

## Learned Behavior Contributes to Low Hand Hygiene Rates

Hand hygiene significantly reduces health care-acquired infections. In many health care institutions, provisions for hand hygiene (including sinks and alcohol-based hand rubs) are extensive and allow near-universal convenient access, yet compliance rates remain low.

A study (Korniewicz et al) of health care worker (HCW) hand hygiene in an oncology hospital found low compliance despite the HCWs knowing that their hand hygiene practices were being observed for a study. This concurs with other studies. Compliance averaged 42 percent pre-procedure and 72 percent post-procedure. The authors comment:

“Interestingly, our findings also suggest that preprocedure hand hygiene was much lower than postprocedure hand hygiene. It is important to note that preprocedure hand hygiene intends to protect patients against infections and maximize risk reduction, whereas postprocedures hand hygiene intends to protect the HCWs and other patients who may contract patient-to-patient infections. Thus, these findings may suggest that HCWs are probably driven to wash their hands by their need to protect themselves more than their patients... It is also possible that HCWs do not perceive their hands to be as dirty before performing a patient procedure as compared to after completing a procedure. Regardless of the possible explanation of these findings, they are disturbing and reflect a continuing trend of poor compliance with proper hand hygiene practices among HCWs.”

While training about hand hygiene and providing access to hand hygiene sta-

tions is important, HCW behavior also needs to be addressed. Another study (Whitby, et al), discusses the behavioral component:

“... (1) patterns of hand hygiene behavior are developed and established in early life. As most HCWs do not begin their careers until their early 20s, improving compliance means modifying a behavior pattern that has already been practiced for decades and continues to be reinforced in community situations. (2) Self-protection: this is not invoked on the basis of the actual level of microbiological risk, but is based rather on emotive sensations including feelings of unpleasantness, discomfort and/or disgust. These sensations are not normally associated with the majority of patient contacts within the healthcare setting. Thus, intrinsic motivation to cleanse hands does not occur on these occasions.”

To address the behavioral component, hand hygiene improvement programs must go beyond education, reminders and readily accessible hand hygiene stations. Examples of behavioral interventions include:

- Establishing role modeling and peer pressure from senior medical, nursing and administrative staff.

**Inherent hand hygiene practice:** Instinctive need to remove dirt from the skin when hands are visibly soiled, sticky or gritty. Likely to be established in the first 10 years of life and to drive the majority of community and HCW hand hygiene behavior throughout life. For example, it occurs after touching an ‘emotionally dirty’ area (e.g., axilla or groin).

- Educating HCWs about the influence of their learned community hand-hygiene behaviors, emphasizing the difference between optional community behavior and mandatory occupational behavior.
- Establishing a reward and punishment system for exemplary and unacceptable behavior, while not punishing the occasional lapse.
- Getting patients involved in the hand-hygiene program, but recognizing this has its challenges in certain circumstances, including lack of applicability to certain high infection-risk patients such as those who are comatose, and the existence of cultural barriers.

— Rory Jaffe, MD MBA [rjaffe@calhospital.org](mailto:rjaffe@calhospital.org)

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- Korniewicz DM, El-Masri M. Exploring the factors associated with hand hygiene compliance of nurses during routine clinical practice. *Applied nursing research*. 2010;23(2):86–90.
- Whitby M, Pessoa-Silva CL, McLaws M, et al. Behavioural considerations for hand hygiene practices: the basic building blocks. *The Journal of hospital infection*. 2007;65(1):1–8.

**Elective hand hygiene practice:** Attitude to hand cleansing in more specific opportunities not encompassed in the inherent category and more frequently corresponding to some of the indications for hand hygiene during healthcare delivery. It includes touching a patient such as taking a pulse or blood pressure, or having contact with an inanimate object in the patient environment.

## Quality, Safety and Peer Review

Because hospital medical staffs are obligated to conduct peer review, why not do it in a way that measurably improves quality and safety? In a way that is also associated with greater medical staff satisfaction?

There is now scientific evidence from two large national studies, reported in five peer-reviewed manuscripts, that relatively small changes in the peer-review process can contribute to significant improvements in quality and safety in a large proportion of U.S. hospitals. The California Hospital Association helped sponsor the initial study in 2007. The American College of Physician Executives sponsored the second study in 2009. I was the principal investigator for both.

In 2007, a comprehensive survey of 339 hospitals demonstrated wide variation in practice, with a strong relationship between specific aspects of process and perceived program impact on quality and safety. Among these were timeliness, process standardization, recognition of excellence, identification of contributory process issues, integration with hospital quality-improvement activity, reviewer participation and diligent governance.

The follow-up study of comparable size validated these findings and showed that peer-review program and related organizational factors can explain up to 18 percent of the variation in standardized measures of quality and patient safety, including mortality and complications. When controlling for these factors, there was no evidence of benefit from a multi-specialty review process. Despite a high rate of program change in response to both Joint Commission focused professional practice evaluation and ongoing professional practice evaluation (FPPE/

OPPE) requirements and dissatisfaction with current processes, there was little sign of improved effectiveness between 2007 and 2009. The majority of programs continue to rely on an outmoded and dysfunctional process model that focuses on competence assessment rather than clinical performance measurement and improvement.

Thus, these studies established the initial evidence base for an improved peer-review process: [the QI Model](#). They also illustrated that most hospitals do not treat peer review as a process — certainly not as one subject to the same requirements for measurement and improvement of effectiveness that hospital staff have come to expect for any other important activity. Collectively, the related articles offer useful tools and tips for program improvement, including a validated Peer Review Program Self-Evaluation Tool (now available at no cost online: at [www.qatoqi.com/PREPSET.htm](http://www.qatoqi.com/PREPSET.htm)).

— Marc T. Edwards, MD MBA, [marc@QAtoQI.com](mailto:marc@QAtoQI.com)

## References

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## Hand-Hygiene Music Video Débuts

Sierra Vista Regional Medical Center recently filmed a music video that features employees washing their hands to the tune of the popular Beatles song “I Want to Hold Your Hand.”

The song, “I’m Gonna Wash My Hands,” is performed by The Bluz Dogz, a local band featuring Dr. Harold Segal and Sierra Vista nurses Linda Martin and Bud McCabe. The lyrics encourage people to wash their hands to help stop the spread of infection. Nathan Nybakke, Director of Radiology, filmed the music video at the hospital, which features employees from all over the facility.

The video kicks off Sierra Vista’s “Clean Hands — Clean Environment” hand-washing campaign. Light pole banners were also hung to remind visitors about the importance of washing their hands as a way of controlling infections and contributing to their overall health.

— Shannon Downing [shannon.downing@tenethealth.com](mailto:shannon.downing@tenethealth.com)

This video and other hand-hygiene campaign materials are available at [www.chps.org/hygiene/index.asp](http://www.chps.org/hygiene/index.asp).

Subscription service (additions and removals): La Shon Tate [ltate@calhospital.org](mailto:ltate@calhospital.org)  
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## The Accounting of Responsibility

Responsibility. We hear the term bandied about quite loosely every day. For example, President Obama intends to hold BP responsible for the Gulf of Mexico oil well blowout. Voters/Stockholders/Patients “demand” that politicians/corporations/clinicians be held responsible for their various actions.

I occasionally encounter an objection when teaching teamwork best practices to health care professionals that is really interesting because it stems from the same appreciation for the importance of holding people or organizations “responsible.”

The objection typically comes from physicians who are uncomfortable with my assertion that every member of the team is responsible for the welfare of the patient. The complaint usually sounds something like, “No, I’m sorry, but if you’re suggesting that anyone else is responsible for my patient’s welfare, I disagree. I’m the one who is responsible, and I will be held responsible.”

I have two concerns with this statement. The first is nomenclature. When we refer to being held responsible, what we’re really describing is accountability. Accountability describes the reckoning for outcome. Responsibility can be defined as scope of practice, job description or expected behaviors. So when I say that everyone is responsible for the well-being of the patient, what I’m saying is that patient safety is a part of *everyone’s* job.

The other flaw with this well-intended objection is the notion that responsibility is a zero sum concept. If the physician is assumed to be 100 percent responsible for the patient’s welfare, and others on the health care team are also responsible, then the 100 percent must be divided

up among all the team members. The physician now is 60 percent responsible; the nurse is 20 percent; the respiratory therapist is 10 percent; and the pharmacist is 10 percent. However, that’s simply not the case. When the physician tells her team that she expects everyone to speak up if they have any concerns about the patient’s safety, she retains 100 percent responsibility *and* she has reinforced the fact that the nurse also has 100 percent responsibility, as do the respiratory therapist and the pharmacist.

The goal of teamwork is that the team’s abilities exceed the sum of the individual team member’s abilities. It’s *synergy*, and it can be readily seen in a team that is 400 percent responsible for the well-being of the patient. Patient safety is everyone’s responsibility.

— Steven Montague, Vice President,  
[LifeWings, lifewings@verizon.net](mailto:lifewings@verizon.net)

## Patient Empowerment for Hand Hygiene Promotion

Including patients in the hand hygiene campaign and having them ask if their health care workers (HCWs) have washed their hands is a powerful tool to improve hand hygiene compliance. As with any change effort, success depends upon proper implementation and accounting for organizational characteristics.

Support of the clinical and administrative leadership, including medical staff leadership, is an important step. Also, patient empowerment is needed, as patients will be taking what for many is a non-traditional role in their care.

There are four elements to patient empowerment:

*Patient participation*, in which the patient understands and accepts his or her opportunity to become involved in the care process and to contribute to safer delivery of health care. Key characteristics, such as age, culture, background, personality, and level of intelligence, have been identified as factors that affect success when engaging patients in participation and form the foundation of empowerment.

*Patient knowledge*, in which patients are given sufficient knowledge, including risks and actionable patient steps, to help them engage in decisions with their health care provider. Patients usually prefer information/knowledge that is specific, provided by their HCWs, and printed for use as a prompt sheet if necessary.

*Patient skills*, which include self-efficacy and health literacy, thereby helping the patient to not only understand the issues but also to believe that they can attain a positive goal if they participate in their care. These skills have been linked to better performance of a task that requires a change in behavior.

*A facilitating environment* that encourages patients to develop and practice open communication about their care in an environment that is free of barriers. To create this environment, HCWs also must be enabled by a workplace that promotes empowerment and recognizes that the relationship and communication between HCWs and patients can be powerful.

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## References

McGuckin M, Storr J, Longtin Y, Allegranzi B, Pittet D. Patient Empowerment and Multimodal Hand Hygiene Promotion: A Win-Win Strategy. *Am J Med Qual.* 2010. (in press)

## PSO Requirement for State-Based Health Insurance Exchange Participation

Two provisions from the Patient Protection and Affordable Care Act (PPACA) address Patient Safety Organization (PSO) participation. In our May newsletter, we discussed the PPACA provision that established a readmission rate-reduction program for hospitals with high risk-adjusted readmission rates through the use of PSOs.

PPACA has a second provision that affects hospitals over 50 beds that wish to contract with health plans participating in state-based health insurance exchanges.

Participating health plans may only contract with hospitals with greater than 50 beds when the hospital is working with a PSO. State-based health insurance exchanges are to be in place by January 1, 2014, and the compliance date for hospital contracts is January 1, 2015.

See the [CHPSO web page on PSO Laws and Regulations](#) for more information.

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## PSO Incident Report Submission Instructions Released

Quantros just released their file format instructions for hospital incident report submission. CHPSO members will receive copies of the format specifications along with telephone numbers to call to receive no-cost support for understanding the specifications. The copies are being emailed to the 'contact person' as specified by the facility in the CHPSO-hospital contract.

Electronic data submission will be in the XML file format, a common text format for labeling computer information. Upload will be by secure FTP, an internet protocol supported by many programs, including a number of well-developed open source free programs.

In XML, each piece of information has a start label and an end label. This makes it easy for a computer program to identify what the data is and where to store it. If the label text were 'date' and the answer were 11/22/2009, then the XML line would be:

```
<date>11/22/2009</date>
```

For example, the AHRQ Common Formats include the question: What is the patient's gender? The possible answers are male, female, or unknown. Quantros specifies that the label text is 'gender' and the allowable answers are 'M', 'F' and 'UNK.' For a male patient, the XML line would be:

```
<gender>M</gender>
```

Comprehensive descriptions of the fields, the method for electronically sending the files and examples of completed XML reports are included in the document.

## Patient Protection and Affordable Care Act

*Section 1311. Affordable Choices of Health Benefit Plans. [Establishing state-based health insurance exchanges]*

(h) QUALITY IMPROVEMENT.—

(1) ENHANCING PATIENT SAFETY.—Beginning on January 1, 2015, a qualified health plan may contract with—

(A) a hospital with greater than 50 beds only if such hospital—

(i) utilizes a patient safety evaluation system as described in part C of title IX of the Public Health Service Act<sup>1</sup>; and

(ii) implements a mechanism to ensure that each patient receives a comprehensive program for hospital discharge that includes patient-centered education and counseling, comprehensive discharge planning, and post discharge reinforcement by an appropriate health care professional; or

(B) a health care provider only if such provider implements such mechanisms to improve health care quality as the Secretary may by regulation require.

(2) EXCEPTIONS.—The Secretary may establish reasonable exceptions to the requirements described in paragraph (1).

(3) ADJUSTMENT.—The Secretary may by regulation adjust the number of \_\_\_\_\_ beds described in paragraph (1)(A).

<sup>1</sup> 42USC299b-21(6): The term "patient safety evaluation system" means the collection, management, or analysis of information for reporting to or by a patient safety organization.

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In addition to free one-on-one support, CHPSO and Quantros will jointly host a free web seminar question and answer session on the submission file format. Watch your emails for an announcement of the time and date. The session will be recorded and information from it will be available for those unable to attend.

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## Calendar

The following upcoming events are still open for enrollment. For more information or to enroll, use the contacts listed below.

### July

**23:** *Washington Hospital Healthcare System: Navigating MERP.* Presenter: Loriann DeMartini, Pharm. D., Chief Pharmaceutical Consultant, Center for Healthcare Quality. Fremont.

**27:** *BEACON: Quarterly Meeting.* South San Francisco.

### August

**10:** *SCPSC (Southern California Patient Safety Collaborative): Track I: Surgical Care Improvement Project, Sepsis, Hospital-Acquired Infections in the ICU Setting.* City of Industry.

**11:** (Date change — was September 10) *BEACON: Key Contacts Meeting.* Location to be determined.

**12:** *HASD&IC (Hospital Association of San Diego & Imperial Counties): San Diego Patient Safety Council; Sepsis.* San Diego.

**13:** *BEACON: Excel for Quality Improvement: Basics for Beginners.* Fremont.

**18:** *BEACON: Practical Skills for Quality Improvement.* Oakland.

### September

**10:** *CAPSAC: California Patient Safety Action Coalition Meeting.* Napa.

**16:** *BEACON: Excel for Quality Improvement: Beyond the Basics.* Fremont.

**21:** (Date change — was September 1) *SCPSC: Track II: Pressure Ulcers.* City of Industry.

**23:** *BEACON: Physician Leadership Meeting.* Location to be determined.

**24:** *BEACON: CNE Meeting.* Location to be determined.

### October

**6:** *HASD&IC: San Diego Patient Safety Council; Sepsis.* San Diego.

**26:** *BEACON: Quarterly Meeting.* Fremont.

### November

**16:** *SCPSC: Track I: Surgical Care Improvement Project, Sepsis, Hospital-Acquired Infections in the ICU Setting.* City of Industry.

**19:** *BEACON: Practical Skills for Quality Improvement.* Fremont.

### December

**2:** *SCPSC: Track II: Pressure Ulcers.* City of Industry.

**3:** *CAPSAC: California Patient Safety Action Coalition Meeting.* Torrance.

**15:** *HASD&IC: San Diego Patient Safety Council; Sepsis.* San Diego.

**15:** *BEACON: Practical Skills for Quality Improvement.* Redwood City.

*For further information on these events:*

*BEACON:* Petrina Aiello [paiello@hospitalcouncil.net](mailto:paiello@hospitalcouncil.net) or [www.beaconcollaborative.org](http://www.beaconcollaborative.org)

*CAPSAC:* Theresa Manley [manleyt1@pamf.org](mailto:manleyt1@pamf.org) or [www.capsac.org](http://www.capsac.org)

*HASD&IC:* Lindsey Wade [lwade@hasdic.org](mailto:lwade@hasdic.org)

*SCPSC:* Catherine Carson [ccarson@hasc.org](mailto:ccarson@hasc.org)

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## About This Newsletter

*CHPSO Patient Safety News* provides lessons learned from reviews of patient safety events and news of patient-safety activities in this state. We hope you will find it useful in your efforts to improve patient outcomes. This newsletter may be freely distributed in its original form.

Copies of each newsletter will be archived on the CHPSO website ([www.chpso.org](http://www.chpso.org)).

Send subscription requests (additions, deletions) to [ltate@calhospital.org](mailto:ltate@calhospital.org).

Submit articles to [rjaffe@calhospital.org](mailto:rjaffe@calhospital.org).