As hospitals and health systems emerge from the pandemic, many organizations are considering permanent design and engineering changes to help prepare for future crises. Some key review processes that began during the pandemic should continue, say respondents of the American Society for Health Care Engineering’s 2020 COVID Response Tactics Sharing survey report. Among them are:

- Reexamining surge capabilities.
- Creating more flexible patient care spaces.
- Reconsidering patient flow and separation.
- Designing flexible air-handling systems.
- Increasing personal protective equipment and hand-washing stations.

At the same time, ongoing market shifts in how and where care is delivered will require careful consideration. With lower-acuity care increasingly moving to outpatient settings and surgery centers and the rise in retail clinics and virtual care services, there will be significant ramifications for acute care and specialty hospitals.

Many of these facilities will require more acuity-adaptable patient rooms and increased attention to the way operating room designs and workflows impact throughput as acute care hospitals increasingly shift to caring for the sickest of the sick.
Strategies to make health care spaces safer in the face of anticipated future growth in infectious diseases also will need close attention, including the selection of and caring for interior surfaces and finishes and their potential susceptibility to harboring bacteria and ways to restrict building access points in a crisis.

Effective communication and input from facility management leaders during decision-making are also critical to this effort as organizations examine surge planning, optimizing the use of limited resources and avoiding complications during a crisis. It takes a team of facilities leaders to fully assess the downstream impact of any planned changes to patient care areas, particularly where airflows are concerned. Organizations should aim to have structured, regularly occurring, bidirectional communication between these groups and consider cross-training and official collaborations to capitalize on lessons learned and strengthen team building.

These and other steps can inform current or future renovations and new construction to better protect patients, visitors and staff and avoid overdesign and overspending.

Discussion Questions:

1. What changes made to facilities during the pandemic are likely to carry over or be incorporated into future renovation and new construction projects?

2. What has the pandemic taught us about safely operating facilities, mitigating the spread of infectious disease and optimizing clinical spaces during prolonged surge conditions?

3. Sudden patient surges during a crisis can challenge capacity in EDs, ICUs, acute care rooms and hospital labs. Spaces that can be flexed for other uses also often are at a premium. How can strategic partnership service agreements and design options such as modular construction give hospitals and health systems greater ability to respond in a crisis?

4. How does the continuing shift of care to lower-acuity and virtual settings impact facility planning for existing buildings? What are the implications for future renovation and new construction projects?