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What Is a *World-Class* Medical Facility?

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The term *world class* is often used in service and retail industries, athletic competition, and other non–health care settings to describe exceptionally good service or outstanding performance. Being characterized as *world class* is a high distinction accorded to an elite few and is generally taken to mean that one has achieved a level of performance excellence that ranks among the very best in the world.

The term *world class* has been increasingly used in health care in recent years, although in most such instances this has been a self-designation made on the basis of unspecified criteria. For example, a recent Internet search of the terms *world-class health care* and *world-class medical center* found more than 100 health care organizations marketing their services as *world class*, but very few offering any specifications to support the claim. Similarly, in opposing national health care reform legislation, 3 former presidents of the American Medical Association stated that "Most Americans live within an hour's drive of a world-class medical facility,"[1] but provided no explanation of what is a *world-class medical facility*. Likewise, in describing the Joint Pathology Center that will replace the famed Armed Forces Institute of Pathology, the Department of Defense states that it will be a *world-class* institution,[2,3] but provides no functional explanation of what this means.

Defining World-Class Medical Facility

Care for military personnel located in and around the nation's capital has long been provided by the Walter Reed Army Medical Center and the National Naval Medical Center. In 2005, the Base Realignment and Closure Commission (BRAC) mandated consolidation of these 2 institutions into a new Walter Reed National Military Medical Center that would be constructed on the grounds of the National Naval Medical Center in Bethesda, Maryland.[2] This new medical facility is intended to provide a continuum of primary to tertiary care for active duty and retired military personnel and their families living in the National Capital Region (NCR)—the geographic area that includes Washington, DC, adjoining areas of Virginia and Maryland, and portions of West Virginia, New Jersey, and Pennsylvania—as well as comprehensive care for wounded military personnel returning from combat overseas.

In authorizing funding for the new Walter Reed National Military Medical Center and a new military community hospital at Fort Belvoir in Virginia, the Congress directed that they be designed and constructed to be *world-class medical facilities*,[4] although no operational specifications were provided that would ensure accountability for the use of the appropriated public funds—some $2.5 billion so far. Based on reports that these new facilities were not being designed and constructed to be *world class*, the Congress mandated that an independent review be conducted of their design plans.[4] The NCR BRAC Health Systems Advisory Subcommittee (HSAS) of the Defense Health Board, augmented with health care facility architects and other subject matter experts, was charged with completing this independent review.[5] The Defense Health Board is the official external advisory body for health-related matters for the Department of Defense, and the NCR BRAC HSAS had been previously established to advise the Department of Defense about the creation of a joint armed forces integrated delivery system to serve active duty and retired military personnel and their dependents in the NCR.

Because no recognized entity had defined *world-class medical facility*, the NCR BRAC HSAS needed to develop an operational definition that could be used to objectively assess the plans for the new military medical centers. In developing its definition, the NCR BRAC HSAS interpreted *medical facility* to mean the totality of the physical environment; the processes and practices of providing care; the diagnostic, treatment, and other technologies used; the adequacy, expertise, and morale of the staff; and the organizational culture.[5] Because the Congressionally mandated review focused primarily on the design and construction of the facilities' physical environment, the committee's definition required criteria that

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specifically addressed facility architecture and design characteristics linked to health care outcomes. The committee first looked to existing multidimensional approaches to defining performance excellence (eg, the Malcolm Baldrige Award for Quality) but found none that sufficiently addressed facility structural architecture as well as care processes, staffing, leadership, and other performance factors. The committee also took the position that the term *world class* should be reserved for performance that is truly exceptional based on meeting measurable performance specifications.

Much has been learned over the past 3 decades about the importance of the physical environment of health care. Structural design significantly affects the efficiency of making correct and timely diagnoses and the ease of administering treatment; the occurrence of hospital-acquired infections, medical errors, worksite injuries, and resource wastage; and the creation of a healing milieu.[6-8] Combined with the organization's social support systems and culture, a facility's physical environment also significantly influences the attitude and morale of patients, families, and health care workers; staff satisfaction and turnover; and the overall effectiveness of the health care team.[9,10]

The committee concluded that the Walter Reed National Military Medical Center was not being designed to be a *world-class medical facility*, despite the diligent efforts of many individuals and substantial expenditure of public funds, and offered multiple suggestions for how the goal might be achieved.[5] Design of the Fort Belvoir Community Hospital was found to be much closer to achieving the Congressional intent.[5]

Achieving World-Class Health Care?

Achieving *world-class* performance is a commonly stated goal, but one that is uncommonly reached. Achieving *world-class* performance is very hard, requiring a clear vision, unwavering commitment, perseverance, and consistent performance at the upper limit of what has been demonstrated to be possible.

Achieving *world-class* excellence in health care requires doing many things exceptionally well, including applying evidence-based facility design principles; utilizing state-of-the-art processes and the latest advances in the biomedical, informatics, and engineering sciences; using the most appropriate technologies in an easily accessible and safe healing environment; employing the right number of well-trained, competent, and compassionate caregivers who are attuned to patients' and their families' culture, life experience, and individual needs; providing care in the most condition-appropriate setting; and having pragmatic but visionary leadership.

Many of the architectural design characteristics, care practices, and other organizational processes required for a medical facility to achieve a level of health care performance excellence that would qualify as being *world class* in other settings can be objectively described and specified. The NCR BRAC HSAS organized these specifications into 18 categories within 6 domains.[5] These specifications provide a detailed yardstick for assessing a health care organization's claim of providing *world-class* health care, as well as a strategic framework for those aspiring to achieve this level of excellence. These specifications were recently codified into federal law.[11] Of note, these specifications may require modification when appropriate to an organization's mission. For example, a *world-class* cancer or pediatric center may provide services in fewer specialties and subspecialties and not use all the same technologies as a *world-class* general acute care hospital, or a *world-class* community hospital may be engaged in relatively fewer scholarly activities than a *world-class* academic medical center.

Importantly, however, achieving a level of performance that would qualify health care to be *world class* requires more than just implementing the specifications detailed by the NCR BRAC HSAS.[5] These things are necessary, but they are not sufficient. A substantial part of achieving health care excellence that would qualify as being *world class* derives from a facility's "invisible architecture"—that is, its values, culture, and emotional climate. This invisible architecture constitutes the soul of the organization and is what catalyzes the synergies between and among the physicians, nurses, and other staff and the facility's physical environment and technology that drives it to achieve *world-class* excellence. The elements of this invisible architecture are not well measured with currently available methods, but their manifestations can be described in qualitative terms.

World-class health care is achieved by going above and beyond compliance with professional, accreditation, and certification standards to bring the best of the art and science of medicine together in a focused effort to meet the physical, mental, social, and spiritual needs of the patient. *World-class* health care is achieved when highly skilled professionals work together as practiced teams with precision, passion, and a palpable commitment to excellence within an environment of inquiry and discovery that creates an ambience that inspires trust and communicates confidence. *World-class* health care is achieved by routinely performing at the theoretical limit of what is possible and consistently and predictably delivering high-quality care and optimal treatment outcomes at a reasonable cost to the patient and society. *World-class* health care routinely envisions what could be and goes beyond the best known practices to advance the frontiers of knowledge and pioneer improved processes of care so that the extraordinary becomes ordinary and the exceptional routine.

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