The 16th Annual Dr. Raymond C. Grandon Lecture

May 3, 2007

Patient Safety: The Impact of Facility Design

This year's speaker was John G. Reiling, PhD, MHA, MBA, President and CEO of _Safe by Design_. His message was clear and compelling. "See the harm, think 'human,' and seek techniques and technologies to design around preventing errors."

See the harm. The opportunity for harm in ambulatory and inpatient care is high. There are 15 million events of harm annually. One of 10 drugs administered is incorrect at the point of service and, last year, 90 000 people died of hospital acquired infections – one in 300 admissions.   To appreciate the magnitude of these statistics, compare them to deaths on domestic airline flights (1 in 8 million flights) or the much publicized problem of lost airline luggage (7.5 problems per 1000 passengers).

Think "human."   The Institute of Medicine report, "To Err is Human**,"** acknowledged the fallacy in the belief that good doctors and good nurses do not make mistakes. All humans make mistakes. There are conditions under which mistakes are more likely (e.g., fatigue, noise, multitasking) and there are conditions that can be created to catch mistakes before they cause harm.

Seek techniques and technologies to design around preventing errors.   Fewer patients will be harmed through good hospital design. Facilities, equipment, and technologies to support safety begin with standardization and simplification. Many normal hospital activities – e.g., looking for things in patient rooms and nursing stations that vary from one to another – use up considerable amounts of short-term memory and lead to making errors in more important processes. "Standardization is one of the most effective tools for creating a safe environment."

Across the country, safe design features are being incorporated into new and renovated facilities. Examples include:

- New inpatient facility designs feature a glass-windowed alcove with a computer in each patient room. This allows nurses to complete all tasks pertaining to one patient (e.g., post orders and enter clinical data) within view of that patient and before moving to the next. Studies show that "one-at-a-time" is more efficient and less error prone than "batching."
- Some hospital systems no longer use vinyl coverings on exterior walls because the material attracts infection-causing mold.
- Some facilities have begun to use windows that enclose blinds within the glass to reduce the surface areas that breed germs.

An organization must see harm in order to effect necessary changes. A culture of safety that permeates the entire organization must be created – and facility design makes it concrete.

A panel of Jefferson Faculty members including Cristina G. Cavalieri, Esq. (Vice President and University Counsel), Bruce Metz, PhD (CIO), Christopher Olivia, MD, (CEO, Cooper Health System), and David Reiter, MD, MBA (Facial/Plastic Reconstructive Surgeon, Medical Director, Clinical Effectiveness) reacted to Dr. Reiling's presentation. They raised issues that might impede or prevent a facility-wide implementation of safe design at Jefferson, but they applauded the concept of creating an environment that reduces errors and promotes clinical effectiveness.

Health Policy Forum
Summary Reports

Pennsylvania 2020 Vision
Secretary Nora Dowd Eisenhower
Pennsylvania Department of Aging
March 14, 2007

In 2020, it is estimated that 20% of Pennsylvanians will be over 65 and 20% will be under 18. Secretary Dowd Eisenhower relayed this unusual statistic during her presentation on the Pennsylvania Department of Aging (DOA) and the Pennsylvania 2020 Vision project.

The DOA was created in 1978 to provide a greater focus on issues surrounding the aging population. Under the DOA, the Pharmaceutical Assistance Contract for the Elderly (PACE) program was developed and managed. One of the first of its kind in the country, PACE has been providing income-based assistance for over 20 years. Funding for this and many other Department programs comes from the profits from the PA Lottery. Beyond the prescription

assistance, as a rich data resource, PACE provides important drug detailing information for providers and allows for targeted improvement efforts for doctors.

Long Term Living (LTL) management also comes under the auspices of the DOA. Nearly 80% of PA state dollars for LTL goes toward institutional care, with the remaining 20% spent on care in the home or community. This breakdown is markedly different than that in other states, such as Oregon, which uses only 20% of state funds on institutional care. The Governor has set a goals of balancing these expenditures, using waivers. Additionally, the Governor's LTL Council, consisting of various state departments such as Transportation, Welfare, Health, and Economic Development, is looking at how we can better provide care and allow elderly to live in community settings versus institutions.

Secretary Dowd Eisenhower went into detail about the changing demographics of Pennsylvania residents and described the goal of the Pennsylvania 2020 Vision as being:
1) Assess challenges and opportunities presented by these shifts; and
2) Develop Agency Response Plan (ARP) to plan for programmatic and fiscal impacts of these changes.

To view slides or listen to Secretary's Dowd Eisenhower's presentation in its entirety, please visit: http://www.jefferson.edu/dhp/education_ls.cfm

Strengthening the Mid-Atlantic Region for Tomorrow (SMART)
Bob Carullo
Executive Director, SMART
April 11, 2007

SMART, a grassroots organization that sprung from the technology community in the mid-1990's, pulls together a congressional caucus, the federal executive branch, states and regional technology communities. Currently a 4-state science and technology authority, SMART is working to expand to at least 4 additional states across the nation. SMART has federal budget line items through the Departments of Commerce and Defense.

Recognizing that there are limited national assets for technology, SMART developed its mission: *Integrated collaboration on science and technology issues that lead to regional technology enterprise and intellectual vitality.*

Members of SMART understand that you get out of the organization what you put into it. Its primary purpose is to help facilitate regional solutions for national and international issues. For example, the congressional caucus provides legislative support and can assist in gaining government endorsement for science and technology advancements.

SMART supports a variety of activities including:

- Annual Conventions: Tech Trends, Capital Forums, and SMART PROC (Procurements)
- Technology fairs in local congressional regions.
- Staffer series: quarterly technology topics requested by staffers, e.g., stem cell research
- State-Wide Meetings

For more detailed information on SMART visit: http://www.smartstates.com/
To learn more about the SMART PROC meeting visit: http://www.smartproc.com/