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The Fairview Lakes Regional Medical Center Creating and Establishing a New Health Care Model



Scott Wordelman
Current CEO
Fairview Redwing Health Center
Wyoming, Minnesota

Donald K. Lemonds, AIA
JMGR Inc.
Memphis, Tennessee

Howard Goltz, AIA
Setter, Leach & Lindstrom, Inc
Minneapolis, Minnesota

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Merger mania, insurance requirements, managed care. Keeping up with the changes in the delivery of health care services is a daily battle. The good news is that new models for delivering health care services are being established--models that offer substantial benefits to both health care professionals and the patients they serve. The new Fairview Lakes Regional Medical Center in Wyoming, Minnesota, located approximately 50 miles from the Twin Cities, is one such example.

The facility integrates preventative care, outpatient services, and inpatient services into a single facility. This new model has resulted in a highly productive environment for staff and a comforting and secure oasis for patients and their families.

The paper addresses the driving forces, planning, and design process that inspired a new health care facility model. Other health care providers and their facility designers will be able to gain valuable insight into how health care services may be delivered in the future.

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The Fairview Lakes Regional Medical Center Creating and Establishing a New Health Care Model

Scott Wordelman, Chief Executive Officer
Fairview Redwing Health Center, Wyoming, Minnesota

Donald K. Lemonds, Medical Planner
JMGR Inc., Memphis, Tennessee

Howard Goltz, Project Manager
Setter Leach & Lindstrom, Inc., Minneapolis, Minnesota

This paper describes the driving forces, planning, and design process that led to the creation of the Fairview Lakes Regional Medical Center. The Center represents a new health care model that integrates preventive care, outpatient services, and inpatient services into a single, new regional facility in Wyoming, Minnesota, a rapidly growing area north of Minneapolis/St. Paul.

Background

The pressure for health care reform has led to the rise of managed health care and has forced hospitals and physicians to look for more efficient ways to deliver services. In Minnesota, managed care makes up more than three-quarters of the marketplace. Several years ago, the state responded with Minnesota Care, a system for controlling costs and for improving access to health care for uninsured patients. The program imposed a tax on hospitals and other providers, and required that the rate of growth in health care costs be reduced by 10 percent annually. It also encouraged the development of Integrated Service Networks (ISN), which link hospitals, physicians, and other health care providers. Although ISN legislation was never fully enacted, it led to a "merger mania." Looking for ways to share the risks imposed on health care providers by managed care, physician groups began to merge with hospital systems and with one another. In turn, hospitals and physicians merged with third-party payers to capture and control a share of the marketplace.

Chisago Health Services was a result of the merger mania and the trend to "do more with less." Established in 1986, Chisago Health Services was located in a rapidly growing part of Minnesota within commuting distance of the Twin Cities. The system was originally comprised of a 49-bed hospital, 40-bed nursing home, home health care agency, and three physicians' clinics. In 1988, the organization recruited additional physicians and expanded its services.

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By the early 1990s, Chisago Health Services recognized that most patients were receiving care in clinics and day surgery centers instead of hospitals and that this trend was accelerating. In 1991, after seeking input from board members, managers, and staff, Chisago Health Services developed a new vision "to become the health system of choice in the area northeast of the Twin Cities." Chisago devised three strategies to create a regional health care system that would be anchored by a new regional medical center designed for efficient delivery of health care in the new marketplace. The strategies were as follows:

- To recruit more physicians;
- Replace outdated and inefficient facilities;
- Expand traditional service areas.

Chisago Health Services decided to seek a partner to support its vision of a regional health care system. In 1994, Chisago Health Services became a wholly owned subsidiary of the Minneapolis-based Fairview Health System. Fairview Hospital and Health Care Services is the second largest health care facility in the Twin Cities and third largest in the state. Fairview's operation includes a network of 10,000 employees who operate in 24 primary care clinics, two specialty clinics, 21 sports medicine facilities, 5 regional hospitals, and a 100,000,000-square-foot central health care complex.

Within a year of Chisago's partnership with the Fairview Health System, two small hospitals within 20 miles of the new center chose to become a part of the system. Together with Chisago Health Services, these comprise the new Fairview Lakes Regional Medical Center, which has a total staff of 33 physicians and nearly 800 other employees and serves a population of 175,000 living within a 50-mile-long corridor.

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Planning Lays the Foundation for Success

The merger required review of the Center's facilities. The aim of the planning process was to redesign the system of health care delivery in East Central Minnesota to meet people's need for high-quality, affordable, community-based care.

A citizens' advisory council helped select the 28-acre site, which was planned as the anchor to a future 110-acre health and wellness campus currently being developed by the Fairview system. A multidisciplinary team, the Facility Planning Committee was developed to coordinate the planning process. The committee included administrators, Fairview's planning and real estate staff, physicians, public relations professionals, and a private consultant. The FPC developed a preliminary program, gathered community input, and developed key quality characteristics to serve as benchmarks for all program and design decisions:

- Personal care and respect for all customers;
- Comfortable, safe, and appealing facilities;
- Full range of state-of-the-art technology;
- Customer-focused systems and processes; and
- Cost-effective operations.

New Way of Working

In planning workshops, the staff was challenged to redesign the way patients flow through the health care facilities—to design the entire building from the patient's perspective. The most dramatic result of this challenge was the decision to bring care to the patient rather than moving patients through the facility. In this way, services are also brought to the physician, which minimizes movement through the space and creates new opportunities for teamwork. The goal was to blur the traditional lines between hospital and clinic so that a new model for future health care delivery could emerge.

Expanding the Team

Setter Leach & Lindstrom, a Minneapolis-based 120-person architecture, engineering, and interior design firm known for strong project management, and Memphis-based JMGR, internationally recognized experts in medical planning and design and also a full-service firm, were hired to design this unique facility after staff planning was completed. Before beginning the project, the architects met with functional design teams comprised of key staff members who were grouped not by department but by work-related categories that defied old stereotypes.

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The Master Plan and Program

The facility master plan and space program were developed simultaneously, working closely with the Facility Planning Committee and over 40 user groups. The basic framework of a main street-type mall and service zones were established during the concept stage. The next step was to establish the key service relationships for an integrated, patient-focused facility, using the following criteria:

- Clinics and the emergency department were to provide access to all services in the facility;
- Patient registration and triage were to be primarily by telephone, thus allowing decentralization to the clinics and emergency department;
- Services were functionally organized with a linear progression of integrated care from primary to acute care, providing easy access to comprehensive care for the patient and an efficient work process for the physician and staff; and
- Diagnostic services, imaging and lab, and educational activities were decentralized where feasible to serve the patient.

The space and functional programming was done in interactive work sessions with the user groups and the Facility Planning Committee. A computer-based spread sheet format was used with portable computers so that the planning team could work on site and could quickly review alternatives and revisions. The initial programming effort indicated a range between the best-case "wish" for a facility as large as 240,000 square feet and a budget-driven program of 120,000 square feet. A space program for the 155,000-square-foot facility was ultimately agreed on. The size and specific components of the facility's services were documented, which allowed for cost estimates to be developed on the basis of square footage.



[Figure 1](#): First Floor Plan.

Flexibility and expandability were key planning issues. Specifically, the plan included space for a comprehensive cancer center. The main street mall can be extended to the east and west, and a third pavilion was planned for the south side of the mall. Within each service, flexibility was provided by using a universal and modular room planning approach. In selected service areas, expansion capacity was provided by including "shell space" or designating "soft space."

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Responses to Customer and Community Themes

Inspired by the concept to organize the facility as a town center, with services arranged around the "main street," the design team used small-town imagery to respond to customer and community themes. The result is a health care facility that presents a different image from the traditional hospital. The visual design supports this concept by appearing as a collection of buildings instead of a single large building.



[Figure 2](#)

The facility's "main street," an enclosed mall that doubles as a gathering spot for community events, provides patient and visitor entry to all clinics, outpatient services, rehabilitation area, wellness and education, retail, administration, and food service. Upon entering the main entrance, visitors are greeted by an inviting chapel.



[Figure 3](#)

Wellness, education, and rehabilitation services are located south of main street with direct outside access. At the west end of the main street, the cafeteria dining area spills into the mall with the appearance of a sidewalk cafe. Retail services and clinics are located to the north, with diagnostics and acute care services north of the clinics.

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Located along I-35, the facility incorporates external design elements that support instant recognition and a progressive image. A gently curving wall on the exterior reflects the interior mall and terminates in two pods located at either end of the building. The facility presents a contemporary high-tech image from the exterior as well as a comfortable, appealing interior focusing on the human scale. Oriented toward the south, a glass curtain wall introduces as much natural sunlight as possible and provides extensive views to the outside. These design features were paramount, given the building's location within the cold northern climate.



Figures [4](#) & [5](#)

(Click for full image)

The interior layout is organized into specific functional zones in a linear progression throughout the public, clinic, and inpatient areas. Clinics spin off the public mall and are grouped functionally with similar inpatient services, giving the medical staff access to patients in both clinics and inpatient areas without traveling across the facility.

The design of the inpatient unit incorporates patient-focused care, maximized operational flexibility, and minimized staffing. In a departure from traditional centralized nursing stations, satellite stations are located between pairs of patient rooms to support point-of-care nursing practices, thus increasing response time and availability to patient needs.



[Figure 6](#)

The planning team's goal was to create an atmosphere in which patients feel less like they are visiting the doctor and more like they are visiting a friend. The result is a facility that demystifies the traditional hospital setting.

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Clinical and Operational Benefits

Fairview Lakes Regional Medical Center establishes a new architectural model for meeting the cost-containment needs of managed care with respect to facility design and construction and responds to the pressure to seek efficient, local delivery of services. Breaking down old assumptions about the separation between inpatients and outpatients and between staff categories led to a breakthrough in the design of health care facilities and their operations. Following this model benefits health care providers by reducing redundancy, limiting the number of staff with whom a patient interacts, and ensuring that the information given to inpatients and outpatients is consistent.

By developing a clear understanding of Fairview's operational philosophy and a customized project delivery system, the Setter Leach & Lindstrom/JMGR team created an entirely new kind of hospital and clinic project program with lasting implications for the future of medical-facility architecture. 🧑‍🔬

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[Figure 1](#)
(30k)



[Figure 2](#)
(12k)



[Figure 3](#)
(26k)



[Figure 4](#)
(23k)



[Figure 5](#)
(23k)



[Figure 6](#)
(24k)

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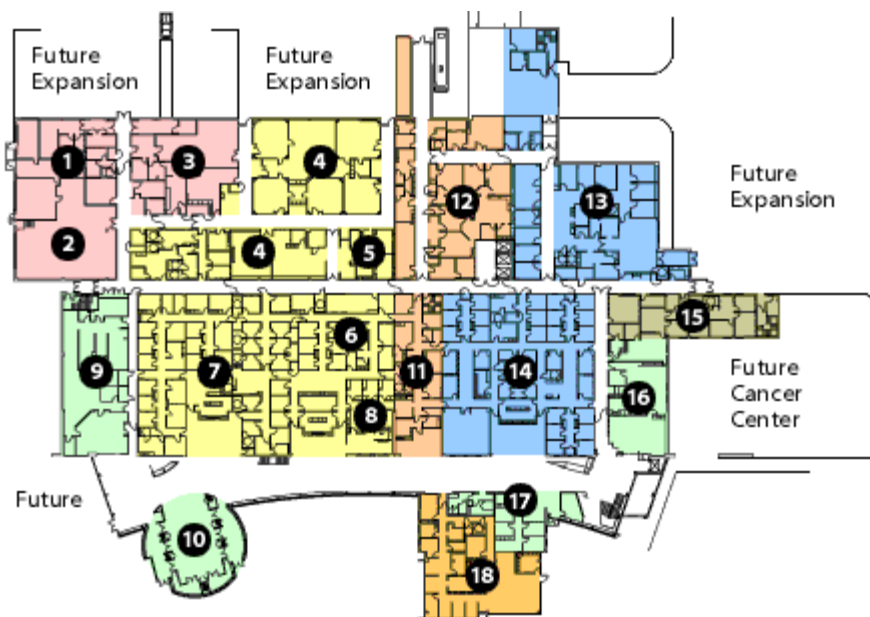
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Fairview Lakes Regional Medical Center First Floor Plan



- | | |
|-----------------------|-------------------------------|
| 1 Maintenance | 10 Education |
| 2 Mechanical | 11 Diagnostic Clinic |
| 3 Mat. Management | 12 Diagnostics |
| 4 Surgery / PACU | 13 Emergency/Urgent Care |
| 5 GI Lab | 14 Family Practice/Pediatrics |
| 6 Ortho Clinic | 15 Admin/Med Staff |
| 7 SDS/ Surgery Clinic | 16 Pharmacy |
| 8 Optometry | 17 Business Office/Chapel |
| 9 Dietary | 18 Rehabilitation |

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 **Fairview Lakes Regional Medical Center**
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Figure 2

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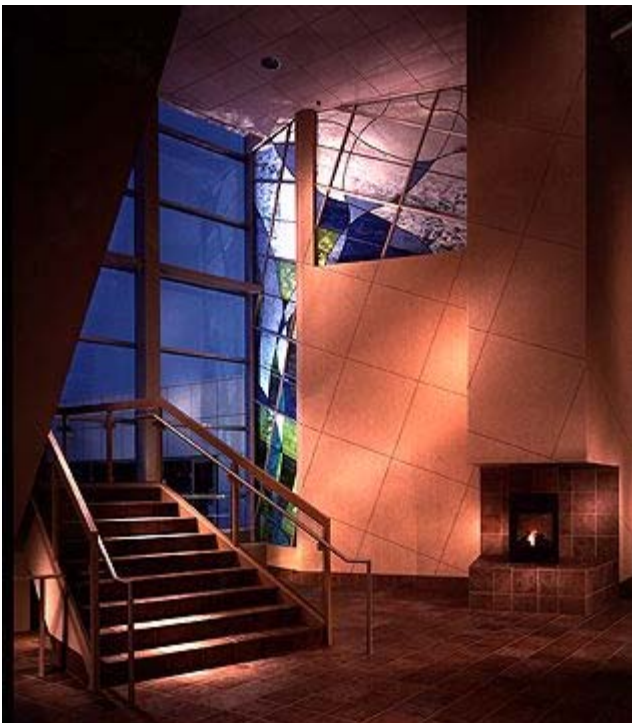


Figure 3

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Fairview Lakes Regional Medical Center Wyoming, MN



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 **Fairview Lakes Regional Medical Center**
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Fairview Lakes Regional Medical Center Wyoming, MN



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