

Design Criteria for establishing the minimum building footprint for the Lawrence Hospital Cancer Center Addition

The space requirements for the proposed Operating Rooms relocation on the second floor of the Lawrence Hospital Cancer Center Addition are the primary factors responsible for determining the building footprint within the available project site area. The original space planning for Radiation and Medical Oncology was adjusted to adhere to the more restrictive Surgery requirements.

The current operating rooms at Lawrence Hospital Center were constructed in the 1950's and have served the hospital well for over 50 years. However, the size and condition of the current surgery suite is less than adequate for industry standards and patient safety. Procedure outcomes and department performance are at greater than acceptable risk, and thus it is imperative that they be upgraded to accommodate today's needs and future needs. Due to limited infrastructure and space within the existing facility, Lawrence Hospital Center determined to upgrade the size and conditions of the six operating rooms by relocating them to the 2nd Floor of the proposed Cancer Center Addition. The 2nd Floor of the new addition will be at the same floor elevation as the existing surgery department, but will allow for the required floor areas as well as the higher ceilings necessary to accommodate updated surgery equipment.

Effective January 1, 2011 the State of New York adopted the 2010 Edition of the Guidelines for Design and Construction of Health Care Facilities published by the Facility Guidelines Institute. *Section 2.2-3.3 Surgical Services* and its subsections govern the size and condition requirements for operating rooms, staff support spaces and storage areas. The hospital determined the best use of its resources would be for each of the six operating rooms to have the capability to accommodate any procedure type, including orthopedic, and neurological; therefore, the minimum size requirement for each operating room must have a minimum clear floor area of 600 square feet (*Subsection 2.2-3.3.2.2 (1)*). The flexibility to perform scheduled and emergency cases in any of the new rooms will ensure improved patient safety, procedure outcomes and department performance.

Subsection 2.2-3.3.7 Support Areas for Staff identifies the size and conditions for the staff lounges, lockers, showers, toilets, hand-washing stations, and spaces for donning surgical attire. These areas shall be designed to provide a one-way traffic pattern so that personnel entering from outside the surgical suite can change and move directly into the surgical suite. Therefore, these spaces are required to be included in the new addition.

Likewise, *Subsections 2.2-3.3.2.2 (3) Equipment Storage Rooms, 2.2-3.3.2.3 Additional requirements for Orthopedic Surgery, 2.2-3.3.6.5 Scrub Facilities, and 2.2-3.3.6.14 Substerile room* requires each of these spaces to be adjacent or near the operating rooms.

Subsection 3.7-7.2.2.1 requires the corridors used to transport patients on gurneys to the operating rooms shall have a minimum width of 8 feet.

Providing each of the areas noted above within the available site area established the size and configuration of the proposed Cancer Center Addition. The area required for the 2nd Floor Operating Rooms relocation allowed space on the Basement Floor of the proposed addition for a future linear accelerator to be allocated adjacent to the one currently planned. Designing and building this space now will minimize professional and construction costs and disruption of services in the future.