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HOME CONTENTS ARCHIVES CALL FOR PAPERS

Designing a Primary Care Center to Meet Consumer Needs



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[Go to Article](#)

In order to succeed in today's health-care market, organizations must not underestimate the consumer. Proactive consumers are demanding quality, convenience, and value. As a result, customer satisfaction has become the new focus of healthcare delivery.

Consumers no longer find acceptable the status quo patient-physician interaction. Traditionally, the patients felt demeaned and anxious, with no sense of control over their environment. By turning the visit to the physician's office into a more positive experience where the customer has a sense of control, the clinical outcomes have a better chance of improving.

At the newly opened Sycamore Primary Care Center, in Miamisburg Ohio, customer service issues were central to the operational and architectural design decisions. The intent was to create an environment that would promote greater consumer involvement and interest in their own care through positive interactions.

The waiting experience, traditionally undesirable, is intended to be unique and interesting, thereby reducing anxiety. In lieu of a traditional waiting room, an activity area was created which has many amenities that provide positive distractions. There is shopping in the Apothecary, a Playroom for the children, outdoor seating, big screen TVs, and reading material. In addition, there are amenities geared toward consumer education. There are computer kiosks, desktop computers, lap top connection sites, and VCRs.

Consumers can take advantage of these amenities while waiting because they are notified by pager that the clinical staff is ready to see them.

With increased competition in the marketplace, healthcare organizations must address customer demands or face losing market share. It is no longer sufficient to compete on price and quality alone.

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

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In today's market health-care delivery follows a consumer model. The old provider-oriented model does not meet the consumer demand for quality care, convenient services, and economic value. As the health-care industry changes, so does the design of health-care facilities. The Sycamore Primary Care Center, a new 25,000-square-foot facility in southwestern Ohio, has been designed to meet the market-driven demands of health-care consumers.

The Center will offer full primary care services and an internal medicine practice that includes physical therapy, a medical education area, an obstetrics-gynecology practice, and a pediatrics practice, as well as a full-service apothecary. Each practice, including the apothecary, will be a teaching site for postgraduate residents and medical students. The center is located on the campus of Sycamore Hospital, a 185-bed hospital in the suburban community of Miamisburg, just outside the Dayton, Ohio metropolitan area of approximately 900,000 people. Sycamore Primary Care Center is affiliated with the Kettering Medical Center and Wright State University School of Medicine.

[Abstract](#)

[Next](#)

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 2 of 8

Why a Consumer Model?

Americans today report feeling disenchanting, disenfranchised, and alienated from health-care providers ([Zimmerman](#) et al. 1997). Recipients of health-care services are more than patients who receive care—they are consumers of goods and services who are interested in quality, convenience, and value. The term "patient" originates from the Latin word "sufferer," one who experiences anxiety and a loss of control. It is the charge of the health-care industry to diminish the demeaning aspects of patient experiences while enhancing customer service.

An emphasis on customer service is necessary for a variety of reasons. First, patients typically feel a lack of control over their environment when visiting a physician's office. This leads to anxiety, which increases stress. Giving patients a sense of control can reduce stress and improve the atmosphere for a better patient-physician relationship ([Jones](#) 1996). This increases the potential for compliance with prescribed medical care and healthy behaviors, and should reduce health-care costs by reducing physician involvement as the health status of the population improves.

Second, as competition between provider groups increases, consumer demand gains more clout in the industry. Providers are looking toward good customer service to set them apart from the competition. Competing on price and quality alone is no longer enough. Prices have already been severely reduced, and most areas have several providers of quality care competing within the same market ([Hudson](#) 1998).

Last, customer service can affect health-care providers' cash flow and revenue. Customer satisfaction has become a selection criterion for capitated contracts with third-party payers. "A recent survey determined that more than 50 percent of employers and managed care companies dropped providers who failed customer service standards" ([Zimmerman](#) et al. 1997). Managed care organizations reported that they use the data from customer service surveys to choose providers, facilitate contract negotiations, and determine provider bonuses.

[Previous](#)

[Next](#)

Designing a Primary Care Center To Meet Consumer Demands

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The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 3 of 8

What Do Consumers Expect?

Research indicates that consumers are concerned with privacy, waiting times, convenience, accessibility, and a sense of control ([Lumsdon](#) 1996; [Mitry](#) 1979). Attention to the issue of privacy has increased in this technological age—the use of electronic medical records has raised new concerns about breaches of confidentiality. In addition, as public acceptance of diagnoses such as sexually transmitted diseases, AIDS, and mental illness decreases, consumer sensitivity to privacy increases. Discretion about personal information has become a consumer expectation.

Busy lifestyles have decreased the tolerance for the waiting periods associated with a typical visit to the physician's office. Consumers expect efficient service. Some providers are offering guarantees of maximum wait times. One upscale practice in Boston, catering to the city's central business district, even calls customers to alert them when their providers are running behind schedule.

Consumers also expect convenient and accessible services. More and more practices are opening in suburban communities and offering extended evening and weekend hours of operation to accommodate their customers. Conveniences for the provider, such as proximity to the hospital and "bankers' hours," are no longer acceptable. Providers are even losing their prime parking spots to the customers.

"Humans have a basic need for some control of themselves and their environment" ([Jones](#) 1996). They expect the most basic of environmental aspects to be in their control, such as lighting, temperature, view, and sound. These demands are fairly easy to meet. obvious physical changes must be accompanied by a change of attitudes among the staff. They must give consideration to the customer's desires and preferences.

To meet these kinds of customer demands for health care, providers are looking at corporate models outside their own industry ([Hudson](#) 1998). For example, McDonald's is recognized for its consistent, speedy service. In addition, the Playplace concept and its child-focused advertising campaigns have made McDonald's a mainstay with the younger population. Children prefer to go to McDonald's because they feel it was made just for them. Disney is another organization noted for its great customer service. In addition to friendly service and exceptionally clean facilities, Disney has learned how to handle the inevitable waiting in line for rides, bringing entertainment value to the experience. Health care organizations can learn a great deal from successful corporate and hospitality industry strategies.

[Previous](#)

[Next](#)

Designing a Primary Care Center To Meet Consumer Demands

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of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 4 of 8

The Consumer Model at Sycamore Primary Care Center

Before design began in earnest for the Sycamore Primary Care Center, the planners attempted to determine the consumer demands of the target population. This strategy was evident in the composition of the design team, which was comprised of representatives from all user categories within the facility. Each team member had a different relationship with the patient population and consequently a different perspective on patient needs and demands. Team members represented the following positions:

- Attending physician,
- Resident physician,
- Medical student,
- Pharmacist,
- Staff representative,
- Community representative, and
- Consumer representative.

In addition to direct input from design team members, the Center's planners conducted informal patient surveys and literature reviews. These efforts helped to define more precisely the new consumer model of health-care delivery. Project goals were established to align with and support the new model. Everyone involved made a concerted effort to rethink how care is delivered and to be creative in addressing newly emphasized needs.

Project goals relative to the consumer model were as follows:

- Provide convenient access to the building;
- Create an implied and physical link between the facility and the community;
- Maximize patient privacy and confidentiality;
- Provide a unique, interesting waiting experience;
- Provide patient access to the outdoors;
- Provide the consumers with environmental controls that increase their comfort level and ease anxiety; and
- Promote greater consumer involvement and interest in their own care.

The Center was able to meet consumer demands relating to privacy, waiting, convenience, accessibility, and sense of control. Each design goal was met through an operational policy that was reinforced by the design of the building.

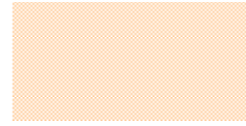
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[Previous](#)

[Next](#)



The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 5 of 8

The Sycamore Primary Care Center has established implied and physical connections with the community through its location, services, and use of technology. Physician practices are separate from the hospital facility to bring the practice closer to the community, but close enough to the hospital campus to offer convenient access to radiology and lab facilities. The site is highly visible on a prominent corner of a busy intersection within the community, on a main thoroughfare that runs directly from a major highway, an important community gateway.

In addition to working from their central location in the midst of the community, the Center's care providers offer health screenings at prominent locations such as a large local supermarket. Two computer kiosks, designed especially to provide patient education and information access, were established in youth and senior centers remote from the Center. A home page on the Internet ([www.ketthealth.com/Sycamore Primary Care/](http://www.ketthealth.com/SycamorePrimaryCare/)) offers a direct link to the Center from virtually any location.

Although on a major thoroughfare, the physician practice facility was designed with convenient site access points. It is located on a public transportation route, which further increases accessibility. Extended evening and weekend hours of operation also make its services available to more people.

A voiceless paging system for patients maximizes privacy and confidentiality. Upon identifying themselves to a centrally located information clerk, customers are checked in electronically with the various practices. They are then given a vibrating pager that will notify them when the nursing staff is ready for them in the clinical areas. This eliminates the need to announce the names of customers in order to call them into the clinical area. To further diminish the possibility of customers overhearing confidential information, the nurses' station, scheduling, and check-out areas within each clinical area are separated from one another.

Consumer concern over wait time was addressed by making the waiting a unique and interesting experience. The building was created without a traditional doctor's office waiting room. The central space of the facility is an activity area that provides many amenities that help to make the wait time productive. The vibrating beepers primarily serve to provide customer privacy, but they also allow for mobility so that customers can take advantage of all the amenities offered.

[Previous](#)

[Next](#)

Designing a Primary Care Center To Meet Consumer Demands

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for Health

A Professional
Interest Area of The
American Institute
of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 6 of 8

The activity area offers customers a variety of patient education opportunities using computer kiosks, desktop computers, and videos. Televisions and stations for laptop computer connections give customers the choice between entertainment and work while they wait. Telephones are available for free local calls. The apothecary carries a modest selection of books, CDs, magazines, cards, and sundries, and a beverage and snack cart offers nutritious refreshments.



[Figure 1](#): Activity Area Rendering.

The activity area extends outdoors, where there is additional seating. Smoking is permitted outdoors, as some customers rely on it for reducing anxiety. Extensive landscaping adds to the enjoyable atmosphere. A special part of the activity area is the enclosed playroom for children. This supervised area allows children to be entertained while their parents visit their physicians. It also serves as a positive distraction for children before their own visits.

The Center offers its customers empowerment through patient education, computerized health assessments, and environmental control, which reduce uncertainty and put customers more at ease. Computer kiosks will allow customers to find valuable information about their specific health needs before their physician visits. In addition, once in an exam room, a customer will have control over lighting and music selection. Giving health-care consumers some control within the clinical environment will give them a sense of control over their health.

The Center's owner required that the facility design be innovative (according to management expert Peter Drucker, "innovation is applying knowledge to tasks that are new and different"). The newly defined consumer model of health-care delivery has left the field ripe for the growth of innovative design. Successful architectural design lies in how well a building supports operational responses to market demands.

According to C. Robert Horsborough, Jr., MD, MUS, "Medical care cannot be separated from the buildings in which it is delivered. The quality of space in such buildings affects the outcome of medical care, and architectural design is thus an important part of the healing process."

[Previous](#)

[Next](#)

Designing a Primary Care Center To Meet Consumer Demands

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A Professional
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of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 7 of 8

In addition to the consumer model project goals established by the Center's planners, the following architectural goals were established:

- The building form and aesthetics should reflect the local community, if not literally, at least figuratively;
- The building should draw people to it and make them want to come back;
- The environment should be comfortable, inviting, nonthreatening, and easy to navigate;
- Customers and staff should have access to an outdoor area; and
- The costs of construction should match the current market cost of medical office building construction.

The organizational concept for the building are derived from two elements of Greek architecture: the agora and the plinth. An agora is a gathering place; marketplace and civic center are common translations of the Greek term ([Wycherley 1962](#)). In many instances the agora was located near the center of a city. The plinth serves as the base of one or more objects. For the Sycamore Primary Care Center, the metaphor of the agora fits well with the activity area, which is the hub around which all of the practices are organized. To create the sense of a smaller building, each practice became its own building. The plinth concept was used to create a base that would receive each of the buildings, including the activity area, and allow the usable space to extend to the exterior, creating three different outdoor plazas. The plinth also helps the building meet the ground and transition from the high to the low end of the site, as there is a 15-foot grade over the length of the site.



[Figure 2](#): Concept Diagram.

The design team agreed that the best contextual element to draw upon for an aesthetic was a modest prairie style home just a few miles away. The low profile and horizontal lines lent themselves well to the Center's needs, as it is a long (287-foot) facility. The complex's prairie-style overhangs, including low terraces and garden walls that reach outward, also seem to fit with the outdoor space defined by the plinth ([Lind 1992](#)).

[Previous](#)

[Next](#)

Designing a Primary Care Center To Meet Consumer Demands

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A Professional
Interest Area of The
American Institute
of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

Page 8 of 8

Given that the facility is to be located on a prominent corner and was intended to draw people to it, the design needed a dramatic element at its corner to serve as a visual draw and inspire the curiosity of passersby. This corner became the natural location for the playroom. A tall, dramatic form that broke away from the low lines of the buildings was used to create contrast and draw attention to itself. A similar form is used on the opposite side of the building to mark the main entrance. The playroom, a glass enclosure, is lighted to showcase the bright and colorful, custom-designed mobile that hangs in the 19-foot-high space. This space was modeled after the McDonald's Playplace, but emphasizes more sedate activities. It is most definitely a marketing strategy to draw people in, particularly children.



[Figure 3](#): Exterior Rendering at Playroom.

With the activity area as the central space around which the practices are organized, wayfinding is easy. The all-glass enclosure of the activity area contrasts against the solid brick walls of the clinical buildings, which have smaller windows to offer privacy and more carefully framed views. The more public activity area allows for openness and a direct connection with the outdoors. Each window wall separates the activity area from the outdoor plazas. At the base of each is a landscape bed, which blurs the line between indoor and outdoor spaces. The use of brick on the interior of the activity area also helps to blur the line between indoor and outdoor spaces. All spaces are comfortable, bright, and cheery, with positive distractions to ease anxiety.

Each design decision for the Sycamore Primary Care Center was driven by and evaluated against how well it supported the consumer model of health-care delivery. While this mode of thinking is uncommon among members of the design team, it was agreed that the success of the project depended on how well the team could discipline itself to think within the new paradigm of the market-driven consumer model health-care delivery system. "The 21st century health-care facilities...will be responsive to the efficiency demands of managed care, but sensitive to consumer needs and expectations" ([Coile, Jr. 1996](#)).



[Previous](#)

[Photos/Plans](#)

[Bibliography](#)

Designing a Primary Care Center To Meet Consumer Demands

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Interest Area of The
American Institute
of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)

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[Previous](#)

[Photos/Plans](#)

Designing a Primary Care Center To Meet Consumer Demands

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The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)



[Figure 1](#)
(30k)



[Figure2](#)
(5k)



[Figure3](#)
(23k)

Designing A Primary Care Center to Meet Consumer Needs

[Abstract](#)

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The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)



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Figure 1: Activity Area Rendering

Designing A Primary Care Center to Meet Consumer Needs

[Back to Photos/Plan](#)

[Back to Article](#)

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The Academy Journal

HOME CONTENTS ARCHIVES CALL FOR PAPERS



Sycamore Primary Care Center
Kettering Medical Center
E. Lynn APP Architects, Incorporated

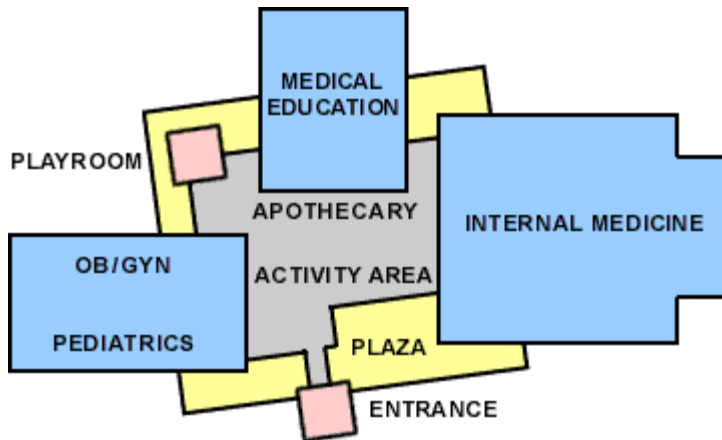


Figure 2: Concept Diagram

Designing A Primary Care Center to Meet Consumer Needs

[Back to Photos/Plan](#)

[Back to Article](#)

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A Professional
Interest Area of The
American Institute
of Architects

The Academy Journal

[HOME](#) [CONTENTS](#) [ARCHIVES](#) [CALL FOR PAPERS](#)



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Kettering Medical Center
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Figure 3: Exterior Rendering at Playroom

**Designing A
Primary Care
Center to
Meet
Consumer
Needs**

[Back to
Photos/Plan](#)

[Back to Article](#)

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