

The Personal Responsibility Paradigm Shift

An Emerging Era of Near-Perfect Hand Hygiene Adherence in Healthcare Settings

by Ron Cagle

Hand hygiene holds the largest opportunity to reduce hospital acquired infections, promising to cut rates in half, yet average U.S. healthcare compliance continues to lag under 50 percent. With all the hard work and change since the release of the Centers for Disease Control and Prevention (CDC) 2002 hand hygiene guidelines, one may ask, what are we missing here?

In a recent article the Institute for Health Improvement's (IHI) Vice President, Don Goldmann, MD, states: "Curbing the alarming increase in the rate of antibiotic-resistant infections surely requires both systemic improvements and increased personal accountability." He calls for finding "the right balance between blaming mistakes on systems and holding individual providers accountable..."¹

Dr. Goldmann's call for personal responsibility is the missing ingredient needed to sustain near-perfect adherence. A breakthrough requires the re-engineering of a new hand hygiene system that is wrapped around a paradigm of individual responsibility and frontline worker empowerment. We cannot expect to lay this problem solely on the will of healthcare workers (HCWs), infection control practitioners (ICPs) and their leaders without giving them the technology, tools and multimodal programs to support this new paradigm and sustain success.

The point of individual accountability isn't just to locate new targets for leveling blame, but is to build systems that empower frontline workers with the multimodal components being called for by CDC, WHO, IHI and other hand hygiene experts. Individual hand hygiene measurement indicators should be a part of every healthcare workers' performance evaluation and subject to administrative action in extreme cases, but the strength of a system wrapped around a personal paradigm shift is in its ability to wield the power of shared governance and individual professional improvement. If we give frontline workers the tools they need to

overcome the logistical barriers to near-perfect hand hygiene and then support them vigilantly with a host of best-practice multimodal components, sustained near-perfect hand hygiene will be the result.

Broken Big

Hand hygiene in healthcare is not a little off. It is seriously broken. In what other industry would quality measures that averaged fewer than 50 percent and that claim the lives of 90,000 customers a year be considered anything less than a crisis? Didier Pittet, MD, has shown us that improvements in hand hygiene from 48 percent to 76 percent results in a reduction of HAIs by 50 percent.² Therefore, there is the opportunity to establish new systems that could save 45,000 U.S. lives, prevent one million infections, and save the U.S. healthcare system \$15 billion annually.⁷ Given such high stakes, would we not expect to have to pay a price, to challenge all assumptions, to invest in the problem and step outside our comfort zones?

Why don't we have personal responsibility for healthcare hand hygiene, and why is U.S. compliance so low? The status quo inertia of this problem is not to be underestimated. The decades of over-reliance on antibiotics coincided with the greatest advancements in medical procedures. The result is a retarded discipline for which we are now paying the price as new antibiotic resistant threats emerge.

The 2002 CDC hand hygiene guidelines were a major breakthrough for U.S. infection control. It established a new path based on decades of groundbreaking work by infection control giants such as Pittet, Boyce and Larson. Alcohol wallmount dispensers have gone up across the country as well as implementation of supporting multimodal programs. The best-practices model of making alcohol accessible at the point of care supported by multidiscipline, multimodal programs was pioneered by Didier Pittet, MD, and his Geneva Hand Hygiene team.⁶

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What did not come across in the U.S. translation of the Geneva Hand Hygiene model is the commitment to make it everyone's program and focus on empowerment of the individual HCW. When you walk into Dr. Pittet's hospital, there is a massive hand hygiene mural at the entryway that says it all. Now that is a committed program that engages the individuals at every level.

How much have the actual hand hygiene clinical practices changed since 2002 anyway? Studies cited by the guidelines pointed out how the old sink-centric hand hygiene model did not work, and that busy workers couldn't possibly sanitize their hands every time they should and do their jobs. Has every busy HCW adopted alcohol as her/his primary hand sanitation method?

Technically Possible?

Is the technology really there? Do HCWs have true access to alcohol sanitizers at the point of care at all times and in all circumstances? When there is a wallmount at the door, does a HCW truly have point-of-care access in response to all CDC guideline indications inside the room? When a HCW has just sanitized her hands and then moves a chair or rubs her ear, did that happen? Is she going to break eye contact with the patient, and cross the room to use a wallmount dispenser while four other patients are waiting? The fact is she must become numb

to many hand hygiene opportunities to do her job under the current model.

Ambiguity

Personal accountability calls for clear definitions. Workers need to know exactly for what they will be held accountable and how they will be measured. For example, do indications for hand hygiene "in the immediate vicinity of the patient" include your eyeglasses, tie, beeper, clipboard, papers or pen? Is it acceptable to operate three doorknobs and then handle medical equipment and supplies without performing hand hygiene first? Firm definitions need to evolve into the working context of duty-specific procedures.

Institution vs. Personal

Although recommendation 8.D. calls for pocket bottles, the U.S. translation of point-of-care access has been wallmounts that tend to support an institutional approach to hand hygiene adherence.³ A review of the recommendations on page 34 for the "Indications for handwashing and hand antisepsis" will fail to reveal a call for hand hygiene when entering or exiting a patient room. Yet, it is recommended to put the dispensers near the patient room entrance. Is this not a mixed message? Hand hygiene is indicated inside the room, yet the dispenser is at the door. It certainly explains why many



**Geneva University
Hospital entryway
hand hygiene
mural—it's
everyone's
program.**

ICPs only measure hand hygiene opportunities as entering and exiting patient rooms.

When a wallmount dispenser is out of service, the most common reaction is: “Someone should do something about that.” It is taken as an institution problem, i.e., someone else’s problem.

Meanwhile, Joint Commission interprets recommendation 8.D. to make pocket bottles available as opposed to making them required in busy units, while the actual language calls for wallmounts, “...and individual pocket-sized containers to be carried by HCWs.”³

JC Check Box Programs

A prevailing tendency of hand hygiene programs in the United States since the 2002 guidelines is to pass it off to the ICP as a Joint Commission checkbox and given minimum resources. The ICP forms a committee, presents inservice education, puts up posters and tracks inventory records. Box checked. But the real needs of the frontline individual HCWs were little affected. Such programs tend to trap the ICPs in overwhelming paperwork while effectively overlooking the real need to promote, network, build trust and get the program out into the worker population. ICPs are viewed as handwashing cops who modify behavior only when present.

A New Vision

With all the disturbing indicators for U.S. hand hygiene, there is significant justification for optimism. A breakthrough is near. The promise of the Geneva Hand Hygiene model combined with a new generation of hand hygiene technologies and best practices methodologies are being crafted into comprehensive systems that empower frontline workers with a high degree of support where accountability will be a welcomed fit.

At the center of the new systems are new types of personal alcohol sanitizer dispensers that are designed to become second nature in use. In order to overcome the logistical barriers necessary for near-perfect hand hygiene, healthcare workers must have the technology to perform hand hygiene without interrupting workflow and requiring minimal conscious thought. Personal dispensers are the only way to ensure a worker always knows the location of a dispenser and can use it anywhere, anytime and on the go. Ergonomic single-hand operation is required for true point-of-care access.

The primary key to personal responsibility is individual measurement, and to the personal dispenser electronics that track the individual performance of HCWs. There are tests underway for such units now. The CDC and IHI call for monitoring and feedback. Wallmount and inventory group measures homogenize the meaning out of the data. You can’t manage what you can’t measure, and without measurement at the individual level, the measure lacks the meaning required to close the feedback loop and manage the system. The new technology of personal dispenser tracking provides the backbone for a system that can achieve and sustain near-perfect compliance because it can provide the individual feedback loop to implement and retain the personal paradigm shift. Think of what is to be learned with personal dispenser tracking. New insights will be gained never before available. Usage metrics can be established for varied positions, units and conditions. The working science of hand hygiene can evolve.

Now add electronics to the personal dispensers that provide the capability to train workers, pattern the new hand



Personal responsibility must start with the technology for true personal point-of-care sanitizer delivery.



Personal sanitizer dispenser with tracking electronics downloading individual adherence data.

hygiene behavior response, and assist them in expanding their working indications. HCWs need a way to build the new behavior quickly and seamlessly into their duties. There are promising clinical tests being conducted with electronic reminders inside personal dispensers.

Filling out the multimodal components of the new system are eLearning, promotions, management software and quality teams. eLearning can be highly effective with HCWs when broken up into short-and-snappy installments that build a relationship with the learner. Utilizing the Six Sigma mechanism of automatic remedial education when performance indicators first dip is a way to support individual accountability without the weight of blame.

What is done with the individual tracking data will dictate its success. Quality teams are a best practice mechanism that puts individual performance indicators to work within the mechanism of group governance. Command and control style management, although well intentioned, tends to send the incorrect message to frontline workers that their role is to comply without question, that they will be monitored only for possible punitive action, and that they are not respected enough to meet expectations and manage the change. Quality teams help improvement come from the frontline and disseminate through the teams, leaders and administration.

ICPs will need better tools as their jobs shift from paper shuffling handwashing cops to empowering network facilitators. Management software will be used to manage the hand hygiene system, rotate promotional materials, keep track of all the participating HCWs and where they are in the system. It will help an ICP manage the system and keep it active with the HCWs population—out at the frontlines where it belongs and is most effective.

A Big Thing

Keep in mind, this is not a small thing we're asking of anyone, especially the frontline workers. Asking HCWs to reinvent such a fundamental part of their job is like asking your eight-year-old to wear a surgical mask to school during flu season. The new system will need power and momentum to smash through the status quo in an environment where change management is most challenging. Personal dispensers can act as a visible symbol of the new system.

Administrative Sanctions?

Should a HCW actually have to face administrative sanction for lack of hand hygiene compliance? The

ultimate goal is to prevent infections. If one worker cannot achieve basic hand hygiene competency and consistently spreads infections, the diligence and hard work of everyone else is undermined. As Goldmann points out: "Repeated violations in healthcare, as in any industry, should have consequences."¹ It is the responsibility of the system to prevent what errors it can. If the system can identify and weed out HCWs who cannot maintain basic hand hygiene competency, everyone gains, and the balance for which Goldmann calls is achieved.

Getting There

How do we get to this great new vision of a system? The IHI provides us with an improvement process through its PDSA testing process, and guidance through its "How-to Guide: Improving Hand Hygiene."⁵ The WHO has just released a host of advanced multimodal support materials.⁴ Ambitious new vendors are introducing innovations that cut across commodity business models and focus on the solution. SHEA, APIC, the IC journals and the IC community at large have continued to make hand hygiene a priority. The reason brings us back to where we started.

Hand hygiene offers the greatest opportunity for reducing HAIs; real people, real lives, moms, dads, sons, daughters... We are within striking distance of a new era of sustained near-perfect hand hygiene adherence in healthcare settings. The pieces of the puzzle are out there: the technology, the best practices, and healthcare workers who truly care. What is left is to believe we can, focus on empowering the individual, follow our leaders who have pointed us in this direction, and continue to reinvent and drive change until the breakthroughs are sustained. ✚

References

1. Goldmann D, System Failure versus Personal Accountability – The Case for Clean Hands, *New England Journal of Medicine*. 2006 Jul 13;355(2):121-123.
2. Dix K, "CDC's Endorsement of Alcohol Hand Rubs Launches New Era in Hand Hygiene" *ICT Dec. 2002*, pg 5.
3. Boyce JM, Pittet D, "Guideline for Hand Hygiene in Health-Care Settings" *Morbidity and Mortality Weekly Report*, Oct. 25 2002, Vol. 51, No. RR-16.
4. Pittet D, "WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft): A Summary" *World Health Organization Press*, 2005.
5. Hustkins WC, Boyce JM, et. al., "How-to Guide: Improving Hand Hygiene" *Institute for Healthcare Improvement*, Apr 2006.
6. Pittet D, "Improving Adherence to Hand Hygiene Practice: A Multidisciplinary Approach" *Emerging Infectious Diseases*, March-April 2001 Vol 7, No 2.
7. McCaughey B, "Unnecessary Deaths: The Human and Financial Costs of Hospital Infections" *RID*.

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