generally public space) argues that at least a semi-private version, for some facilities, may be in order. Lastly, the privacy choices related to the most basic of on-the-job necessities, such as changing in or out of scrubs, are too often conflated. The locker room is not, and should not serve as, a general break room, especially without alternatives for busy employees.

Providing nutritional choices for both patients and staff is another key part of the Planetree approach. Hospital employees often work odd hours and must snatch the chance to refuel on the go, and while vending machines stocked with candy and potato chips should remain part of their choice, providing fresher and more nutritious choices in those same vending machines (apples, low-sodium soup, or sandwiches on whole-grain bread) contributes to their sense of being cared for on the job, which in turn feeds the quality of their caregiving. While hospitals should not consider it an obligation to “run a restaurant,” neither should they ignore food’s complex effects as a comfort-giving and social-interaction medium. From a design and planning perspective, these choices should be supported by ones related to privacy: the decision to eat alone, with other staff, or with patients.

DESIGNING AND PLANNING FOR MULTIPLE PRIVACY LEVELS

A fundamental starting point on the journey that is patient-centered care is process analysis, which can often locate new time- and money-saving efficiencies that impact design and planning.

Examining interaction points and how care is being delivered, especially in light of electronic medical records, is one prime example; rather than constructing a new nurse station, rethinking how workflow can be done at the bedside might best benefit an organization. Careful operational analyses can lead to vastly more efficient use of space, reducing the need for renovation or expansion — and saving in the millions of dollars. A savvy facility strategic plan will consider human interaction at every major touchpoint (nurses' stations, family consultation areas, patient rooms, conference areas) and also the spectrum of privacy versus communality. The best evidence-based healthcare designs provide spaces for patients, staff, and families that range from interactive to private. Examples include:

- A lobby or cafeteria (public)
- A chapel or reference library (semi-public)
- A family lounge (semi-private)
- A patient room or consultation area (private)

To understand the need for this range of spaces, one must only take the patient-eye view. Much autonomy is stripped away in even the best caregiving environment. Control over clothing, temperature, lighting, bedding, noise, and food are dramatically impaired. Intimate bodily functions have to happen without any expectation of privacy. Moreover, much of the experience is simply boring or stress-inducing, spent waiting for the next test or procedure and its results. In such a setting, re-granting autonomy in the form of simple choices (to be with family or other

Unlike business transactions, healthcare transactions are inherently personal...



patients; to watch television or listen to a harpist or visit with a therapy pet, or to spend time in a peaceful, contemplative setting) often makes a significant difference in the overall impression of the experience. Additionally, the therapeutic effects of views to nature and the calming effects of certain artworks have been repeatedly documented, leading to that ultimate in bottom-line savings: reduced average stays per patient.

Unlike business transactions, healthcare transactions are inherently personal, and thinking about how privacy is to be respected is among the most ground-level design decisions. When this is done well, there is a distinct demarcation between the types of spaces that is palpable — even just the noise level. (Weakest spaces typically include ER triage, where the need to deliver services quickly is in direct competition with

the acquisition of critical data in a non-private setting.) From admission through checkout, a patient-centered facility must reduce or eliminate barriers between patients

and caregivers, allowing for compassion and empathy, while also providing designated private areas for conversations to educate them about their condition and their choices. Perhaps most importantly, permeability of the caregiving space for family members — historically viewed as operationally inconvenient — has been shown to empower the patient and their loved ones to provide some of the basic services that often take nursing staff away from clinical responsibilities. It is simple for all concerned, for example, to spend five minutes showing a family member where spare bedding or ice is kept, thence preventing demands on trained staff's time for requests that are likely more rewarding for a family member to fulfill.

Permeability of even the most traditionally sacrosanct spaces may also affect the bottom line. Inviting a family member into the room where their loved one's heart has stopped, with an appropriate advocate on hand to talk the family member through the process, has been shown to reduce anxiety and improve impressions of the process. In one study, four types of communication problems were compellingly linked to the likelihood of a lawsuit when the patient outcome was unfavorable:

- Deserting the patient
- Devaluing patient views
- Delivering information poorly
- Failing to understand the patient's perspective.⁶

It is not hard to discern how a view of the professionals hard at work to save the patient's life gives a better understanding of the clinical process and eases the feelings of isolation and helplessness that arise when one is stranded in the general waiting area, even if the patient cannot be revived.

⁶ Kavalier, F. and Speigel, A. *Risk Management in Health Care Institutions: A Strategic Approach*. New York: Jones and Bartlett, 2003.

NEW INCENTIVES FOR PATIENT-CENTERED DESIGN AND OPERATIONS

With the passage of the 2010 federal healthcare reform package and growing consumer awareness about patient choice represents an operational shift for many hospitals.⁷

The Hospital Consumer Assessment of Healthcare Provider and Systems (HCAHPS) survey (and its results' availability on websites such as Hospital Compare⁸) is a valuable tool for patients looking to "shop around" for their next healthcare experience. Through Quality Check⁹, hospitals that demonstrate superior patient-centered quality, safety, and reporting metrics gain credence with The Joint Commission (TJC), accreditation which is viewed as a condition for Medicaid reimbursement in many states.

As Charmel and Frampton point out in a 2008 article in *Healthcare Financial Management*, since July 2007 hospitals have been required to report

HCAHPS data to the Centers for Medicare and Medicaid (CMS) to avoid a two percent reduction in annual payments for inpatient services. In late 2008, with the loss of the value-based purchasing (VBP) program, hospitals began to become eligible to benefit from high HCAHPS scores when correlated with other efficiency indicators. One hospital, a Planetree facility, received an incentive payout of \$744,000.00.¹⁰

At many hospitals, on-demand access to electronic medical records is daunting to some physicians or administrators. However, it is a patient right; its contents are not the property of the hospital or the insurance company. A common misrepresentation

⁷ Planetree affiliation requires transparency with regards to both medical records and patient satisfaction scores.

⁸ Available <http://www.hospitalcompare.hhs.gov>. Accessed November 2, 2010.

⁹ Available <http://www.qualitycheck.org>. Accessed November 5, 2010.

¹⁰ Available <http://www.qualitycheck.org>. Accessed November 5, 2010.

is that shared medical records violate HIPAA, but while certain procedures (such as the way release is signed) do need to be carefully enacted, the exchange of medical information between the patient and care providers is valuable — after all, people have subjective insight into their bodies that even the most qualified health professional can only approximate. In any case, with the exponential

growth of information available via the internet (including longstanding access to personal financial records and transactions), it is nearly unthinkable that medical records will not be online within the next 25 years. Those hospitals that establish a culture of transparency now will be ahead of the curve — and poised to benefit from improved HCAHPS scores.

THE VA EXAMPLE

In recent years, the Department of Veterans Affairs (VA) the largest healthcare system in the United States, has begun a top-down implementation of patient-centered care to better serve veterans and their families,



which will likely eventually impact many of the 153 VA hospitals, 773 outpatient centers, and 260 Vet Centers currently in operation across the country. VA patients now span several generations and both genders. Many are elderly or have mobility issues. As a subset of all patients, veterans represent a unique case study in means to accommodate not just the physical, cultural, and social needs of the patient him- or herself, but also those family member/members who may be escorts to the facility and/or accompany the patient through needed medical tests and procedures.

In addition to the more general design principles of color, non-“institutional” lighting, and privacy-conducive acoustics that generally apply to patient-centered care, VA facilities share the need

for an expression of culture and place that will resonate with patients’ experience as veterans. This consideration should be integrated into the design standards, and reflected throughout the facility. Waiting, consultation, and exam rooms must plan for a family complement, with the former consisting of groupings of furniture conducive to conversation (rather than rows of seats) and the latter appropriately sized. Family-oriented, single-occupancy rooms and family restrooms are often a requisite. In certain areas, such as those specializing in PTSD, special emphasis may be placed on noise reduction.

As with the other project examples discussed herein, VA facilities are most frequently taking an incremental approach to achieving patient-centered design and planning. VA San Diego,

for example, decided to tackle an upgrade to its corridors and lobbies as one of its first priorities. Cluttered and confusing signage and indistinguishable hallways were replaced by clear graphics and color schemes to identify quadrants of the buildings, and nodal areas (such as sub-waiting rooms) benefited from floor patterns, sound, and light differences to assist wayfinding. In the lobby, materials reflective of the native landscape were employed, and a wavy glass water feature further references the outdoors. Both the corridors and the lobby renewal were accomplished without making significant structural changes, although some ceiling heights were altered. VA San Diego will next undertake a somewhat more ambitious project: the addition of a new psychiatric ward (currently in schematic design) that will be built up from the first floor roof deck and attached to the second floor. This new ward will also draw on patient-centered design.

A similar schematic design process is currently underway for the VA Specialty Clinic in Reno, where a Planetree representative is on staff. HMC Architects' designers met with hospital decision-makers to review the program and determined that one primary objective in siting the building

was its orientation toward the sun, which would enable natural light to penetrate it. Interior touches will include views to the outside at the end of halls wherever possible, orienting users toward the outdoors, giving a sense of the time of day, and alleviating the impression of the hospital as a closed, claustrophobic space. Check-in areas are being designed to accommodate privacy from both a standing and wheelchair position. Perhaps most significantly, the oncology department will include outdoor therapeutic gardens where patients can walk or sit and enjoy the sunshine while lengthy infusions (sometimes up to eight hours at a session) take place.

Jerry Eich, HMC's Practice Leader for Healthcare and the principal planner for the Reno VA Specialty Clinic, encourages healthcare leadership to view the VA endeavors and other patient-centered hospitals as inspirational examples, rather than templates, and not to be daunted by case studies that reflect many years of incremental change. "Patient-centered design doesn't have to entail a big reconfiguration," he says. "It is more about considering the things you are already doing or need to do within a slightly different context."

VA San Diego Medical Center //



CATCHING THE WAVE: PATIENT-CENTERED DESIGN AS THE FUTURE OF HEALTHCARE

Like many aspects of patient-centered care, design of the physical and built environment play an integral role in achieving financial and marketing advantages for a hospital.

While thorough review of new technologies, medications, and procedures is indispensable to determining how and when they should be implemented, evidence-based design aspects are often given short shrift. In large part, this is due to apprehension about cost. However, the myth that large capital expenditures on a new ward or a new building are necessary in order to realize some of the benefits of patient-centered design and planning once healthcare leadership understand one of Planetree's most elemental virtues: it is a gradual, if pervasive process that considers the hospital's overall priorities and evolution. Most facilities simply do not have the wherewithal to build new rather than to repurpose, but this does not mean that they cannot make appropriate strategic-plan budget allocations that will enable important incremental changes.

At its most basic, a design approach that facilitates patient-centered care is about instituting physical surroundings that enable a culture of

kindness, empathy, and human interaction. However, there is no "one-size-fits-all." Every hospital must determine what they are trying to accomplish, and then assess how those goals can be optimally realized within the realities of their budget and their existing facilities. Many low- or no-cost opportunities exist in artwork, improved views to the outdoors, soothing colors, plants, rearrangement of furnishings, music, staff training, and improved access to and for family members. In determining priorities, administrators should consider the healing environment for patients and the working environment for staff.

When a hospital is considering implementing a patient-centered approach, obtaining feedback from patients, families, staff, and the wider community are all essential. Surveys (often best conducted by a qualified outside agency) can provide a valuable foundation for any and all changes that are to be considered by the hospital over time. For example, patient satisfaction

Renown Regional Medical Center // Postpartum Wing



surveys overwhelmingly report three points when asked about what could improve their experience of a facility:

- access to family and friends;
- access to information; and
- personalized care.

Proper design, even if it is incremental, can facilitate all three, although operational changes contribute at least equally.

While “medical tourism” — going outside the U.S. for elective surgeries — has subsided as a threat to hospitals’ way of doing business, administrators would do well to examine the rise and success of medical spas. With prevalent consumer impressions of hospitals as difficult to navigate, uncomfortable, and unpleasant, the more inviting option right down the street begins to look more attractive for a knee or hip replacement. The physical environment plays an important role in Category 2 (attracting users) and Category 4 (repeat business) impacts to the bottom line.

Effective design will likewise consider the role of the hospital in the community it serves, and inquire about what is working or what people would like to see change. In the larger context, the design of a hospital communicates its interpretation of its role in the community. An imposing façade and labyrinthine infrastructure may imply that the patient will be supplicant to the superior research and technologies within, while open doors, natural light, and clear wayfinding welcome patients and family members and encourage the notion that healing is a collaborative process. Communicating that patients and their families should not be afraid, that the hospital and its staff exist to care for them, is among the foremost responsibilities of designers focused on patient-centered care.

The responsibility for hospital decision-makers is to assess the value of patient-centered design

in light of the fact that upgrades, expansions, renovations, and new construction are all necessary components of “staying open.” If a new technology or methodology necessitates any of the above, why not do it in a patient-centered way? Small steps toward the larger desired effect can go a long way on their own. Planetree affiliates’ success, often in the face of challenging fiscal circumstances, are telling when viewed alongside the trends of healthcare reform and growing involvement of patients in their own care. Costs associated with changes to processes and to the physical environment are balanced by improved HCAHPS scores, decreased malpractice costs and HIPAA fines, increased retention of the most valuable staff, and increased staff discretionary effort. Moreover, once the commitment is made, change can be as sweeping or as incremental as makes sense. Some hospitals tackle the transformation in a concentrated way; some do it over years to defray costs. Some communicate

their accomplishment loudly and repeatedly; some prefer more modest communications (especially if — as with the VA — there is concern over the perception of how taxpayer money is being used). However, there can be a plan for every budget that will empower patients and family members as part of the healing process, enrich the surrounding community, and save money in the long term.

Perhaps at some point in the future, Angela Thierot’s vision of healthcare will simply be “the way things are done. In the meantime, administrators unconvinced that the “right thing to do” happens to make excellent business sense might benefit from a visit to a Planetree hospital— even if it is a competitor. They will likely not see brand new facilities or smell cookies baking, but they will sense a subtle difference: the continuum of patient-centered care factors, including effective design and planning, have made things better for patients, family, and staff.

About HMC Architects (hmcarchitects.com)

Since 1940, HMC Architects’ timeless and functional designs have impacted communities across the Western United States. HMC is a founding Certified Member of the Planetree Visionary Design Network, reflecting its understanding of the effect design has on the healing process and on the necessity of incorporating relevant research to achieve positive patient outcomes. It is one of only five firms in the world to be inducted as founding members into this network, and the only firm in the western region of the U.S.

About Planetree (planetree.org)

For more than 30 years, Planetree has provided consultation for practical improvements to healthcare operations, physical attributes, and business philosophy that demonstrate the synergies between exceptional patient outcomes, perception in the marketplace, and long-term economic health. Named after the “plane tree,” or sycamore, from under which Hippocrates taught his ancient Greek pupils, Planetree’s ongoing work, in partnership with its clients and with architectural and interior design consultancies, continues to prove that providing patient-centered care is more than a moral imperative, but a financial imperative in the new healthcare landscape.