



# MANAGING MAINTENANCE

COSTS ANYTHING BUT ROUTINE **By Phil Giuntoli**

**A**pppearance matters. In healthcare, people often form judgments based on the cleanliness of the facility.

Obviously, cost matters too. Healthcare providers want to operate clean, well-maintained facilities, and they want to limit what they spend to keep chairs stain-free, carpets looking fresh and light bulbs working, especially in this economy. Additionally, the less the furniture, flooring and fixtures cost to purchase and install, the better.

Despite the initial cost concerns, maintenance is seldom the focal point of a design discussion, even if it is an important consideration. Energy use, green design and sustainability have received a lot of attention, but maintenance issues go far beyond compact fluorescent light bulbs. Cost, functionality and facility presentation all are factors to be addressed

when designing a maintenance-friendly building that meets the needs of today's healthcare consumer and provider.

## Designing on budget

Routine, daily environmental facility maintenance is important, but it represents just one-third of the upkeep cost equation. Long-term durability and operational considerations also factor into keeping a facility tidy and making a strong first and lasting impression.

Keeping the carpets vacuumed, garbage empty, and the hard and soft surfaces free from spills and stains are the most commonly thought of maintenance tasks and costs. Those fundamental activities are so commonplace that they go unnoticed until neglected.

More than just a nuisance, however, inattention directly impacts the bottom line. Shabby is definitely not chic in healthcare. In fact, quite the opposite is

**Above: Virginia Mason Clinic**

**Opposite page: Virginia Mason Breast imaging reception.**

true as tattered and worn often leads to questions about reputation and quality.

Even so, maintaining an orderly facility is not cheap, and inefficiencies often drive up costs. Some maintenance expense can be mitigated through design. Choosing materials that look good and are easy to clean reduces costs related to staff time and cleaning supplies.

How the space will be used is another important consideration. High-traffic areas such as lobbies and other common spaces may require durable, easy-to-clean materials that are unnecessary in other places within the facility. Carpet tile in high-traffic areas more easily will correct some of the problems associated with wear patterns. Spaces subjected to exposure from the outside elements — wet, snowy weather in the fall and winter, rising temperatures in the spring and summer — also impact facility upkeep.

Long-term durability becomes the next consideration. Limiting wear-and-tear requires upfront consideration and sometimes investment in wall protection and corner guards.

So, the first consideration is determining how long the facility needs to last. Build-to-suit leased space generally has a much shorter life expectancy than wholly-owned new construction. Based on this, equipment and materials can be selected to match expected use and life cycle.

Weigh short-term implementation costs against long-term maintenance expenses. The longer the useful life, the more sense it makes to invest in materials that reduce the burden of ongoing care and upkeep. Conversely, shorter-term leases can make taking on upfront costs less attractive if the return is only a few years of reduced monthly expenses.

Regardless of a facility's useful life, minimizing capital investment is essential as long as it is not to the detriment of the facility. Ongoing operational outlays for replacement parts, materials storage, and increased liability exposure caused by infection and other concerns can

quickly erode cost savings before they are ever realized.

Investing in efficiency has a long-term, life-cycle payoff. Well-planned facility maintenance that considers daily durability and operational costs reduces staff time and saves money.

### **Know your people resources**

Staff knowledge should be inventoried along with other resources. This includes understanding the collective staff experience in connection with various materials being considered for the facility and evaluating exposure to different facility designs and sophisticated systems.

Well-designed systems match facility needs and staff expertise. Facilities that run the most smoothly and effectively align closely to staff capabilities.

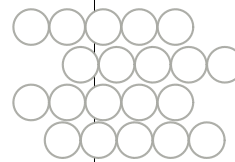
Technological expertise is a great example. Off-the-shelf solutions are sometimes better than fancy, customized options in cases where staff experience is not very deep in operating and maintaining complicated equipment.

Additional training costs to implement and run the newest solutions can offset cost benefits. Sometimes the decision comes down to a question of what gets the job done in the most efficient, cost-effective and easy-to-use manner. Control systems are an example of solutions with a wide variability in capability, cost and outcome. Selection of these systems must address need, compatibility and life-cycle cost implications.

Practical applications also should not be overlooked. Ideally, maintenance fades into the background of everyday activity. New maintenance-friendly design elements are working to make that happen by improving how simple tasks like changing a furnace filter is done, the focus of a current design trend.

Architects are looking at ways to simplify HVAC maintenance by removing

interstitial floors in favor of mechanical closets. In addition to easier access, activities like changing furnace filters can be done without climbing a ladder and much more unobtrusively during regular business hours. Staffing flexibility, time savings and reduced liability are among the potential benefits.



### **Patient psychology matters**

Facility size, scale and sophistication are secondary to immediate surroundings. Patients expect tidiness in healthcare facilities. While this does not mean sterile and antiseptic, it does imply attention and care.

Healing has a mental and emotional component. Cleanliness and order feeds patient confidence that the facility is paying attention to details. Whether fact or perception, the details matter to patients and their families.

Impressions are formed at the front door, so the evaluation begins in the lobby and continues throughout the building. Waiting area furniture, flooring, paint and reception workstations each appeal to patient senses. Corridors, patient rooms and equipment are under constant assessment.

Inviting, well-kept common areas can help ease a patient's uneasiness in much the same way tired, dingy walls, floors and furniture get the heart and mind racing before people even see the doctor. Patients

spend a lot of time waiting — to check in, to be shown to their rooms, and to be seen by a physician — leaving plenty of time to inspect their surroundings.

How a facility is designed directly influences patient impressions and can go a long way in allaying these issues. Plentiful natural light, organized corridors, welcoming lobbies, well-thought-out waiting areas, and the use of materials that keep their newness longer are the products of design. A well-programmed facility is a pleasant experience, translating to a better patient experience, staff efficiencies and operational improvement.

### Pairing form and function

Building durable design into aesthetic appeal is the goal. Long-lasting does not have to mean an institutional look and vice versa.

Thoughtful design elements can be used to improve durability. The best introduce a level of functionality through innovative layout and clever materials selection without being obvious about serviceability.

Healthcare facilities need to be refreshed about every 10 years at a minimum. Sometimes simple can go a long way. Things like wainscoting can refresh an existing facility beginning to show its age and enhance its aesthetic appeal without the expense of repainting an entire corridor.

Similarly, disguised maintenance functions create an environment that is less mechanical and more easy to use. Maintenance safeguards should be made integral design elements instead of armor applied after the fact.

### Remember the specialized

Stringent policies and standards often dictate maintenance requirements. While rigid, those regulations only provide the framework for basic functionality. There still often is room for smart, maintenance-friendly design and efficiency.



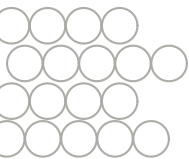
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Patient care and lab spaces contain sophisticated equipment and require meticulous attention to cleanliness and maintenance. Although these spaces typically carry some of the toughest restrictions, the rules for patient perceptions still apply. Even lab settings, where patients likely will never enter, are often viewable from common spaces.

Careful upfront consideration of specialized requirements makes for better, more efficient design. Efficiency is intentional and only as good as the planning that goes into it.

Maintenance costs go far beyond a line-item expense. They relate directly to facility perception and ultimately reputation, something everyone — healthcare providers included — has to protect. Design can be an able partner in improving patient, staff and visitor experience. In fact, by using the right materials, programming properly and keeping facility life cycle in mind, design can be the way all of this is best accomplished.

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**Right: The patient lab at Virginia Mason Clinic.**