

Trends in the Design and Construction of Urgent Care Centers

By John Duggan and Marc Margulies, AIA LEED AP

Healthcare costs are of great concern to all those who bemoan their ever-increasing payroll deductions, but they are of no less concern to the insurance companies and capitated clinics that must cover those costs. Emergency department (ED) coverage constitutes a large percentage of the average monthly insurance premium, so reducing the ED expense could have significant cost-saving benefits. Fifty-five percent of visits to emergency departments are for routine care or minor medical problems (i.e., not potentially life-threatening conditions); the cost of those visits is greatly influenced by the fixed overhead costs associated with 24/7 maintenance of staff and resources in a hospital environment. The urgent care center (UCC) can provide lower cost (estimated at one-sixth to one-third of the ED cost) and more readily accessible care by qualified but less specialized medical personnel. This is the rationale behind the nationwide effort to build new urgent care centers.

There are several factors in the design and construction of new UCCs that influence their site selection, cost of construction and operational efficiency:

Site Selection

Because UCCs are intended to be open at least 12 hours per day, seven days per week, the location must be able to accept the traffic, lighting, signage and parking for staff, patients and emergency vehicles. On urban or hospital campuses, there is a trend for the UCC to be near but distinct from the ED, with signage clearly designed to attract ambulatory, low-acuity clients but likewise redirect the more severely medically needy toward ED triage.

Perhaps most important, the UCC location should be convenient to the intended

demographic. A major attraction of the UCC is its accessibility to patients after hours, and ideally the user population becomes accustomed to going there for all their healthcare needs when consistently seeing the same physician is not essential. There is also a balance between larger facilities with more capabilities and smaller, more decentralized locations. The most common site size thus has evolved into one that can comfortably accommodate about 15 patients at a time. With four to six exam rooms; two procedure rooms; and the associated offices, radiology and support spaces, this becomes a facility of 4,000-5,000 square feet.

Cost of Construction

The "AIA Guidelines for the Design and Construction of Health Care Facilities" section 3.5 sets the standard for freestanding urgent care facilities, and often becomes the de facto standard for public health agencies as well. Sizes of rooms; adjacencies; heating, ventilating and air-conditioning standards; dimensions of components; and acoustic and visual privacy requirements are all specified. Given this highly prescriptive and regulated format, the opportunities for cost containment come less from "value engineering" the space program than from attention to the details of construction management and equipment procurement. Equipment, furniture, furnishings and medical technology have become more componentized. This means that rather than field-constructing traditional millwork, storage units or pharmaceutical storage/dispensing systems, facilities can purchase and install them as units. A higher degree of quality control and flexibility can be achieved, and the procurement process can be more transparent.

Two medical trends that affect building

cost are the increase in the use of electronic technologies and the heightened sensitivity to infection control. Given that testing, monitoring and recording equipment is increasingly networked and portable records management is more the norm, well-planned and ubiquitous network jacks connected to the local area network (LAN) are essential to the future success of a UCC. Eventually this capability will be done wirelessly, but in the meantime it is important for flexibility and functionality that a robust IT infrastructure is in place.

The second trend with cost consequences is the increased concern over regular hand washing. Studies have proven that frequent hand washing is one of the most effective means of preventing the spread of disease, so UCCs must have a full network of sinks throughout the facility. Sinks must be in each exam and procedure room, in soiled utility storage areas, in the staff lounge, and in equipment cleaning areas. The cost of the associated plumbing can be substantial, particularly for existing single-story slab-on-grade conditions, but the health benefits are indisputable.

Operational Efficiency

While managing the cost of construction is always an important part of the success of any new project, the cost of staffing a UCC is 15-20 times the real estate cost. Designing the space in a way that reduces the number of staff required and increases the quantity and quality of care delivered will have enormous impact on the profitability of the operation. The first step is for the processes and procedures, both medical and financial, to be clearly identified prior to beginning design. Who will be responsible for admitting, recording payment/reimbursement information, or referring? What medical capabilities are avail-

able at the UCC and which are not? What imaging is available on-site? What are the lab procedures?

Unlike hospital EDs, UCCs may have the ability to be selective about their client base. If they are associated with a subscriber network, they may have the benefit of an electronic medical records database that gives immediate access to their patients' medical histories from any room. This can eliminate the wasted time, personnel and space associated with accessing, filing and storing the physical medical records either on-site or at a remote location.

Once again, there are two trends that can positively impact ongoing operational efficiency. The first is the search for efficient staffing of the reception/control/triage function. With proper visibility and the ability

to interview patients with an appropriate level of confidentiality, the admitting nurse can serve several functions simultaneously when it's less busy. Eliminating any non-essential staff can yield worthwhile economies, and this may well be possible as the result of carefully considered space planning.

The second trend involves the intent to reduce the amount of travel needed for nurses, PAs, NPs or physicians to perform effectively. Hospital designers have long understood the value to the ICU of a central nursing station ringed by patient rooms, in terms not only of the immediacy of available care but because of the reduction in travel time and distance. Likewise in the UCC, for clinicians on their feet all day long, a hub-and-spoke concept is far preferable to a more linear layout. A circulation

path that welcomes patients from reception/check-in to an exam room, and through treatment to checkout, is an example of one way to efficiently treat patients and staff alike.

The UCC cannot replace the ED, but it can offer a more family-friendly environment to many who do not need or want the intensity of care offered by an ED. Assuming we won't be returning to the practice of doctors making house calls, we should be planning to build more urgent care centers as an important component of our national healthcare delivery strategy. **FC**

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QUIZ BOX

SELF-TEST TRUE OR FALSE

- 1** A UCC can offer lower cost of about one-sixth to one-third of an ED's cost.
- 2** The intended hours of a UCC are 24 hours a day, seven days a week.
- 3** The most important factor when choosing a location is that it is visible to highly traveled roads.
- 4** Two medical trends affecting building costs are use of electronic technologies and heightened sensitivity to infection control.
- 5** The first step in reducing the staffing cost of a UCC is to outline processes and procedures.

ANSWERS:
1. True 2. False 3. False 4. True 5. True

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