Abstract

Daniel Burnham, creator of Chicago’s 100-year-old master plan, once said, “Make no little plans. They have no magic to stir men’s blood.” As healthcare systems adapt to trends in economics, required care, and developments such as home healthcare, they will do well to heed Mr. Burnham’s advice. There is a need for facilities that are efficient for patients and caregivers and that foster collaborative care. Healthcare facilities must also respond to the trend toward preventive care and the changes implicit in the treatment of chronic diseases rather than acute disorders. All of these developments mean that people will make more frequent visits to the doctor’s office. More than just an exam room will be required to fulfill what people will expect as part of their “patient experience.”

Introduction

Daniel Burnham, creator of Chicago’s 100-year-old master plan, once said, “Make no little plans. They have no magic to stir men’s blood.” As healthcare systems adapt to trends in economics, required care, and home healthcare, they will do well to heed Mr. Burnham’s advice. There is a need for facilities that are efficient for patients and caregivers and that foster collaborative care. Healthcare facilities must also respond to the trend toward preventive care and the changes implicit in the treatment of chronic diseases rather than acute disorders. All of these developments mean that people will make more frequent visits to the doctor’s office. More than just an exam room will be required to fulfill what people will expect as part of their “patient experience.”

Green buildings that contribute to sustainable environments and that support, integrate with, and act as an anchor for their communities will also be important. While these are not wholly new concepts, the need for facilities that accomplish all of the above in one movement is more of a necessity than ever. To accomplish this, healthcare systems will need to adopt a master-plan mentality rather than a simple one-step plan. When Oakwood Healthcare (major healthcare system), Midwest Health Center (local provider), Redico (national real estate developer), and the city of Dearborn (local municipality) formed a partnership to develop a mixed-use complex on one of the city’s strategic properties, they did just this—created a facility not of the future but with a future.

Changing Healthcare

Healthcare is an ever-changing industry. It has developed from home care to religious institutions to what we know now as hospitals, and today it is moving back toward homes in expanding communities through ambulatory care centers. It is important to develop facilities that can adapt over time and remain useful as the environment of care continues to develop. In the near future, both economics and changing care needs will push more and more care out of hospitals and into ambulatory facilities.

The economy and health reform are strongly linked. Health reform has been the subject of political discussions since President Truman’s...
time, but recently it has been brought to the forefront because of drastic changes in the economy. Current reforms emphasize wellness and pay-for-performance models, largely in response to changes in our society, how people live, and the progress medicine has made in treating people and diseases. In the last decade advances in medicine have dramatically changed the focus of patient care. Great strides have been made in curing many diseases and acute medical conditions. Many of the diseases and acute conditions that people died from at an early age have disappeared with medications and treatments. While these advancements have done much to extend life, they have created a population afflicted with chronic disease.

According to the Centers for Disease Control and Prevention, chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States. Chronic diseases account for 7 out of 10 deaths of Americans each year. A quarter of people with chronic diseases also face major limitations in daily living. Chronic disease, which is most prevalent in urban areas, can be treated with a process of prevention, prescription, and personalized care. People with these conditions need to be coached and led into a lifestyle or program of healthy living and to receive care on an ongoing basis. Managing care for chronic conditions and preventing people from developing these conditions will require centers teamed with caregivers to provide education, diagnosis, treatment, and care.

Wellness Centers

This change in focus of care has led to a change in the delivery of care. Changes in delivery of care cause changes in the facilities that support care delivery. So what types of facilities are needed?

A major difference in providing care for chronic-vs-acute problems is the frequency with which patients are expected to take action to improve or maintain their health. If taking action is made an easy part of their lifestyle, then the chances for success will increase. Providing facilities that fit into patients’ lifestyles will provide a greater chance for interaction and support of patients during their journey toward wellness. In the past people went to their provider when something was wrong, and they expected to return home with the problem solved and feeling better. This visit was all about the end result. The provision of ongoing care and support requires a different outlook. If we keep in mind that in life it is not the end that matters—the end is always the same—but the journey along the way, we can perhaps have a better understanding of how to facilitate healthcare for today’s patients. Healthcare providers need to create pleasant, convenient wellness centers that enhance the patient experience and provide them with all the tools needed to improve their health. Without these, it will become increasingly difficult to keep patients engaged in improving their health.

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Providing such centers requires the facility to be part of the community, and not just a building located within the community it is intended to serve. Matthew DeGeeter, ASID, LEED® AP+C, an interior designer at Perkins + Will, stated, “The connection between healthcare provider and patient needs to be developed to improve the delivery model. If the healthcare system is rooted in the community, then the image is a portrayal of what the community aspires to be.” For healthcare facilities to influence the patients they serve, they “need to provide patient-centered care in a facility that honors the environment and community.” Such facilities, he said, will “have the opportunity to become the community center for health and wellness.” From an even broader perspective, when discussing where evidence-based healthcare design will head in the future, Debra Levin, president and CEO of the Center for Health Design, stated, “We will broaden our understanding to explore the role that the design of communities plays in health as well.”

Given the effect communities have on health, providing facilities that are integrated with and enhance the communities they support is clearly the right direction.

**Development of a Facility with a Future**

After considering the multiple changes in medicine and healthcare delivery, Oakwood Healthcare undertook a mission of addressing the needs of its patients by providing not only a new facility in which to practice medicine but a whole new outlook at the practice of medicine. Oakwood Healthcare has a long tradition of providing care to poor and working-class individuals in the greater Detroit and southeast Michigan region. The health system was founded in Dearborn, Mich., in the 1950s by Henry Ford to promote healthcare and wellness to employees of the Ford Motor Company as well as the greater Dearborn community.

After evaluating a number of programs for providing services in the best manner possible, Oakwood realized that demographic expansion would slow down and expansion to newer far-reaching suburbs would subside. Therefore, it made sense for Oakwood to reinvest in its core communities. The healthcare system turned to Dearborn for development of the next stage of healthcare: a newly defined ambulatory care center. Oakwood has been in the ambulatory care practice since the early 1980s when satellite campuses were developed to reach patients in newly emerging suburbs. In addition, Oakwood maintains ambulatory care centers near its major hospitals in order to reduce hospital density.
A number of factors were considered in the decision to develop this new medical center:

- Location: As mentioned earlier, the hospital system maintains a large number of satellite facilities in the outreach portion of its service district. The intent of the new program is to provide continuous, collaborative care to the core community residents. Oakwood recognized that in the coming years, these would be areas of growth. A downtown community with transportation alternatives was chosen as the appropriate location.

- Population: Chronic disease affects persons of lower means the most intensely, because they often do not receive proper medical attention and health education. Again, the downtown community location will provide access for such persons. As well, the system’s initiative is aimed at providing residents with education.

- Basis of service: A program that responds to the needs of the community must address all of the conditions afflicting the population. With a baseline of medical programs ranging from primary care and internal medicine to optical, dental, and cardiology, such a center needs to address all of the educational, preventive, prescriptive, and treatment needs for the service lines.

- Collaboration: A network must be available for sharing the patient’s information and establishing protocols for what may involve multiple conditions. Electronic medical records will be critical as patients are able to network with caregivers from their homes for discussion of conditions, education, and in some cases treatment.

- Community resource: Early in the development of the program for this new medical center, Oakwood made it clear that the facility would not be used exclusively for caring for the sick. The healthcare system would recruit residents to come to the facility when they are well, thereby creating a community resource. This criteria required that the new center be welcoming and available and have an open environment that would inspire residents to take advantage of the resource.

- Architecture: A special architecture would be required for this new medical model. The design must communicate strength and permanence, along with an image of caring and welcome.

Such an organization already existed in the community. Midwest Health Center supported primary care and some specialties through a managed care system. Midwest has been providing care to the core communities of Dearborn and parts of greater Detroit for 30 years and has become a recognized brand in this community.

The directors of the organization shared a vision of developing a more comprehensive care model, embracing the virtues of prevention, prescription, and personalized care. Midwest was in a search to collaborate with a major health organization, one that would aid in the development of a truly integrated model. After much negotiation, Midwest Health and Oakwood reached an agreement to develop a comprehensive care model. Midwest Health Center was selected as the appropriate location for the new medical center.

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a new medical center that would service the regional population with a comprehensive and collaborative care model, incorporating the attributes of the Midwest Health managed care model with the vast resources of Oakwood Healthcare.

At the same time that Midwest and Oakwood were negotiating, a national developer, Redico, was pursuing plans for a significant mixed-use development on a site in the heart of downtown Dearborn, across from the historic city hall.

Dearborn’s community master plan called for a significant development to be located on this property. For many years it was the site of a Montgomery Ward’s store and had become a major epicenter for the community. The city, aware of all parties’ desires, became instrumental in development of the new medical center’s base for a major mixed-use program. Oakwood Healthcare, Midwest Health Center, Redico, and the city (which provided the much-needed funding for the parking structure) formed a partnership to develop the Dearborn Town Center, a set of facilities for the benefit of the community.

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Interest from this point focused on how to make the best use of the site for multiple benefits to the community. Issues included:

- Construction of a medical center that would provide the community with a collaborative resource.
- Consideration for the needs of an aging population, and potential for housing.
- The need for a catalyst to redevelop the city’s downtown and to encourage retail for this site and ongoing community development.
- The need for a community resource center.
- The need for a “statement” facility that would inspire the future of the city. Such a complex should embrace the solid virtues of the city relative to its commercial base, history, and tradition, but with an eye to the future. Promotion of best land-use policies and sustainability also formed important criteria.

Planning for the new Dearborn Town Center included all of these important criteria. The result is a two-city-block mixed-use composition that responds to the needs of greater Dearborn. The site is anchored by the Oakwood Midwest Medical Center, a three-story, 152,000-square-foot building. The base of the building houses retail that services the center and the public. Medical office space is located on portions of the first floor and upper floors. Land has been established for construction of a multistory, 100-resident assisted living center and an additional mixed-use retail/medical/office building. Parking is provided in a five-story parking structure with 524 parking spaces.

**Care Delivery Model**

With the master plan for the Oakwood Midwest Medical Center concluded, the focus turned to programming and planning for service lines and best-in-class accommodations for the program. At this point, it is important to look at how healthcare reform and the need to provide care for chronic disorders require a different delivery model from the traditional ambulatory care model, in which individual elements are separated in silos. While the silos in hospitals have been broken down significantly, many ambulatory sites have not made such a change. The change from care for acute disease to care for chronic disease means that an increasingly large number of people will make frequent visits to medical facilities for treatment of multiple conditions. A new medical center needs to be responsive to this change. People may spend a large portion of their day at such a facility in order to receive primary and specialty care, diagnosis, and treatment. These medical facilities need to foster collaboration, be welcoming and responsive, and offer efficiency to the provider in order to maintain profitability.

Effectiveness needs to be derived from the efficiency of the operation. Planning needs to address the basis of a clinic module, the most effective way to treat patients, providing them with the information they need and removing many of the difficulties and encumbrances placed on patients from the equation. If planned correctly, ambulatory sites offer the ability for patients to access care and amenities much more easily and comfortably with less confusion than in a traditional hospital setting.

![Figure 7: Conceptual Main Street sections](image)
Ease of use, access, and understanding are key to patients developing a comfort level with a facility and their provider, and ultimately continuing on a journey toward better health. Blending the existing providers, Oakwood healthcare standards, and a collaborative model required the use of an integrated design approach in which existing processes and clinical culture were refined and incorporated into the new facility to enhance already successful services.

The clinical module needs to be a model of efficiency, anticipating large patient volumes. Registration for the new medical center was designed to be a combination of telephone and data, combined with a registration center at the entrance with a simple check-in/check-out process. Within the clinic’s areas for taking patients, vital statistics were incorporated, nursing and physician areas were standardized, and an on-stage/off-stage concept was introduced. Private and semiprivate waiting areas have been provided. Staff and services are managed through the off-stage circulation, which allows trash and other dirty materials to be removed without interacting extensively with the public or patient circulation areas and also helps manage infection control concerns. Of equal importance, the off-stage connections provide a means for dialogue and collaboration between provider staff and physicians.

The clinical modules are standardized to the greatest extent possible. With the continuing evolution of medicine, changes in treatment, patient procedures, and service lines will continue. Clinics need to be interchangeable to accommodate the ebb and flow for these facilities. Arrangement of the multiple service lines and their adjacencies was considered crucial to the success of the medical center. Arrival at the facility needed to be simple and the entrance points visible. Two major entrance points were developed, one for those arriving by car and a second for those using public transportation. The entrances, which are at opposite ends of the center, are linked with a mall gallery that provides a welcoming, wide route through the facility. Consideration for persons arriving by car meant that the access points to the building and adjacent parking structure not only needed to be contiguous, but welcoming to one another.
Because the facility is located in an urban environment, security for patients and staff, especially at night, was important. The parking facility is well-lit and security cameras and call boxes are located throughout the facility.

Certain healthcare services, including urgent care, imaging, orthopedics, labs, and physical therapy, are located on the first floor. This location aids patients with limited mobility or who require immediate contact at the urgent care center and provides a convenience for those who need a quick visit to a lab. A sky bridge provides quick and convenient access from covered parking to the center’s Women’s Health and Surgical Centers.

Other considerations for the new Oakwood Midwest Medical Center included:

- Promotion of staff efficiency by minimizing travel distances between frequently used spaces.

- Efficient use of space by locating support spaces so they can be shared by adjacent functional areas, and making prudent use of multipurpose spaces.

- Inclusion of all needed spaces; elimination of redundant areas.

- Grouping of functional areas with similar system requirements.

- The vital importance of staff and physician retention versus replacement is environmentally dependent. The spaces and operation must respond to the needs of staff including the work environment and respite accommodations.

Stewards of the Community

The Oakwood Midwest Medical Center is clearly intended to be a model facility for healthcare. On a large scale the entire mixed-use complex is intended to be a model for stewardship of the community. Sustainability virtues were high on the priority list of criteria for design and development of the complex.

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Many accommodations were made in the design and engineering, construction, and building systems to earn the facility’s LEED® Silver certification. The solar-powered parking structure has earned a Green Building Award from the Construction Association of Michigan.

As healthcare providers strive to make plans that can “stir men’s blood,” it can only be hoped that more development can be incorporated in the fabric of the communities they strive to serve. As we look around the country the outlook is good. In Chicago, Mount Sinai Hospital has a proposed outpatient pavilion planned adjacent to mixed-income housing to provide an anchor for a community redevelopment plan. As projects like this one and Dearborn Town Center continue to develop, we will provide the infrastructure to support a healthier population, healthier communities, and sustainable facilities with bright futures.

Notes


References


