

OVERCOMING A CHALLENGING JOINT COMMISSION REQUIREMENT

PresSura™ Room Pressure Products Case Study #1

The Background:

In 2014, 53% of hospitals surveyed by the Joint Commission were cited for violation of Standard EC 02.05.01 EP15 - Utility Systems (Ventilation). In many cases, the citations were issued because the facility's ventilation system is unable to provide appropriate pressure relationships, air exchange rates and filtration efficiencies.¹ Violations of this standard have increased annually from 23% in 2011², signaling a heightened Joint Commission focus on airborne contamination and monitoring in healthcare facilities.

The Problem:

In preparation for an upcoming Joint Commission survey, and continuously looking for ways to increase the safety of their facilities, a large Midwest healthcare network decided to investigate ways to improve pressure monitoring in critical environments such as operating rooms, isolation rooms and sterile processing rooms at one of their Missouri hospitals.

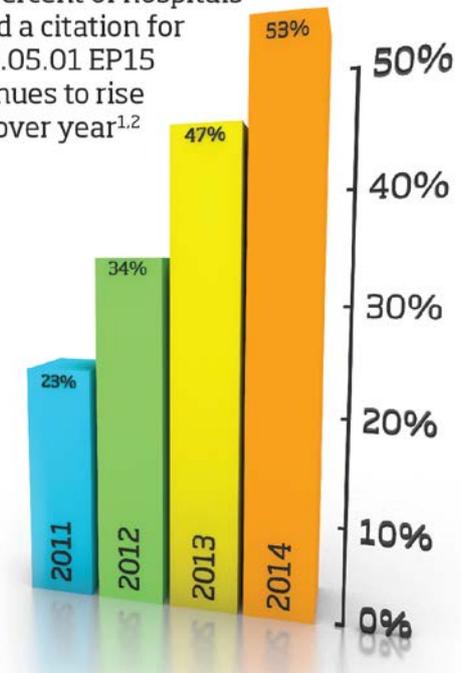
"I did have documentation that we had them (OR rooms, negative pressure rooms) tested annually, but really that is not what they (Joint Commission) are looking for right now. They really want to know that you are taking care of this and looking at it on a regular basis."

– Manager of Plant Operations³

Historically, the hospital addressed the standard through an annual HVAC test and balance performed by a third party.

ON THE RISE

The percent of hospitals issued a citation for EC 02.05.01 EP15 continues to rise year over year^{1,2}



However, to meet a more rigid Joint Commission inspection, they needed to find a system that allowed continuous pressure differential monitoring, while keeping cost and ease of installation in mind. The solution also needed to allow the facilities staff to make configurations onsite. Finally, knowing that medical staff would be key participants in monitoring room status, the solution had to be straightforward with clear warnings when room conditions were out of compliance.



The Solution:

The hospital's Manager of Plant Operations first looked at solutions offered by the hospital's current building automation system provider; however the solution was cost-prohibitive. In addition, future programming needed to be handled by the supplier or third-party, creating additional expense and unneeded delays and hassle. The option was quickly eliminated.

“Cost wise, it (TSI PresSura) was a good product for the money.”

– Manager of Plant Operations³

Teaming with Dynamic Air Solutions in St. Louis, MO, the hospital evaluated the TSI line of PresSura™ Room Pressure Products. The TSI solution offered the hospital everything they were looking for – easy to install, ability for on-site maintenance and configuration, and simple displays for easy understanding by nurses and facilities engineers.

The hospital quickly outfitted all critical spaces with the PresSura RPM20 Room Pressure Monitors. The installation itself went smoothly, and the facilities team was able to manage all configurations in-house – something that was unattainable with other options evaluated.

The PresSura RPM20's flexible features also allowed the hospital to customize individual monitors to the specific needs of each room. For instance, the operating room monitors not only provided pressure readings, but room temperature and humidity readings as well. Multiple-room monitoring capabilities were also leveraged to monitor clean work rooms, adjoining corridors, and soiled areas.

The result

The performance of the PresSura Room Pressure Monitor system was put to the test when the Joint Commission conducted a survey at the Missouri facility in 2014. The survey went smoothly with the Joint Commission taking positive notice of PresSura's instantaneous pressure monitoring in critical areas. Another highlight of the survey was the presence of room temperature and humidity monitoring in the operating rooms including in-room, visual readings for the surgical team.

“It (PresSura RPM20 Room Pressure Monitor) really helped my last (Joint Commission) survey which was in January. ... Everybody that has seen the monitors has loved them. They love the fact that we have taken the next step to try to make a better, safer hospital. It has been very well received by all the surveyors who have come through.”

– Manager of Plant Operations³

In addition to standards conformance, the hospital gained maintenance efficiencies. Because the PresSura monitor warnings are easy to decipher, the nursing staff is able to quickly and easily notice issues and alert facilities. Often times, these immediate notifications allow the facilities team to proactively assess a room and address issues before they become large, expensive problems.

In the end, by updating their facility with TSI PresSura Room Pressure Monitors, the Missouri hospital was able to not only conform to industry standards and guidelines, but also create an efficient, safe environment for patients and staff.

1. George Mills, The Joint Commission, 2015 THE HEALTHCARE ENVIRONMENT UPDATE, Dated 2015,
2. George Mills, The Joint Commission, 2013 THE HEALTHCARE ENVIRONMENT UPDATE, <http://bit.ly/1cQpMRF>
3. Hospital Manager of Plant Operations, Interview, February 13, 2014



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