



Integrative Hospital Design

Remarkable Healthcare Facilities,
from Concept to Reality

BY **CAROLE J. HYDER, MA**

www.carolehyder.com



Introduction

What can an Integrative Space™ do for a hospital?

Healthcare centers today face increased competition in terms of costs, quality, efficiency, and innovation. Patient satisfaction and employee retention are crucial factors in creating and maintaining a successful healthcare facility.

For these reasons, it's more important than ever to distinguish your organization as a leading-edge healthcare provider. One way to do this is through the incorporation of Integrative Spaces, a process which can facilitate healing and create total patient satisfaction.



“Improve the efficiency, effectiveness and atmosphere of your healthcare facility using the Integrative Spaces Strategy™

The incorporation of an Integrative Space™ strategy provides a unique and exceptional outcome, assuring that your healthcare facility is one-of-a-kind. This approach is perfect for your facility if you want to:

- Be the place where more and more people will gravitate who are looking for alternative ways to heal
- Be on target as the demand for more integrative healing becomes a regular request
- Be a leader in integrative health and healing
- Be part of a forward-thinking initiative that assures healing
- Have the satisfaction that all levels of healing have been addressed
- Take a proactive stand about addressing all needs of patients before they ask
- Provide a place for people who can sense the difference between a healthcare facility that incorporates Integrative Spaces and one that doesn't
- Be known for independent thinking
- Provide a remarkable space for healing

What is Integrative Space™?

An Integrative Space provides cues which can lead to positive experiences, feelings and thoughts—healing included.

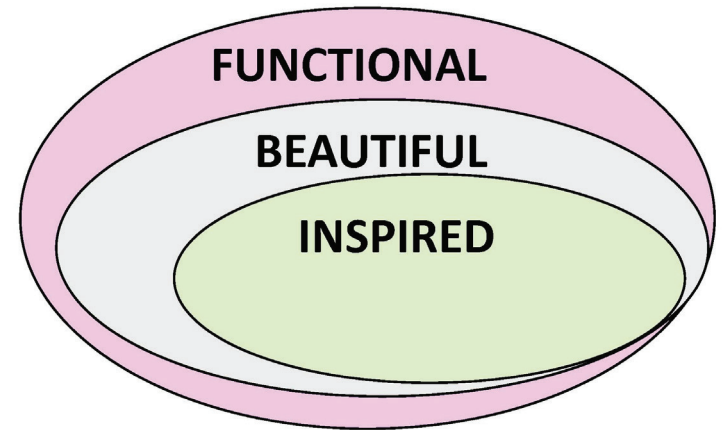
“An Integrative Space™ builds on and surpasses functionality to create a space that addresses a deeper language.

The best way to achieve this optimal environment is through the intersection between the ancient principles of Feng Shui and the modern research behind neuroscience—one speaking to the physical aspects of an environment and the other to the energetics of a space, both approaches merging to create a whole greater than the sum of the two.

All healthcare facilities must be functional and meet stringent code requirements. It is also important that, in doing this, the space maintain useful design principles. But all that still does not create a space that *inspires* those who are in the facility—patients, staff or visitors. Functionality and beauty are both enhanced by overlaying the powerful aspect of inspiration, taking an ordinary space and making it extraordinary.

How can a hospital apply Integrative Space™ principles?

In this e-book *Integrative Hospital Design*, you will read how to create your own facility with these principles in mind. Case studies and practical applications will enable you to embrace and incorporate various aspects of this approach, supporting you as you create a healthcare facility in which patient, staff or visitor will feel less stress and more inspiration toward leading a whole and healthy life.



The Components of an Integrative Space
Functionality and beauty are enhanced by the power of inspiration.



Table of Contents

INTRODUCTION // i

Chapter 1: LAY THE FOUNDATION FOR AN INTEGRATIVE SPACE // 1

Chapter 2: ENHANCE THE INITIAL EXPERIENCE // 3

Chapter 3: DESIGN EMERGENCY ROOMS FOR OPTIMAL HEALING // 7

Chapter 4: MAKE HOSPITAL ROOMS WORK FOR PATIENTS // 9

Chapter 5: PAY ATTENTION TO SOUND // 13

Chapter 6: Case Study: What One Hospital Did to Help Patients Heal Faster // 16

CONCLUSION // 20

ABOUT THE AUTHOR // 24

CHAPTER 1

Lay the Foundation for an Integrative Space

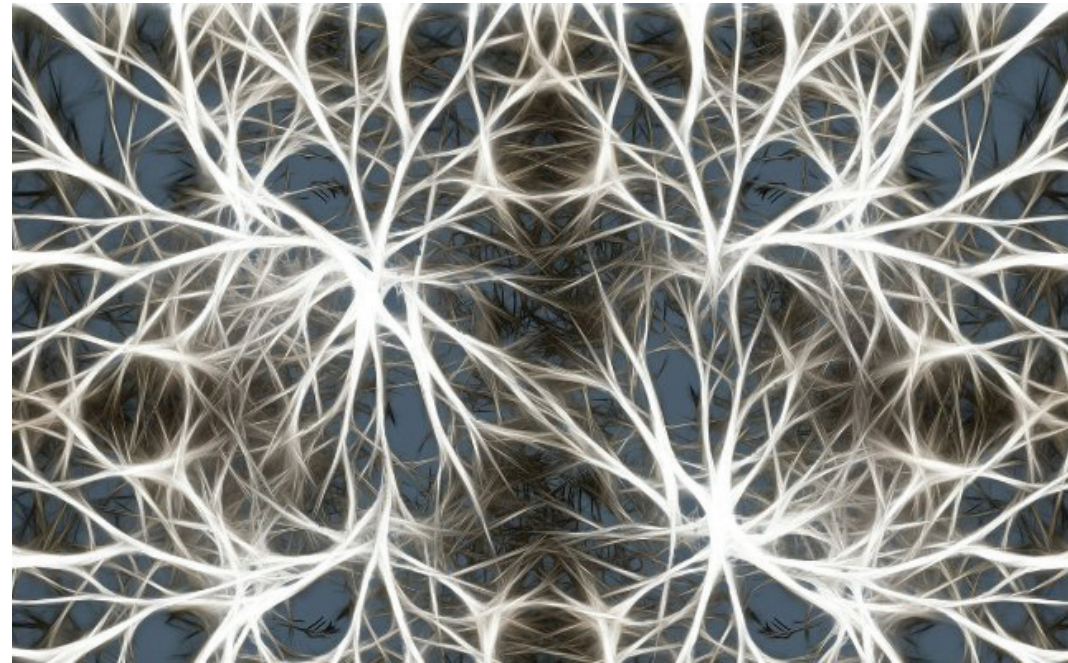
Scientific Research That's Been Missing in Healthcare—Until Now

There's no question that healthcare is dependent on the latest scientific advancements. Lab experiments and recent discoveries are constantly initiating innovative ways to help people feel better and get better. It goes without saying that tremendous financial resources are committed to this path.

However, lately there's a new science collaboration on the block which is offering different solutions for the patient experience: neuroscience and architecture.

Medicalnewstoday.com describes neuroscience as “*the study of how the nervous system develops, its structure, and what it does. Neuroscientists focus on the brain and its impact on behavior and cognitive functions.*” They have also found that certain activities occur in the brain (consciously or unconsciously) as the result of the outside environment.

Certainly, in my work creating integrative space, I am cognizant of a client's reaction to a space from the minute they



“ Neuroscience + Architecture

walk in. “Gosh, I love this place!” or “Yikes, this is horrible!” Clearly some brain activity is at work here in both cases.

At [a conference held in 2014](#) by the Academy of Neuroscience for Architecture in La Jolla, CA, neuroscientists, architects, psychologists and other academics gathered to explore this space-mind concept.

It was agreed that all senses are influenced by the physical qualities of a space, yet the most important is vision, which provides over 80% of the information we need to understand the space around us. Hence, initial reactions walking into a hospital or patient room provide enough data that someone can draw an immediate conclusion: “I feel good in here.” Or not.

The goal of an Integrative Space™ is to project a message of healing and safety, wholeness and confidence. Migette Kaup, an environmental psychologist and interior designer explains:

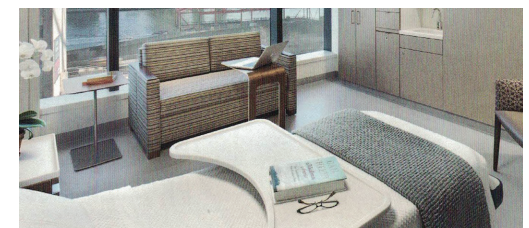
“Architectural cues can provide reinforcement to the desired behaviors that we would like to see enacted in specific place types.”

The take-away from the Academy of Neuroscience for Architecture conference is that there are still a lot of unknowns between architecture and how people’s brains respond. What we do know is how someone reacts within a space and, if a patient reacts positively, they have moved the body into a state of equilibrium where healing can take place.

LEARN MORE

Read further research done on the importance of “placemaking” in the hospital: [Thoughtful Healthcare Design](#).

Find out what Winston Churchill had to say about the power of space: [Integrative Space: Designed for What’s Intended](#).



CHAPTER 2

Enhance the Initial Experience

Create a Positive First-Impression in a Hospital through Clear, Obvious Way-Showing

One of the goals of an Integrative Space™ is to assure that anyone who enters a space—whether home, office, clinic or hospital—knows what to do and where to go. Enabling someone to feel in control of the environment, particularly an environment that is already unfamiliar to them, provides the visitor with a sense of accomplishment and capability, rather than feeling lost and confused.

This is even more important in a hospital setting when a visitor or potential patient is already likely to carry stress or concern which can impair any subtle cues or intuitive expectations as to where they should head. Being sure that a person navigating through a medical building knows exactly where they need to go contributes enormously to their confidence in the staff as well as their own self-confidence.



“ Make it easy for patients and visitors to find their way

Here are some ways to make this way-showing obvious, easy and friendly:

1. Position check-in desk close to the main entrance so that anyone who enters doesn't have to wander around looking for assistance.
2. If an information desk is the initial go-to place for assistance, assure that the personnel anticipate the needs of those coming through the door—rather than making them feel like they may be interrupting a private conversation.
3. When there are specific check-in areas (procedural, surgery, x-ray, etc.), use color as the differentiator to set the various areas apart: signs, carpet in-lays, wall color, etc.
4. Interim signage will keep the way-finder assured of their upcoming destination.
5. Positioning a pleasant person or concierge (who could even be a volunteer) by the main entrance to not only welcome those coming in but to also point them in the right direction if needed underscores the medical facility's commitment to helping anyone who comes through the door.

When someone must circle back, re-trace their steps or in desperation finally ask for help, their frustration will color the rest of their time there. However, making it easy to self-navigate guarantees them a more positive experience, and therefore more positive associations with the hospital they've just visited.



Create Waiting Rooms Where Healing Can Begin: Ease the Discomfort of Waiting

Waiting is an uncomfortable task—whether waiting for time to pass, waiting for a special event, waiting for water to boil. It's even more difficult when waiting to see a medical professional.

If you're waiting for a treatment at the hospital, that may be unpleasant. And it goes without saying, if you're waiting for test results, that situation could involve tension.

As it turns out, the place where everyone checks in and passes time until their name is called can be a big contributor to jittery nerves—or it can provide a pleasant distraction depending on how it's set up.

Most waiting rooms in hospitals are arranged for efficiency, trying to get as many chairs lined up as possible to accommodate the patient, their friends and/or family. This stiff professional air may speak to efficiency and competence, but there's very little that conveys comfort and reassurance. The only positive distraction might be a stack of magazines (many outdated), that may also speak to a lack of care.

Here are a few Integrative Space™ tips to make the waiting room worth waiting for:

- Keep the chairs from lining up against the wall around the perimeter of the room. There is a stiffness in this arrangement of seating possibilities. Instead try to create smaller “pods” or circles to mirror a more natural look.
- Do not place chairs so people have their back to windows or glass walls. Being up against transparent walls does not provide those who sit there with any sense of protection or privacy. They are already vulnerable; assure that the patients are shielded from outsiders being able to see them.
- Provide a pleasant distraction (not just television or magazines). This could be a piece of artwork, a fountain, a large mural on the wall, or a fireplace. It gives the patient a chance to get outside of themselves for a moment and thereby alleviate some anxiety they may have.
- Include plants or flowers in the waiting room. They represent vitality and growth so they give a message of hope. Silk renditions or even photographs of nature can assist in healing if upkeep is a concern.

The goal is to create a space where healing can begin even before a patient sees a medical professional. Using the principles, the waiting room can be a comfort for a patient. If they immerse themselves in a healing ambiance, it will assure that their ultimate healing can more easily take place.

A Follow Up Message on the Future of Waiting Rooms – [Click Here to Listen](#)

CHAPTER 3

Design Emergency Rooms for Optimal Healing

Take the Panic Out of Emergency Rooms

When a patient arrives at an emergency room, it goes without saying that there's stress and anxiety, even panic, surrounding their arrival—often overlaid by pain.

Waiting in an emergency room can be an excruciating experience. However, by designing this space with Integrative Space™ principles, it can provide comfort and support and the reassurance that an emergency patient wants.

Here are 5 ways to make the emergency room alleviate anxiety:

1. **Use darker colors in the design:** navy blue, black, and dark gray are the best choices. This is not the room in which red or orange should be the predominant color choice because these are active colors and can become agitating in certain circumstances.



“ Help alleviate emergency anxiety for staff, patients and their companions

2. **Place the chairs in smaller groupings.** Someone with a broken arm has enough to think about without having to sit next to someone else who has the flu. Small round “pods” are the best if space allows in the emergency waiting room.
3. **Get people’s minds off their problem, even if just for a moment.** This distraction can start their healing. When they close their eyes because there’s nothing to look at, they take their pain inside, increasing its intensity. If they have something to focus on, they relieve themselves of their own issue even if for just a few minutes. This focus needs to have a formidable statement: a large aquarium, a fountain with a strong presence, a fireplace that engages their focus, to name a few.
4. **Provide messages of vitality and wholeness.** The best way to infuse an injured or ill patient with this message is by connecting them to nature. Landscapes or seascapes, forest scenes or actual trees can provide this subliminal connection.
5. **Surround a patient with music or sounds of nature.** Doing so can be a pleasant distraction while they’re waiting and could calm their breathing.

Sometimes it isn’t the patient who is quick to express their concern and impatience but the people who brought them in. Either way, setting up the emergency room with the intention of instilling the area with composure and assurance may provide a better experience for the patient, their companion(s) and hospital staff.

CHAPTER 4

Make Hospital Rooms Work for Patients

Can a Healthcare Facility Help Patients Find Their Happy Place?

Most of us know what it takes for us to find our proverbial “happy place.” It might be an actual place or a memory somewhere in our mind—either way we feel better when we find ourselves there.

If truth be known, our stress levels probably drop just thinking about going to this special spot, along with blood pressure readings. What increases is our sense of peace, safety and—well, happiness. A happy place is where we want to be because we just feel better, whether it’s an actual occurrence or an imaginary one.

Esther Sternberg, M.D., Director of the University of Arizona Institute on Place and Well-Being, explores the question of whether a place can make you happy and well in her [TedX talk](#) from 2013. She argues that currently the stress patients are already experiencing—before they arrive at a hospital—most likely gets amplified once they’re there. Obviously, this is the opposite of what should be happening, since stress impedes healing.



“A peaceful place for patients’ optimal healing

Integrative Space™, however, takes into consideration body, mind, and spirit. An integrative hospital would assure that the patient would be healed on all these levels. This, of course, necessitates addressing the factors that cause stress: too much noise, bright lighting, lack of privacy, industrial colors, no windows, just to name a few. Each one of these issues can have a negative impact on a hospital space.

In an article published by Healthcare Design Magazine entitled [Five Need-to-Know Trends Shaping Healthcare Design](#), the first three trends address the happy place issue: residential warmth, personalized patient rooms, and perfect proportions (addressing the issue of expanding the room to accommodate larger groups of family members). It seems patients want a positive experience just as much as they want good health care. (The last two of the five trends were infection control and bariatric care.)

Along those lines, in 2015 seminar in Finland entitled [Architecture and Empathy](#) which resulted in a paper of the same name, Juhani Pallasmaa, Finnish architect and former professor of architecture and Dean at the Helsinki University of Technology, put forth this succinct statement:

“... science has established that environments change our brains, and those changes in turn alter our behavior.”

If the environment provides a positive experience, the brain will align or entrain with that observation and respond to the situation in a positive way. If the environment is uncomfortable, the brain will align with that observation.

Dr. Sternberg proposes that what's good for patients is also good for staff—and that adds up to being good for the bottom line. In her TedX talk, she quotes a study by the Center for Health Design in San Francisco which determined that the extra \$12 million that it would take for a hospital to retrofit into a more patient-centered facility could be re-couped in the first year.

Sounds to me like finding our happy place can be the healthcare of the future.

Is a Hospital Room with a View Enough of a Connection to Nature?

The evidence-based studies of environmental psychologist Roger Ulrich beginning in the 1980's have proven that having a window with a pleasant view in a hospital room makes a positive difference in a patient's outcome. When provided this connection to nature, the patient needs less medications, recovers faster, has less pain and gets discharged quicker. Ulrich's studies determined that nature influenced the healing process.

Similarly, in Christopher Day's book "Places of the Soul," he concurs that nature plays an important part in someone's healing, but defines nature as a place that feeds the spirit; it's not just a room with a view. He emphasizes the importance of incorporating nature and nurturance into the built environment, particularly hospitals, clinics, or medical facilities.

In Day's words, it's one thing to cure someone—it's another to heal them. One is a physical process, the other is a spiritual one. A truly Integrative Space™ addresses both the physical and the non-physical aspects of an environment.

Stephen Kellert, author of "Building for Life," likewise underscores the importance of creating a habitat for people that satisfies the need for beneficial contact with nature. Kellert is part of the movement that supports Biophilic Design which specifically focuses on incorporating the spirit of nature into an environment—its rhythm, poetics, texture and balance.



The Biophilic approach asserts that a patient is not touched just by decoration or aesthetics, design perfection or efficiency, but by having a sense of comfort.

To integrate this Biophilic perspective, a medical facility could include:

1. Home-made quilts on each bed;
2. Hand-crafted mugs for the patient;
3. Tactile artwork that can be touched;
4. Home-made pillows for the family area.

In one Integrative Spaces™ project for a hospital that I have been involved in, hand-made bird feeders made by a local elementary school were installed outside the first-floor windows so each patient had a front-row view witnessing nature at work.

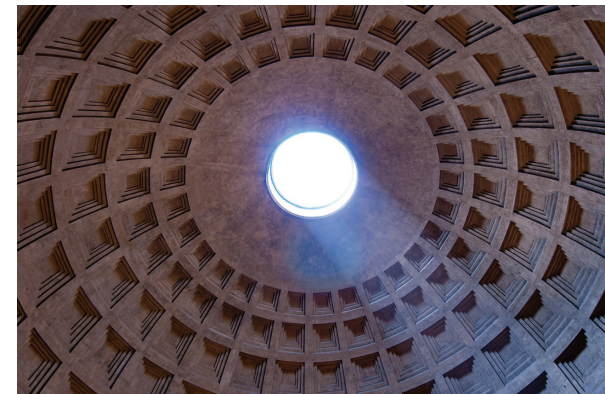
Creating an environment that speaks to the soul of the patient enables them to heal from within, not just physically.

LEARN MORE

Read about how [Plants Can Help Patients Heal](#).

Listen to the Recording: [The Issue of Having a Television in a Patient Room](#).

Listen to the Recording: Hear Carole's personal story about [The Importance of Light in Patient Rooms](#).



CHAPTER 5

Pay Attention to Sound

Hospitals Can Help People Heal Faster by Simply Being Quiet

Creating an Integrative Space™ includes all aspects of the surroundings, not just the physical ones. Besides color, furniture placement, door position, there is another factor that takes up no space but can make or break a patient's experience—sound.

Environmental psychologist Roger Ulrich became known for his [seminal work in 1984](#) on the connection between the hospital room and the rate of healing of a patient. Besides his experiments on the positive impact of nature on a person's rate of healing, he and health psychologist Craig Zimring presented [their findings](#) determining that one of the biggest stressors in a hospital environment was noise.

[Esther Sternberg, M.D.](#), in her book *Healing Spaces: The Science of Place and Well-Being* states that hospital noise generally exceeds the recommended level of 35 decibels, which is comparable to a quiet office. Typically, it falls into the range of 45 – 68 decibels, ranging from what a normal room conversation would measure to listening to loud music through headphones.



“ Less environmental noise facilitates quiet recuperation

Dr. Sternberg cites a study done in 2005 at St. Mary's Hospital (Mayo Clinic, Rochester, MN) in which nurses placed hidden noise gauges in the Surgical Thoracic Intermediate-Care Unit. The sound level was particularly high when there was a shift change in staff and when heavy equipment was being moved. At times the decibels reached 98 decibels—comparable to the sound of a motorcycle.

Everyone is affected by loud noises, but particularly those who are healing from surgery or illness. Heart rate, blood pressure, temperature and other measures of stress all escalate when impacted by external sounds. Not to mention, noise interferes with sleep—falling asleep, staying asleep and quality of sleep. And there's no question that sleep is a necessary component for healing.

The conjecture that Dr. Sternberg puts forth about why hospitals are so noisy is that historically hospitals were not places where people went to heal but were places where people went to die. Healing was not part of any expectations.

Also, patients often died from infections while being in the hospital. So, in an effort to make the environment more sterile, surfaces were covered with materials that were easily cleaned and would not spread germs. But as the surfaces became more germ-free and pristine, they also became more reflective of noise, bouncing sound-waves throughout the halls and in patient rooms.

Now, times are different. Most people survive their hospital stay and, in fact, go there to get better.

Here are some options that could be considered to make hospitals quieter:

- Absorbent ceiling tiles both in the patient room and in the hallways
- Fabrics that absorb sound, such as quilts and blankets that are typically hand-made used on a reclining chair or for visitor seating

- Flooring that is sound resistant yet easy to clean
- Single-bed patient rooms
- White noise which can distract the ear from whatever is going on around them; this may involve a music station accessed through the television
- Music therapy would not only distract from outside noise but could also provide a direct experience of sound vibration to uplift and sooth the patient



The question of hospital noise is not an easy issue to address. Despite measures to assure that the patient's environment is one of healing, a raucous visit from friends or relatives can upset all measures that have been taken. Plus, in the normal course of a day staff need to talk to one another and emergencies happen requiring that equipment be hauled down a hallway in a moment's notice.

There will always be exceptions. However, creating a healing, Integrative Space™ to assure quiet recuperation should always be the goal.



LEARN MORE

Listen to the Recording: [How to Create Quiet Areas in a Hospital.](#)

Read about how music has the power to heal—mentally, emotionally and physically. [Let Harmonics Help the Healing Process.](#)

EXPERIENCE IT

Carole Hyder's CD "[The Bridge Home](#)," created in collaboration with Grammy-winning musician and producer Jeff Bova, is composed specifically for the healing process, and currently used in hospitals, senior apartments, nurseries, and waiting rooms. [Listen to a sample track.](#)



CHAPTER 6

What One Hospital Did to Help Patients Heal Faster

CASE STUDY

In 2003 I was hired as a Integrative Space™/Feng Shui consultant to assist in the building of a hospital in Hudson, Wisconsin. My position on the design team enabled me to offer ideas for color, furniture placement, office arrangements, an overall entry experience, optimal garden settings—and for creating healing rooms in the in-patient wing.

Feng Shui is the art and science of arranging physical space so that it supports the intentions of those who work or live—or heal—within the walls of that environment.

It relies on a systematic assessment of: how a person is positioned in a room, how the building relates to topographical considerations, what events may have occurred in the space before the current individuals, what may have occurred on the land before construction, the shape of the building or room, when the building was built, to name a few.



“A peaceful place for patients’ optimal healing

The other consideration is how the space *feels*. Allowing for individual preferences, the consensus should be that a space or a room feels comfortable, safe, pleasant—and, in the case of a hospital room, healing.

Artwork

One of the discussions I had with the design team was about the artwork that they were considering hanging in each of the rooms. From an Integrative Space™ perspective, healing art should depict nature and it should show or imply a horizon line—both aspects bring someone back to balance which can increase their healing process.

The curator on staff (yes, the hospital had a curator for just this kind of discussion) decided to come up with an “art cart.” A cart full of various nature paintings would be shown to a patient as part of their admissions process. They could choose the one they preferred which would then be hung in their room. This gave them the chance to look upon something that they liked, creating positive feelings which would enable their healing to occur more easily and quickly.

Headboard

In an effort to support people as they healed, we discussed how a headboard could be included behind each patient bed. Because of the instruments, the lights, and all other required medical appliances, an actual headboard was not possible. Each room in Hudson Hospital has a painted headboard—providing the *feeling* of one without disturbing hospital protocol.



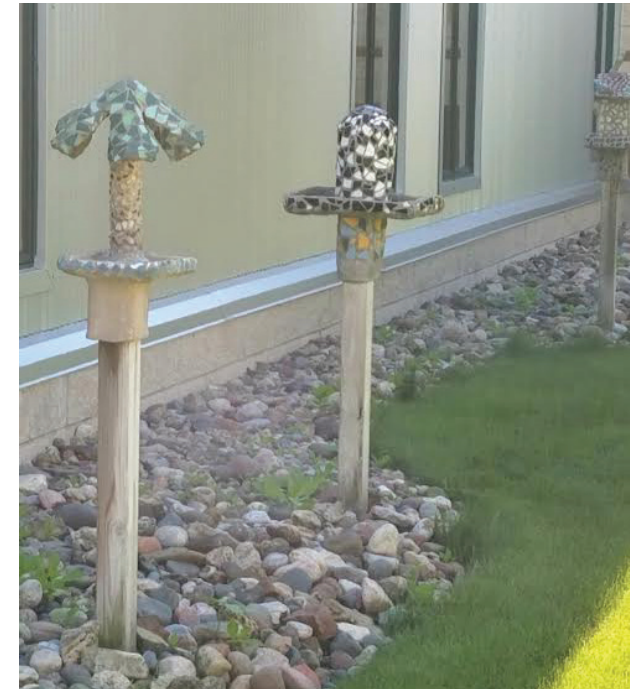
Windows

Because this hospital is one-story, each room had the opportunity to provide another connection to nature besides the painting—an actual look at something from nature. An Integrative Space™ system is reliant on and follows the flow of nature. The problem is that often hospital room windows are positioned too high for someone in bed to see anything other than the tops of trees and some sky. To address this problem, each window was enlarged vertically so the patient can easily see the gardens, statues, flowers and birdfeeders right outside the window.

At-Home Feeling

The hospital also re-created a bedroom feel in each room (every room is private) with wood floors, living room furniture (recliners, sofas) and home-made quilts. Making sure the rooms look welcoming and comfortable, they did not lose the assurance that this was also a professional and top-notch organization. An Integrative Space is, above all, about the *feeling* of a space.

Creating a hospital room that provides a calm and safe place will not only support the patient but the staff and visitors as well. At Hudson Hospital, Integrative Space/Feng Shui principles were applied to help create a feeling of health and healing, harmony and hope—and people were going home a lot quicker.



LEARN MORE

Read about the [Importance of Artwork](#) in Hudson Hospital.

Listen to the Recording: After the initial build or remodel, [Maintaining the Spirit of Integrative Space](#).



CONCLUSION

Hospitals of the Future

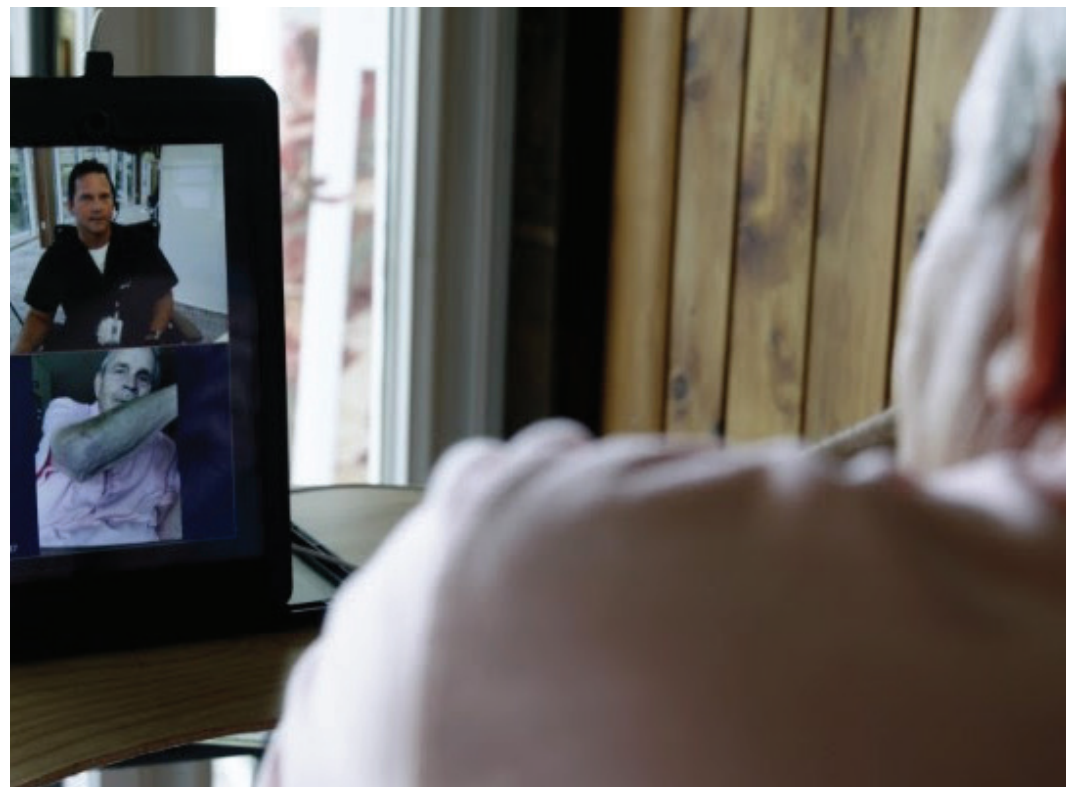
Taking Integrative Space to a Virtual Level

My experience in creating Integrative Space™ goes back to 1992. It goes without saying I have seen enormous changes in this field in terms of acceptance and in terms of a regard for the effectiveness of an alternative energetic/Feng Shui approach.

Recently what else has changed is how people are using space. When cubicles used to be the bane of someone practicing Feng Shui, now we're lucky if someone even HAS a cubicle. The new concept of "hot-desking" or having a "drop-down desk" is part of an organization's attempt to maximize space. Private offices are being replaced with an open space option.

And now healthcare is looking to change *their* spatial usage as well. Minute clinics are already taking the load off hospitals and clinics by enabling people to walk into a drug store, purchase hair color, lipstick, stock up on tissues and have someone look at their rash.

But even that option is becoming a thing of the past.



“Changing with the times
as healthcare evolves.”

Technology is now enabling people to get health advice and guidance via several virtual options—phone, computer, video conferencing. Charles O’Leary of Metropolis magazine refers to it as “telemedicine” in his blog post entitled [Designing a Physical Healthcare Facility for Virtual Care](#).

Further information about this latest move in healthcare: [How to Provide Virtual Care So Patients Can Heal at Home](#).



In Conclusion

Integrative Space for Hospitals has provided many ideas about how to proceed in creating a space that leads to positive experiences, feelings and thoughts. From way-finding to noise issues, from patient rooms to emergency rooms, many times simple changes can be made to create an unforgettable facility.

These intentions can be incorporated in various ways as exemplified by the case study of a hospital who truly understood the importance of creating a space where people feel safe and can heal.

That's innovative healthcare.



“Improve the Efficiency, Effectiveness and Atmosphere of your Healthcare Facility

Get the Help You Need to Make Your Hospital an Integrative One

It will be important to put an expert on your team to assure that the approach to an Integrative Space™ will be optimal. Carole Hyder's experience in overlaying the ancient principles of Feng Shui and modern research in a variety of healthcare environments enables her to provide clear and workable solutions to almost any issue.

Your healthcare facility can express a unique and outstanding experience for patients, staff, and visitors.

Contact Carole for a Free Consultation

carole@carolehyder.com

612-823-5093





About the Author

Carole J. Hyder is an internationally recognized consultant, speaker, teacher, author and trainer in the field of Feng Shui. Her Integrative Spaces Strategy™ combines ancient practices with modern research to create superior environments in the healthcare industry.

Carole holds an MA in East Asian Studies, and has been a Feng Shui consultant since 1992, having studied with His Holiness Grandmaster Thomas Lin Yun, Her Holiness Crystal Chu Rinpoche, and Roger Green, all master teachers in their respective philosophies of Feng Shui.

Carole is an international speaker on various Feng Shui topics and has appeared regularly on TV programs in the Twin Cities area. Besides authoring articles in countless publications, she has written three books and produced one video/DVD on the topic of Feng Shui. In 1998, Carole founded The Wind and Water School of Feng Shui, a 7-month certification program for those interested in studying Feng Shui in greater depth.

Her Integrative Space™ work has been incorporated in hundreds of residential, commercial, and healthcare environments, most notably her long-term tenure at the Hudson Hospital in Hudson, WI.

