



Tackling Sustainability

A quick web search on "sustainability" yields first and foremost, as one might expect, the Wikipedia listing on the topic, followed by a variety of explanations. There are a lot of opinions on sustainability. Still, some basic concepts emerge.

The EPA defines it as "the ability to achieve continuing economic prosperity while protecting the natural systems of the planet and providing a high quality of life for its people." It also emphasizes the importance of meeting "society's present needs without compromising the ability of future generations to meet their own needs." Areas of examination are: site conservation, energy and water conservation, materials conservation and recycling, and indoor environmental quality.

In the June 2010 issue of *Buildings* online magazine, regarding the issue of sustainability in facilities, Paul Hoffman states it simply:

Your objective is to create a facility that minimizes the impact on the environment, embodies social responsibility in the community, positively contributes to the bottom line, and produces a productive, healthy, and effective place for resident, staff, or customers. When you've made decisions with these benefits in mind, you can be confident that you've chosen wisely and you'll reach the right destination.

Sustainability involves conscience, pragmatism, and knowledge – just to note a few of the requisites.

Organizational Roots a Natural for Sustainability

Wisconsin's Affinity Healthcare Systems' origins date back to the 1890s, when two religious groups established much-needed hospitals in Appleton and Oshkosh. In 1995, these two hospitals merged to form Affinity. Affiliations in subsequent years have given Affinity a network of three hospitals and numerous clinics and health centers across northeastern Wisconsin.

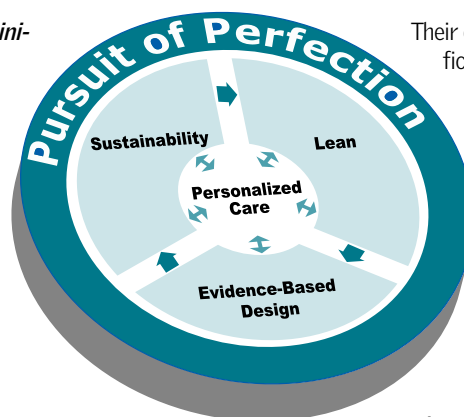


Main entrance of the south addition of St. Elizabeth's Hospital, Appleton Wisconsin.

Like their spiritual founders, the healthcare system's emphasis is on caring for people, with a "promise to provide Personalized Care by listening, treating you with respect and putting your needs and interests first."

Vice President of Performance Excellence Gary Kusnierz saw sustainability as a natural extension of Affinity's origins and promoted the "Pursuit of Perfection" vision wheel, in which all actions revolve around this goal of personalized care. (See illustration below.)

The three components generally regarded as the "pillars" of sustainability are social, environmental and economic and the goal is to balance these optimally. Part of Affinity's interpretation of this concept is termed "Triple Bottom Line" with the components reworked as: People, Planet and Prosperity.



Their efforts so far have garnered them LEED® certification at seven facilities, including two projects within St. Elizabeth Hospital, which to date are the only two LEED® certified hospital sections in Wisconsin. Affinity's hospitals, St. Elizabeth in Appleton and Mercy Medical in Oshkosh, have also been ranked in the top 1% nationwide in terms of quality and efficiency. Affinity has also earned numerous recognitions, in both environmental and in healthcare leadership.

Planning is Paramount

As noted above, a part of the healthcare system's promise is that of listening. "We do a lot of surveys of occupants, both patients and staff," says Kusnierz. They are in the process of setting up an online "suggestion box" for occupants. The flip side to that input is a strong communications effort aimed at educating people on "green" issues, such as medical waste disposal and energy efficient practices. "There's not a lot of rocket science behind it but you're changing people's patterns and asking them to recognize the difference between good and bad practices," Kusnierz notes.

Affinity's current push toward sustainability is the implementation of an online Environment Management System (EMS) that will allow them to track each facility's performance and energy intensity measure (cost of energy per square foot) and benchmark it against like facilities. They can also set up project checklists that are tagged on the energy tracking data screens to determine results of different efficiency measure taken. The goal is to surpass ISO 14001 standards.

Implementation of this EMS is targeting for completion by the end of 2010 and to facilitate the project, a cross-functional sustainability team was assembled with representation from patients, financial staff, O&M staff, etc, so that the efforts are collaborative and no project is undertaken in a vacuum. Again, they do a lot of occupant surveys and use the feedback to, for example, design new areas or renovate existing sites. Kusnierz emphasizes that a lot of work goes into the design phase and energy modeling for best results. "If we use this method and follow the discipline, we can maximize our benefits across the board."

Putting Ideas to Work

Sustainability Team Leader (and recent BOC graduate) Iqbal Mian's original background was in supply chain and operations management, and he wanted to use his expertise in a healthcare setting. He also had an interest in sustainability but realized it entailed understanding the engineering side of operations. To this end, he attends as many building walk-throughs as possible with team members because he finds that "buildings, like people, have their own personalities. We have a very high-energy team who like to get their hands dirty. We learn a lot this way, a lot of it from occupants. Communication is so important."

St. Elizabeth's Hospital is a shining example of Affinity's process, in which they use a three-pronged approach incorporating:

1) evidence-based design, reflecting the exhaustive planning process,

2) sustainable design, reflecting the value placed on environmental stewardship,

3) lean principles, ensuring that time, energy and resources are all used efficiently.

Mian notes that, "Affinity is a very lean organization and runs like a business in that it is not tolerant of waste, knows that this is not always measured in hard dollars and truly recognizes that people come into the equation." A lobby at one of their centers has a huge fish tank, designed to sooth visiting patients in what can be stressful circumstances.

Affinity has five LEED® clinics in the surrounding local cities they service. St. Elizabeth's Hospital has two LEED® projects within the hospital: the Heart, Lung and Vascular Center and the south addition. Following the principles of the three-pronged approach, some highlights of the projects included use of recycled building materials, green plumbing fixtures that reduce water consumption by more than 30%, a vegetative roof, increased natural lighting and a host of green-thinking measures. The organization's energy team also works closely with Wisconsin's Focus on Energy and their utility reps on energy reduction projects for their facilities.

Redefining Efficiency

We tend to think of efficiency as a cut and dried financial calculation, easily measured to dictate action. When thinking of efficiency in terms of sustainability however, it takes on new meaning. The social, economic and environmental spheres that comprise sustainability are truly interdependent. Acknowledging the idea that all three do have their own "bottom lines" is a first step in the right direction.

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