

5



Moments for Hand Hygiene

in the behavioral health setting:

BEHAVIORAL HEALTH: SUBSTANCE ABUSE 2C/2D, HOSPITAL HILL TEAM

Project Champions—Sonya Branaman, RN, and Cheryl Montgomery, RN, BSN.
Team: Amber Bowles, Desiree Guthrie, Hailey Pearce, Elizabeth Rawlins, and Gaye Weston.



PICTURED LEFT TO RIGHT: Hailey Pearce, Amber Bowles, Sonya Branaman

BEHAVIORAL HEALTH: GERIATRIC PSYCHIATRIC, LAKEWOOD TEAM

Project Champions—Lois Clendening, RN, and Kyra Williams, RN.
Team: Kelly Farnsworth, Teri Kallevig, Michelle Kinnison, Deseree Krause, Paul Rada, Lisa Smith, and Terry Trafton.



FRONT ROW: Kyra Williams, Kelly Farnsworth, Sydney Hicks BACK ROW: Terry Trafton, Paul Rada

Can it be accomplished?

BY THOMAS C. BUTTON, RN, BSN, NE-BC, CIC, AND CRYSTAL LYLES, BSBM

BACKGROUND

The World Health Organization (WHO) noted that “a paradigm shift has occurred in our world that cannot be reversed—multidrug resistant pathogens are here to stay.” Despite the prevalence and risk for colonization of multidrug-resistant organisms (MDROs) in behavioral health patients, hand hygiene remains a challenge due to product availability for staff and staff perception. Few studies have been published discussing challenges, solutions, and hand hygiene performance in the behavioral health setting.^{1,2,3,4}

Truman Medical Centers (TMC) located in Kansas City, Missouri, has active behavioral health services at both the Hospital Hill campus situated in downtown Kansas City, as well as a geriatric psychiatry unit at the Lakewood campus in Eastern Jackson County. Each year, TMC serves nearly 16,000 patients in more than 225,000 visits with 3,500 admissions, which makes for a busy behavioral health emergency department.

TMC services a behavioral health patient population that struggles with chemical dependency, homelessness, and numerous medical co-morbidities that put them at an increased risk for developing either colonization or infection with MDROs and other significant organisms. Because the behavioral health setting focuses on individual and group therapy, TMC

has modified isolation practices from those used in the acute care setting. If the patient has MDRO colonization, it is noted in the electronic medical record to offer frequent hand hygiene for the patient, encourage the patient to wear clean clothes, and to monitor the cleanliness of the environment including frequent use of the disinfectant wipes. If the MDRO is a result of a draining wound, the wound needs to be covered in addition to the requirements for colonization.

When the isolation need is due to a diarrheal illness, the patient must be able to control elimination, perform hand hygiene, and avoid soiling their clothing in order to attend therapy sessions. TMC behavioral health units do not have airborne isolation rooms; therefore, all patients requiring airborne

isolation are transferred to the acute medical unit. The determination to transfer a contact isolation patient to an acute medical unit is done on a case-by-case basis.

During infection prevention rounds, TMC infection prevention staff discovered that hand hygiene was often inadequate. We made strides to improve the practices with the adoption of the WHO 5 Moments for Hand Hygiene in 2012 (see figure 1). TMC trained hand hygiene champions, developed a documentation system, and deployed the champions to monitor and record the hand hygiene opportunities. The champions noted low hand hygiene among personnel during their observations, due in large part to the lack of product availability. There did not seem to be a simple solution to increase hand hygiene performance in the behavioral

health setting. In researching the problems we encountered with non-compliance in the behavioral health setting, we found minimal information in the literature regarding hand hygiene in this unique healthcare setting.^{1,2,3,4}

PROJECT

In June 2013, TMC joined the Hand Hygiene Learning Network, a cohort with The Joint Commission Center for Transforming Healthcare and America's Essential Hospitals. The collaborative focused on monitoring hand hygiene upon entry and exit of patient rooms/zones utilizing the Targeted Solutions Tool (TST).⁵ Initial steps in the process included:

- 1 TMC's CEO signing the letter of commitment agreeing to support the project's efforts to improve hand hygiene compliance within the organization and to follow the TST tools and guidelines
- 2 Identification of the units to be monitored
- 3 Training of observers and coaches per the learning network's guidelines
- 4 Collecting and measuring baseline compliance data
- 5 Evaluating the contributing factors to lack of hand hygiene compliance
- 6 Implementing solutions during the improvement phase
- 7 Improving hand hygiene compliance and sustaining the gains

Figure 1.



TMC formed a performance improvement team after joining the collaborative utilizing the TST to record observed data. TMC then identified the substance abuse and a geriatric psychiatry unit to be monitored for the project. Members of the team included the infection prevention and control department as well as unit staff and leadership level representatives from the geriatric psychiatry and the adult substance abuse units.

continued on page 58

Figure 3.

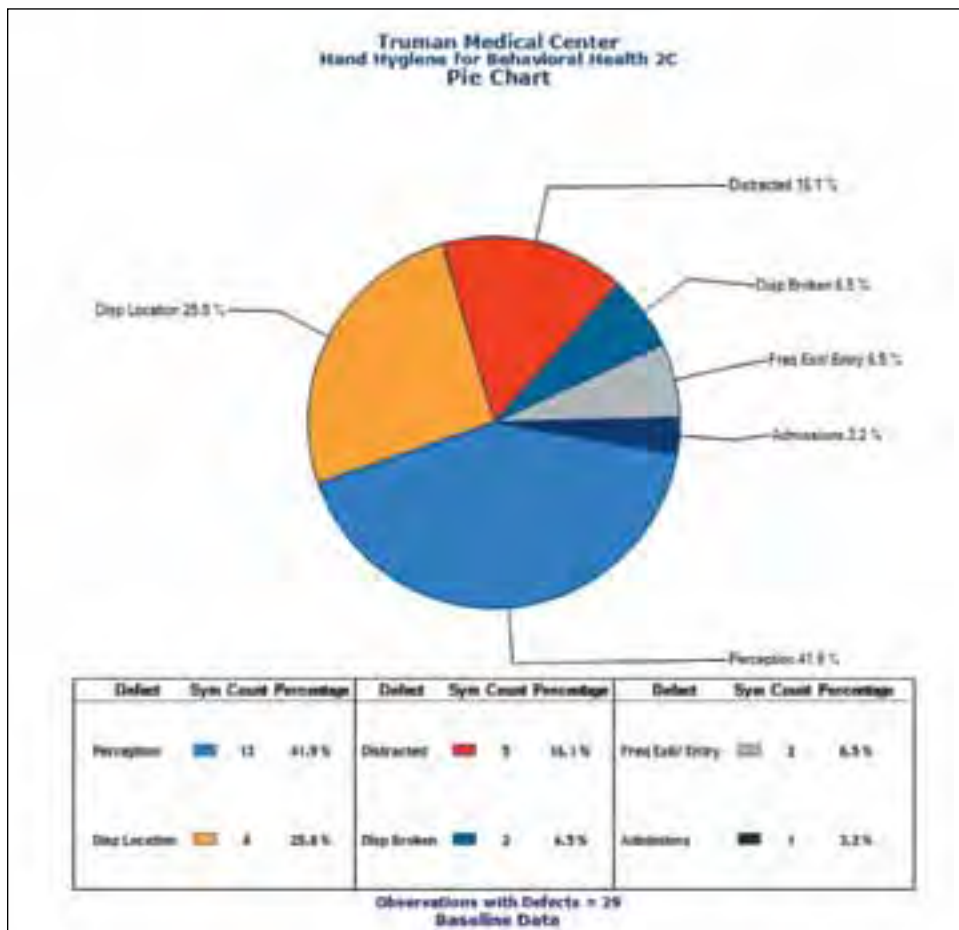
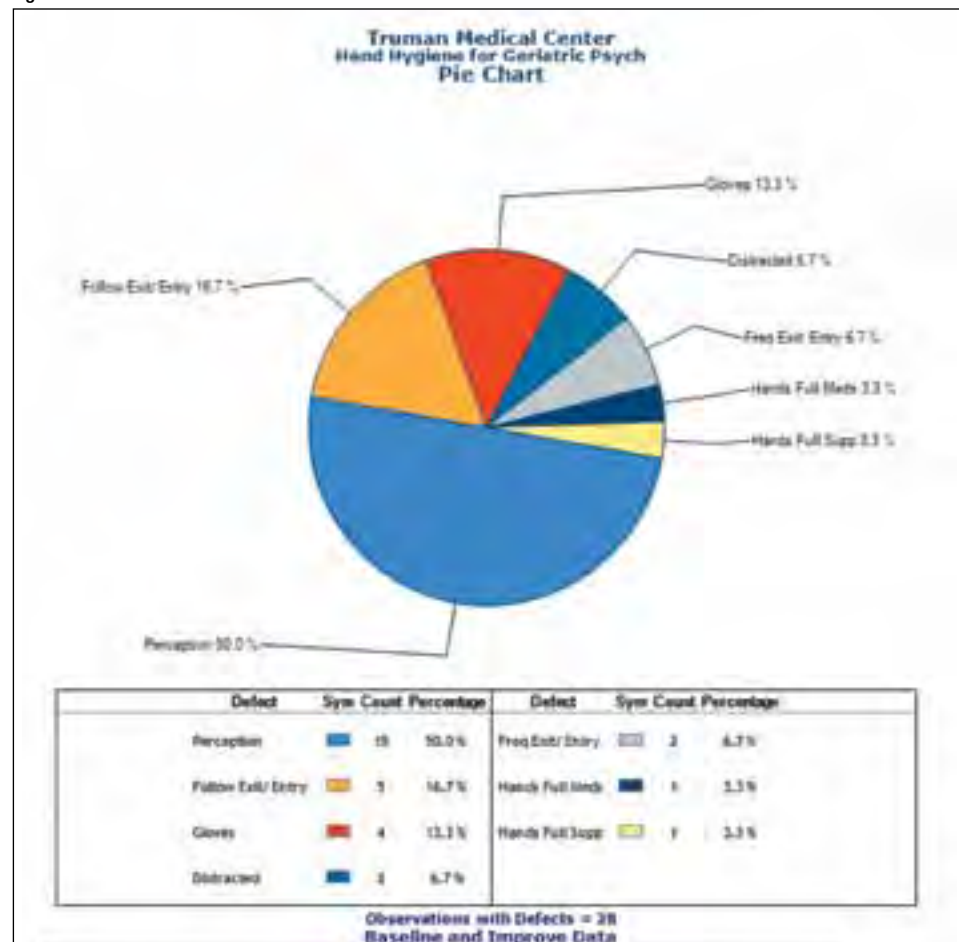


Figure 4.



to brainstorm solutions and to determine if there were alternatives that it had not considered.

Although staff members were provided with personal ABHR with lanyards, not all of them wore them on a routine basis. To assure compliance, daily the leadership team enforced and reminded personnel of the need to wear their lanyards with the ABHR. The ABHR dispenser on all rolling equipment proved effective; TMC found no problems with the installation or use.

To ensure patients did not ingest the ABHR affixed to stationary locations, TMC worked with a vendor to install steel casing (that could be locked with a small padlock) around the dispensers. This casing was being used in various correctional institutions successfully and safely. We also provided a proposal for the placement of lockable ABHR devices at strategic locations in the common areas and corridors to ensure they were always under staff supervision. The Infection Prevention and Control Committee reviewed this proposal and incorporated it into the organization's risk assessment. The committee determined that these dispensers presented a low risk for the following reasons: (1) the amount of product that could be ingested prior to intervention would be low, because the areas involved are supervised, and (2) the mechanism to be mounted on the wall was nearly indestructible so it did not pose a risk to staff or patients.³ The Safety Committee performed a separate risk assessment, which had similar findings. Although the product presented a low harm risk, the ABHR needed to be removed periodically and temporarily due to specific patients' consumption of small amounts.

In addition to attempts to make ABHR more available, TMC provided staff education in group settings and individually (as needed) on the WHO 5 Moments for Hand Hygiene, including the importance of cleaning hands before and after glove use. If hand hygiene non-compliance was observed, TMC provided immediate Just-In-Time training to personnel who were in violation of hand hygiene policy.

After the institution of these improvement measures, TMC has seen an increase

continued on page 60

Figure 5.

Area Name	Campus	Baseline Sample Size	Improve Sample Size	*Baseline Begin	Improve Begin	Baseline Compliance	Improve Compliance
Behavioral Health 2C/2D	Hospital Hill	140	851	9/5/2013	11/25/2013	45.7%	70.5%
Geriatric Psychiatric	Lakewood	99	240	10/21/2013	11/21/2013	30.3%	43.8%

*NATIONAL BASELINE COMPLIANCE RATE AS OF 09/16/13 IS 58 PERCENT.

in hand hygiene compliance. The substance abuse unit compliance rate is 70.5 percent and the geriatric psychiatry unit compliance rate is 43.8 percent (see figure 5).

LESSONS LEARNED

The WHO 5 Moments for Hand Hygiene can be monitored effectively in psychiatric units when clear definitions for hand hygiene moments are identified. Hand hygiene education of staff on psychiatric units needs to be tailored to their setting to ensure compliance.

Psychiatric-safe hand hygiene products are not always readily available, but an

internal risk assessment should be completed to provide insight on safe structure for those products to be used on units. Although ABHR generally poses no risk to acute care patients, behavioral health patients have been known to ingest ABHR, especially if they have a history of substance abuse. Agitation or an increase in aggression due to the presence of ABHR may necessitate the temporary need to remove the product.

There is a need to work collaboratively with colleagues and vendor associates to develop safe alternatives for ABHR use in the behavioral health setting.

Research needs to be strengthened in the behavioral health setting for the basics in infection prevention. ¹³

References:

1. World Health Organization. WHO guidelines on hand hygiene in health care, 2009. Retrieved from http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf.
2. Ott M French R. Hand hygiene compliance among health care staff and student nurses in a mental health setting. *Issues Mental Health Nurse*. 2009 Nov;30(11):702-704.
3. Hand Hygiene Australia (2014). Retrieved from www.hha.org.au/314/section.aspx.
4. Hand Hygiene in Mental Health—Hand Hygiene Australia (2011). Retrieved from www.hha.org.au/userfiles/file/presentations/mentalhealthversion_2011.ppt
5. Joint Commission. (2010). Targeted Solutions Tool (TST) [health care quality and safety application]. Retrieved from www.centerfortransforminghealthcare.org/tst_hh.aspx.



READ MORE ABOUT HAND HYGIENE IN THE AMERICAN JOURNAL OF INFECTION CONTROL

Perceptions of methicillin-resistant *Staphylococcus aureus* and hand hygiene provider training and patient education: Results of a mixed method study of health care providers in Department of Veterans Affairs spinal cord injury and disorder units, Hill, Jennifer N. et al., *American Journal of Infection Control*, Volume 42, Issue 8, 834–840.

Patient empowerment begins with knowledge: Consumer perceptions and knowledge sources for hand hygiene compliance rates, McGuckin, Maryanne et al., *American Journal of Infection Control*, Volume 42, Issue 10, 1106–1108.

A study of the efficacy of flashing lights to increase the salience of alcohol-gel dispensers for improving hand hygiene compliance, D'Egidio, Gianni et al., *American Journal of Infection Control*, Volume 42, Issue 8, 852–855.

Evaluation of the short-term and long-term effect of a short series of hand hygiene campaigns on improving adherence in a tertiary care hospital in India, Biswal, Manisha et al., *American Journal of Infection Control*, Volume 42, Issue 9, 1009–1010.

Comparison of human and electronic observation for the measurement of compliance with hand hygiene, Filho, Miguel Almeida O. et al., *American Journal of Infection Control*, Volume 42, Issue 11, 1188–1192.

A multifactorial action plan improves hand hygiene adherence and significantly reduces central line-associated bloodstream infections, Johnson, Linda et al., *American Journal of Infection Control*, Volume 42, Issue 11, 1146–1151.

Video observation to map hand contact and bacterial transmission in operating rooms, Rowlands, John et al., *American Journal of Infection Control*, Volume 42, Issue 7, 698–701.

Influence of signal colored hand disinfectant dispensers on hand hygiene compliance at a medical intensive care unit, Scheithauer, Simone et al., *American Journal of Infection Control*, Volume 42, Issue 8, 926–928.

Observer accuracy and behavior analysis: Data collection procedures on hand hygiene compliance in a neurovascular unit, Hinz, Krista L. et al., *American Journal of Infection Control*, Volume 42, Issue 10, 1067–1073.