

# Sustainability in the Environment of Care®

KEEPING PATIENTS SAFE THROUGH CONTINUOUS  
FACILITY IMPROVEMENT



Today’s health care infrastructure in the United States is aging, costly to maintain and, in many cases, ill equipped to provide safe patient care.

In 2015, the “age of plant” — a financial ratio that measures infrastructure condition — for an average hospital in the United States was about 11.3 years old, according to a recent study in HFM magazine.<sup>1</sup>

Meanwhile, in 1994, the average age of a hospital in the United States was 8.6 years old.<sup>2</sup> This increase in the average age of plant over the past two decades shows that many hospitals have struggled to keep their facilities up to date.

“The infrastructure of U.S. health care is not in critical condition, but it is aging,” the study’s authors wrote. “As with anything that ages, it takes more resources to keep existing facilities in top working order.”

## SURVEY

### Top issues facing U.S. hospital executives<sup>3</sup>

- ① Financial challenges
- ② Governmental mandates
- ③ Patient safety and quality
- ④ Personnel shortages
- ⑤ Behavioral health/addiction issues
- ⑥ Patient satisfaction
- ⑦ Access to care
- ⑧ Physician-hospital relations
- ⑨ Technology
- ⑩ Population health management

Complicating matters, the resources necessary to make these improvements are increasingly scarce: Financial challenges are the No. 1 issue facing U.S. hospitals and health systems, according to a recent survey by the American College of Healthcare Executives.<sup>4</sup> And governmental mandates — including compliance with the Centers for Medicare & Medicaid Services’ Life Safety Code & Health Care Facilities Code Requirements — are the No. 2 issue on the minds of the nation’s hospital executives, the survey showed.<sup>5</sup>

Proactively identifying and remedying issues are the key factors in maintaining quality and safety, ensuring compliance and lowering costs amid today’s aging health care infrastructure. Creating a safe, functional and supportive environment for patients, visitors and staff, however, is not simply preparing for various accreditation or regulatory surveys; it’s building a culture of continuous readiness and instituting ongoing improvement efforts that achieve long-term sustainability in the environment of care (EOC).

### PROVIDERS FACE EOC ISSUES, BIG AND SMALL

Today, simply keeping track of all the regulatory and maintenance-related requirements of everything within a hospital — including life safety and fire compliance, critical infrastructure and health care-specific equipment — can itself be overwhelming for operations staff. Even more, with limited resources set aside for building maintenance, prioritizing these projects often means making the least-worst choice. Common issues faced by operations staff include:

- **Changing communities:** Hospitals are facing issues related to changing populations and patient needs, from the kinds of patients they serve to site-specific concerns.

One development is the growing demand for behavioral health services. While hospitals are beginning to convert vacant spaces into behavioral health units, many of these spaces are not equipped to provide behavioral health care. Facilities are spending millions of dollars converting these spaces to accommodate behavioral health patients and often require assistance with compliance-related issues.

Another change is that facilities are seeing an increased number of patients of size. Accommodating these patients requires ordering new hospital beds, wheelchairs and patient lifts as well as creating larger spaces and elevator entries.

Hospitals also are experiencing increased issues with violence. Many facilities do not have active shooter and workplace violence drills or security systems designed to monitor and prevent violence.

- **Advancements in technology:** New technology such as MRIs, hybrid ORs and CTs are becoming necessary to create a competitive advantage, but rooms must be large enough to house this technology. This new equipment also impacts facility power structures as well as temperature and humidity requirements, so procedures must be in place to account for changes related to new technology.
- **Aging facilities:** Health care facilities are getting older, and so are the generators, boilers, pumps, air handlers and other EOC-related equipment housed within their walls. While this equipment may still be viable, maintaining service poses numerous obstacles.
- **Aging workforce:** Current facilities managers are retiring, and the transfer of knowledge is not always present. While

hospitals are hiring qualified engineers, these individuals, in many cases, are not coming from the health care industry and may not be familiar with health care-specific challenges and requirements.

- **Disconnected departments:** Health care organizations often act within silos, and this means clinical staff may not be kept abreast of physical infrastructure changes and best practices. There is a direct link between physical environment and quality of care, and it is not possible to deliver consistent, high-quality patient care without maintaining a facility's environment.

## JCR : HELPING PROVIDERS NAVIGATE EOC CHALLENGES

Joint Commission Resources (JCR) helps hospitals and health systems create and sustain an environment fully supportive of their clinical excellence goals. JCR also helps providers navigate increasingly complex federal, state and local regulations that make it increasingly difficult, expensive and time consuming to be in compliance.

JCR is an expert resource for health care organizations, providing advisory services, software, educational services and publications to assist in improving quality and safety.

The Environment of Care & Life Safety chapters of The Joint Commission's accreditation manual contain more regulations than any other chapter in the publication. It's important to be proactive in addressing these regulations, rather than having noncompliant findings that can lead to excruciating organizational pain and excessive costs to get back into compliance during the

60-day resolution timeframe of an accreditation survey. It is not uncommon to see hospitals spend tens of thousands of dollars coming back into compliance. In one instance a 350-bed hospital had to spend over \$4 million to re-establish compliance during the 60 days.

JCR provides the ongoing support a hospital or health system needs to create and sustain its EOC program. A long-term relationship with JCR can help providers:

- Evaluate their facility’s Environment of Care & Life Safety program
- Conduct regular building assessments to help identify areas of noncompliance
- Develop and execute plans for improvement
- Identify best practice strategies and help eliminate barriers
- Standardize best practices throughout an entire health system
- Build and use dashboards to identify risk and best practices across a health system
- Become proficient in all areas of Environment of Care & Life Safety standards and stay current on all Joint Commission updates
- Ensure new facilities managers are up to speed in their role; and
- Bridge the gap between the EOC and the clinical team

JCR’s continuous improvement program provides several sustainable solutions to The Joint Commission’s most challenging standards:

- A comprehensive Environment of Care & Life Safety assessment of all buildings within an organization to assess compliance with Joint Commission standards, which results in an

action plan with a detailed report listing the prioritized deficiencies, recommendations and opportunities for improvement

- Ongoing support regarding implementation strategies and recommendations for remediating deficiencies
- Quarterly conference calls with the health system’s EOC team and accreditation department and JCR’s Environment of Care & Life Safety and clinical experts to bridge the gap between patient safety and an appropriate environment; and
- A license to Tracers with AMP® and its mobile app to track deficiencies and identify trends through customizable dashboards to help guide next steps and help maintain continuous compliance

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*“Compliance with the environment of care chapter takes an army. It’s a big job, and EC is the one chapter every single person who works for or visits the facility can positively or negatively impact. The JCR EC Sustainability program was designed to help HCOs build a culture where all employees understand and participate in the EC. This participation becomes that army which proactively helps achieve continuous compliance. The good news is this proactive approach capitalizes on reducing the high cost of being reactive.”*

Lisa Hardesty, MA, CHSP, CFI, Principal EOC Consultant, Joint Commission Resources

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## JCR ENVIRONMENT OF CARE & LIFE SAFETY ADVISORY SERVICES: HELPING PROVIDERS DELIVER HIGH-QUALITY PATIENT CARE

With the arrival of new payment models, additional regulations and rapid growth, the world of health care is becoming more complex. Hospitals and health systems also are faced with increasing pressure to improve operational and financial performance while delivering top-quality health care. To reach this elevated performance level while maintaining the focus on healing patients, providers must respond quickly to regulatory change and more effectively manage risks. JCR works with over 200 organizations annually to provide assistance in this ever-changing health care environment to help them deliver the best patient care possible. Here are a few examples of how we do it:

- **Keeping operating room air clean**

Air balance can be a potential hazard in operating rooms, which require a certain number of air changes per hour and pressurization to maintain a sterile field. Older buildings and aging equipment also may complicate these efforts. JCR will evaluate your compliance with ventilation and air quality requirements during building tours to make sure operating room equipment is properly maintained and systems are correctly engineered.

- **Maintaining medical gas systems**

Whether it's for direct patient care or to drive medical equipment, piped gas including medical gas, and vacuum systems need attention. Failure to properly maintain and test these systems and

their components (area alarms, automatic pressure switches, shutoff valves, flexible connectors and outlets) is a common Joint Commission deficiency during survey. JCR will evaluate your medical gas systems during documentation review and the building tour to help you identify noncompliance and help the hospital to create corrective action plans that are sustainable over time.

- **Inventorying equipment and service requirements**

Utility systems are extremely important when it comes to delivering safe and reliable care to patients in hospitals. When they're managed efficiently, the hospital's ability to care for patients is maximized. But when problems occur, there can be severe consequences for the environment. Working with JCR to evaluate processes related to inventory inclusion and maintenance strategies can help your organization manage this risk.

- **Ensuring interim life safety measures**

Unlike the occupants of most commercial buildings, health care workers must defend in place in the event of a fire. Construction projects often temporarily disrupt alarm or sprinkler systems and may pose significant challenges to patient and staff safety. JCR works with a facility's operations team to help them develop strategies to manage these risks until a construction project is complete.

- **Preventing airborne contaminants**

Biological agents (bacteria, viruses and mold), as well as gases, fumes and construction-related dust, are considered airborne contaminants. Preventing their spread requires ventilation equipment such as HVAC systems. The goal for HVAC in infection

prevention is to provide filtration, adequate pressure relationships and air exchange rates. JCR works with a hospital's facilities services and infection prevention departments to evaluate and help them to create policies, addressing special ventilation and air quality parameters for critical spaces.

- **Preventing waterborne pathogens**


Hospitals are required to manage waterborne pathogens such as Legionnaires' disease. These pathogens may be found in the following utility components: cooling towers, air-handling units, potable hot/cold water systems as well as aerosolizing water systems such as showers, humidifiers and fountains. JCR works with facility services and infection prevention departments to evaluate and help conduct a risk assessment to help the organization identify areas that are most susceptible to waterborne pathogens.

## LEARN MORE

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**Interested in learning more about how JCR can improve sustainability in your EOC? [Let's talk.](#)**

JCR provides advisory services, software, educational services and publications to assist you in improving your quality and safety and to help in meeting the accreditation standards of The Joint Commission.

For more information about our EOC services, **[click here.](#)** 

*The use of Joint Commission Resources consultative technical or advisory services is not necessary to obtain a Joint Commission Accreditation award, nor does it influence the granting of such awards.*

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<sup>1</sup> <https://www.hfmmagazine.com/articles/3239-a-closer-look-at-infrastructure>

<sup>2</sup> Ibid.

<sup>3</sup> <https://www.ache.org/about-ache/news-and-awards/news-releases/top-issues-confronting-hospitals-in-2018>

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.