

HEALTH FACILITIES[®]

THE OFFICIAL MAGAZINE OF THE AMERICAN SOCIETY FOR HEALTH CARE ENGINEERING

MANAGEMENT

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DESIGN

Patients, staff differ on design opinions

Patients and staff responded differently to a mock-up of a mental and behavioral health unit patient room in a recent study. "Evaluation of a Mental and Behavioral Health Patient Room Mockup at a VA Facility" measured the effectiveness of a mock-up design at a VA New Jersey Health Care System facility to meet nine patient-centered principles, including respecting privacy; facilitating communication, collaboration and trust; and empowering patients.

Designers of the single-patient room wanted to create a deinstitutionalized atmosphere and a restorative environment that empowers patients along their behavioral health wellness journey, while ensuring a safe environment.

The American with Disabilities Act-compliant room features a private bathroom painted in cool blue and surfaces resembling marble, with

ligature-resistant, stainless-steel finishes and a sliding door. The bedroom itself was painted in a light gray with one accent wall in cool blue. A sloping shelf resembling wood spans one wall to create a chaise lounge at one end and levels into a desk at the opposite end. Two windows with an operable portion that opens up to 4 inches provides access to daylight and outdoor scents and sounds. The room also features durable sound-absorbing plaster to curb noise.

Through feedback surveys and listening sessions, the researchers were able to measure staff and patient response to the design. In each of the nine categories, staff measured the design more favorably than the patients. The researchers scored each response on a scale of one to seven, with seven being the most positive. A four or higher was considered positive on the scale.

For patients, averages ranged from a low score of 4.36 for "facilitates communication, collaboration and trust" to a high score of 5.03 for "provides adequate acoustical control." On the staff side, "promotes staff and patient safety" was the lowest score with 4.79. The highest



A mock-up patient room in a VA behavioral health facility was designed with the goal of meeting nine patient-centered objectives.

scoring factor was "empowers patients and patient control" with a 6.14. When averaging the room as a whole, patients ranked it 4.77. Staff scored it at 5.52.

In listening sessions the researchers identified the top three priorities patients and staff had in mind when evaluating the patient room: safety, deinstitutionalization and positive distraction/nature.

Going forward, the VA central office of construction and facilities management says it will consider feedback from the mock-up evaluation project for its revision to the VA behavioral health design guidelines. // BY JAMIE MORGAN

ASHE TOOLS

ONLINE RESOURCES



Managing nitrous oxide use outside the operating room

There is an emerging compliance challenge surrounding the use of nitrous oxide being experienced in many hospitals. Specifically, safety officers and facility managers are finding that clinical services outside the operating room are offering patients the option of self-administering a 50/50 mix of nitrous oxide and oxygen for pain control. This portable system has been in use in hospitals in Europe for decades and only in

recent years has been finding its way into U.S. hospitals. In the United States, it is primarily being used on maternity units in labor and

delivery rooms, though it may also be found in emergency departments, pediatric spaces, obstetrics and gynecologic departments, and plastic surgery suites.

It is important to note that these systems require the same level of risk assessment required in the surgical suite before implementation, and all environmental controls and monitoring practices must be followed. Specifically, a waste anesthesia gas disposal (WAGD) system must be employed in accordance with National Fire Protection Association's NFPA, 99-2012 5.1.5.16. Special attention also must be paid to the ventilation system to

ensure the requirements of the applicable ANSI/ASHRAE/ASHE Standard 170, Ventilation of Health Care Facilities, and Facility Guidelines Institute's *Guidelines* are met. A properly engineered and maintained ventilation system when used in concert with an appropriate WAGD system helps ensure the potential staff exposure to this anesthesia gas is kept to a minimum.

Effective administrative and clinical work practices must be in place. Through an exposure monitoring system, the hospital must be able to demonstrate it is meeting the National Institute for Occupational Safety and Health-recommended exposure limit for nitrous oxide at 25 parts per million (time weighted average over time exposed). Initial and ongoing training must be provided to clinicians and support staff on hazard awareness and the specific roles of each person, including routine checks of all gas connections and scavenging systems prior to use.

With all the above in mind, facilities management leadership must ensure this new practice is safely managed. The American Society for Health Care Engineering has created a new tool for members that can be used to perform a risk assessment and develop a safety protocol around this new trend. Visit the "More Online" link in this column to access the tool and learn how to manage this challenge. // BY EDWARD M. BROWNE, MS, FASHE, CHFM, CHC

MORE ONLINE

For links to resources, log on to ashe.org/nitrousoxide