Abstract

New trends are shifting the focus of the U.S. healthcare delivery system away from acute, inpatient care toward outpatient care delivery as well as health promotion and wellness. Consumers are accepting greater personal responsibility for their health. However, clinical treatment still deals with a person in fragmented parts instead of the well-being as a whole. The emergence of hospital-based fitness/wellness centers dovetails with these trends and presents an alternative delivery method stressing whole health and wellness, makes ambulatory care more accessible and allows healthcare providers to provide for community needs across the continuum of care. In response, healthcare facility design has moved from a clinically-driven focus to a service-driven model placing particular emphasis on healthy living, comfort and humanizing the healthcare experience. Two examples of the design of fitness/wellness centers are discussed.

Overview

Historically, access to quality and affordable healthcare has been considered a right of every American. Today, the U.S. healthcare model is putting this philosophy to the test. Never before has so much sophisticated technology been available to diagnose and treat the full spectrum of disease and illness. At the same time, as a private system, many Americans cannot afford health insurance coverage, including a sizeable population of working adults. Ever-escalating costs have lead to a bifurcation of access; those who can afford to pay can get the best care available worldwide and those who cannot afford to pay end up neglecting their health.

As government struggles to reduce healthcare costs, some important trends are changing the shape of the U.S. healthcare delivery system.

1. Managed care systems helped institutionalize a shift in emphasis away from “sickness care” and toward health promotion and wellness. Today, insurance companies and consumers have embraced the importance of staying well and preventing illness.

2. Consumers are taking far more personal responsibility for their health and healthcare. Patients tend to be more educated about health issues, want access to more medical information and expect to be the ultimate decision makers in their own healthcare decisions. The growth of consumer advertising by pharmaceutical companies is a reflection of the increasing “consumerization” of healthcare.
3. Outpatient care services outpace traditional inpatient care delivery. Significant reductions in hospital stays have been counterbalanced by increases in outpatient diagnostic and treatment alternatives.

4. New technologies make outpatient care even more practical as procedures are less invasive and require less recovery time.

5. Health care providers are placing greater emphasis on community well-being and the continuum of care. Hospitals and other providers are evaluating the health of their communities and devising programs that target the unique needs they encounter. The rising population of adults 65 and over as the Baby Boom generation ages, is fueling this trend.

Implications for Healthcare Architecture
At first glimpse, it may not seem that most of these trends could have any significant impact on healthcare architecture. But the increase in outpatient services and the “personalization” of healthcare can be observed in facility design and architecture as well. Healthcare architecture is adapting to accommodate the new perspectives of wellness and focusing on the whole person by creating more consumer-friendly environments.

“Well-being” is being addressed in myriad dimensions, from helping to build self-esteem and reduce stress (e.g., spas, meditation) to enhancing the sense of community (e.g., support groups) and supporting family interactions. Improving individual comfort is the hallmark of this trend. Additionally, patients want to be as autonomous as possible when receiving care and want to understand what is happening around them. These trends carry over into every aspect of a facility’s design, from size and configuration to more direct light and appropriate interior colors. Easy accessibility is important as well, to ensure that every individual enters each facility with a sense of empowerment and well-being.

The Evolution of the Fitness/Wellness Movement in the U.S.
The fitness movement of the 1960s and 1970s altered attitudes about the importance of exercise and nutrition in the Western world. Three key factors contributed to the evolution of this fitness movement in the U.S.: 1) the growing reliance on processed food, 2) a shift from a manufacturing to service economy, and 3) the impact of the women’s movement in the 1970s.

Fast Food and TV Dinners
Immediately after World War II, American society began purchasing more processed foods. TV dinners came along with television. In 1955, 70 million Americans bought TV dinners; by 1960 the number had risen to 214 million. Frozen food sales exceeded the $1 billion mark for the first time. Canned, frozen and refrigerated processed foods had a longer shelf life than fresh foods. The image of a good homemaker was one who made bologna sandwiches for her kids for lunch, served meat and potatoes for dinner and made home-baked desserts with Crisco. Plus, a booming economy made it desirable for the middle class to take advantage of new trends making life quicker and easier. In the 1960s, McDonalds first appeared on the horizon, initiating a fast food craze still dominant today. With little evaluation of the nutritional merits of processed and fast food, Americans began getting fatter, a trend also continuing today.

2 Ibid. p. 7.
The Technology Revolution
By the start of the new millennium, the agrarian and industrial economies characteristic of the early 20th century had been replaced by service and technology-based economies. One of the most important outcomes of this shift was that working life became more sedentary. Less physical activity is required from most workers today. In fact, a large portion of the working world is made up of office workers who sit in front of a computer all day long. Reduced physical activity on a daily basis negatively impacted upon our society’s level of fitness. The faster pace and greater level of stress on men and women from work combined with less physical activity translated into an increase in heart disease and cardiac-related deaths.

Women and Work
Changes resulting from the women’s movement brought fitness inadequacies to full fruition. With the feminist movement, more women moved into the workforce. As a result, they had less time for housework and cooking, which led to an even greater reliance on fast and processed food. The movement also gave women a stronger voice, which eventually led to greater consumer advocacy for healthcare issues. By the 1980s, doctors struggled to adjust to vocal patients who expected to be informed about their health choices. Additionally, the women’s movement fostered a new image of women and their bodies. Clothing became more form-fitting and revealing and the image of a fit, female physique was as important as being a good mom and having a rewarding career.

Along with the women’s movement, the hippie generation’s “back-to-the-natural” attitude inspired a return to natural foods and herbal remedies. Adele Davis and Ewell Gibbons made their reputations by promoting nutritional, natural foods. Fortunately, this attitude ignited more research into nutrition and fitness. Jogging gained popularity in the 1970s as research showed that heart health was improved through this exercise. Aerobic exercise for better cardiac care became normative for the 1980s. More importantly, the number of public and private fitness facilities was significantly on the rise. By 1987, there were an estimated 17.3 million people who belonged to health clubs. In 2000, that number had grown 89% to 32.8 million. And, health club membership only reflects about 40% of all those who take part in regular physical fitness activity.

In summary, societal changes resulted in population that ate less nutritionally than in the past and were less physically active. Mortality rates for heart disease were on the rise. At the same time, the women’s movement and other social conditions created an environment that was suddenly more attentive to health, wellness and nutrition.

Emergence of Fitness/Wellness Centers
The Cooper Fitness Center of Dallas, Texas opened its doors in 1970. It was conceived by Kenneth Cooper, M.D., the physician who had coined the term “aerobic” in a publication two years earlier. Dr. Cooper advocated that aerobic exercise was an essential component of preventive healthcare. Today, this physician-sponsored treatment, fitness and research center boasts more than 3,000 members in a 41,000-square foot facility.9

The field of cardiac rehabilitation was instrumental in the continuing evolution of fitness/wellness facilities. In 1975, Holy Redeemer Hospital Health & Fitness Center in Meadowbrook, PA was the first medical fitness center developed as an outgrowth of cardiac rehab. By the early 1980s, health systems began to see the potential of fitness/wellness facilities. In 1982, the Riverside Health System of Newport News, VA purchased a large commercial facility to create the Riverside Wellness & Fitness Center. A year later, Baptist Health System of Birmingham, Alabama acquired a commercial club and launched its for-profit division, SportsFirst Inc. Today, SportsFirst owns 10 health and fitness centers throughout the state of Alabama.9
As successes took hold, a wider variety of providers started getting into the game. Duke University created the Duke Center for Living, a cardiac disease prevention program, in 1984. The Michigan Athletic Club marked the first joint venture, mixed-use facility in conjunction with St. Lawrence Hospital in Lansing. The Sports Med Center for Fitness opened in Carol Stream, IL in 1986. Developed by an orthopedic group, the facility was created as a fully integrated surgical, rehab fitness facility. By the mid-1990s, innovation and experience had broadened models for fitness/wellness facilities even further. In 1996, Akron General Health System established a new integrated ambulatory care site with the Akron General Lifestyles center as its anchor. The first joint venture by a college, healthcare system and management group occurred in 1997 in Clinton, MI. In 1998, Mercy Healthplex Fairfield/Anderson in Cincinnati, OH took the first step toward fitness/wellness facilities as a gateway to outpatient care. It invested significant capital into buildings that incorporated fitness/wellness centers with complementary medicine and diagnostic services.

Today, more than 550 medical fitness facilities are operating in the United States ranging from 200 to 8,500 members and a mere 1,000 square feet to more than 100,000 square feet in size. The Medical Fitness Association projects that by 2005, demand will rise to 13.7 million adults. Hospital-based facilities are capturing only 7% of the current demand. However, given the current rates of growth by hospital-affiliated projects, MFA forecasts that hospital-based fitness/wellness facilities may double by 2005 to 2.1 million adults. They project that by 2010, the number of facilities will quadruple from 513 in 1998 to 2,173 by 2010, increasing the market share to 31%.

The Hospital-Based Fitness/Wellness Model
The continued emergence of hospital-based fitness/wellness centers is easily explainable: there is a growing need for these types of facilities. First, they serve a proven community need for healthy and at-risk populations alike. Hospital-based fitness/wellness centers are most successful in communities with high and growing numbers of adults over age 45. Since the Baby Boom generation has reached this age, numbers of 45+ adults in most communities across the nation are increasing. Further, there is a significant need within this population for fitness/wellness support. The majority of adults over age 45 are sedentary and do not exercise on a regular basis. Good nutrition, fitness activity and preventive care can improve their health status for the remainder of their lives and over time, reduce their potential need for acute care.

Hospital-based fitness/wellness facilities offer solutions that satisfy a wide array of community needs as well supporting a continuum of care. Community health is improved by providing the facility and resources for all individuals to maintain wellness, learn healthy habits and find balance and humanized support for their whole well-being. Well-planned and managed fitness/wellness centers generate significant revenue for hospitals and serve as feeders for other types of care. Hospital-base fitness wellness centers are also championing the integration of complementary and alternative medicine with traditional, Western healthcare by offering a wide variety of modalities. Fitness/wellness facilities provide a sensible portal to link complementary and alternative therapies with medical diagnosis and treatment. In fact, in the past few years, hospital-based fitness/wellness facilities have become a dynamic gateway to all of an institution’s ambulatory care, including cardiac rehab, physical therapy, nutritional counseling and more.

Architecturally, these facilities embody the “consumerism” of health care. The focus shifts from how ill a person is to becoming healthier. Clinically-driven design is replaced by service-driven design that places emphasis on human needs values. These facilities don’t stress consumers with feelings about what they can’t do because of health limitations. Instead, they reinforce a positive outlook and keep individuals focused on what they can achieve for greater health and well being.
W. R. Cameron Wellness Center

In 1998, executives at The Washington Hospital fulfilled years of planning by beginning construction on the W.R. Cameron Wellness Center, a 70,000 square-foot facility owned by the hospital. Much of the impetus for pursing development of this facility came from community needs. 20% of the population in the hospital’s service area was over age 65 and the number was growing. The hospital was looking for an alternative that would allow them to help sedentary older adults improve their fitness routines and to centralize its rehabilitation therapies and wellness services. Building and managing a hospital-based wellness center allowed the hospital to meet a number of objectives, including:

- Taking an active, positive step toward improving community health and wellness - a primary hospital goal.
- Consolidating diabetes, cardiac rehabilitation and outpatient rehabilitation services with fitness capabilities for more integrated services, opening up much-needed space in the hospital.
- Adding value to other hospital-related ventures, particularly a nearby assisted living facility.
- Selling memberships for steady revenues.

The completed facility features three swimming pools (lap pool, therapy pool and large pool), state-of-the-art fitness equipment, a climbing wall, a basketball court, integrated cardiac fitness capabilities, separate space for physical therapy, rehabilitation and one-on-one diabetes and nutrition counseling, locker rooms complete with saunas and steam rooms, a child care area and a salon. Additionally, a work hardening area was specifically designed for area residents, many of whom are in the trucking industry, which includes a loading dock, pit and semi-trailer cab for simulating the work environment. Some complementary and alternative medicine capabilities are also available. A Pro Shop, physician offices and wellness education are also incorporated.

The building exterior was designed to complement other buildings on the satellite campus by using a matching colonial-red brick. Yet the design is distinctly modern with many windows for light and bring an overall open feeling into the facility. To keep the space from feeling confined, Phillips Swagger Associates used sails to divide therapy spaces from the rest of the fitness areas, such as separating the therapy pool from the other pools. Windows invite passers-by to see into the treasures offered by the facility. When darkness falls outside, the illuminated view of the climbing wall catches the eye.

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<tr>
<th>Program</th>
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<tr>
<td>Cardiac Rehab (II)</td>
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4 Ibid.
6 Ibid.
7 Ibid.
8 Ibid.
In less than one year, the hospital achieved its goals for the facility. They projected 1,500 memberships in the first year and have secured nearly 2,500 paid memberships. Additionally, the space made available in the hospital by moving the clinical services into the Wellness Center allowed for needed improvements to its Emergency Room area. 50% of fitness center services are dedicated to rehabilitation therapies and while the remainder combines fitness, wellness education and alternative medicine. Community feedback is unanimously positive, greatly enhancing the hospital’s image.

**Good Shepherd Hospital Health & Fitness Center**

Good Shepherd Hospital set out to create a new, benchmark facility for wellness centers across the country by establishing a holistic entity that focused on conditioning the body and the mind. Despite site limitations, hospital executives were determined to use “healing architecture” to realize their vision. Every design element was carefully considered to contribute to the sense of a healthy, healing environment.

For example, building materials were carefully selected to portray a feeling of comfort at the same time acknowledging the newness of the facility. A natural lanon stone base on the exterior provides a familiar feel and a strong connection to the site. Above, a brick of contrasting, smooth texture gives the building a polished contemporary look. Aluminum and laminated wood details add accentuation to key building elements. Large expanses of glass allow views into the building from the road as well as outward views of the neighboring wetlands.

Internally, a warm welcoming lobby with stone floors and voluminous curved wood roof structure greets visitors and sets the tone for the rest of the facility. Large openings between floors allows for multiple views and vantage points, making the two levels feel more integrated than in many other wellness facilities. The materials used – including glass handrails, maple and cherry woods and painted acrylic accent panels – met both community and hospital executive expectations for a comfortable and contemporary environment.

The 68,500 square-foot facility houses a gymnasium area with basketball and volleyball courts, a running track, free weight and exercise equipment areas, aerobics studios, classrooms, swimming pools and whirlpool facilities. It also accommodates Phase III cardiac rehabilitation, physical therapy outpatient rehabilitation, a spine center, a complementary medicine suite, childcare center and juice bar. The facility’s success is self-evident; it has exceeded projected memberships by nearly 75%.
HUMANIZING HEALTHCARE: FITNESS/WELLNESS CENTERS AS THE COMMUNITY LOCUS...

Cameron Project

Diagram of Cameron Project
HUMANIZING HEALTHCARE: FITNESS/WELLNESS CENTERS AS THE COMMUNITY LOCUS...
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