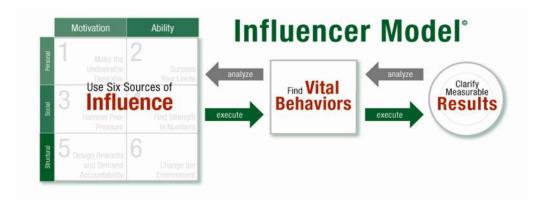
Influencing Hand Hygiene Compliance at Spectrum Health By David Maxfield and David Dull, M.D.

When his mother was in the hospital, Dr. Robert Hooker, M.D. of Spectrum Health, made sure she was well taken care of. He routinely made visits during her hospitalization and had complete confidence in her medical team. Then one afternoon, while he was talking with her physician, he watched a nurse walk from the room of a patient with MRSA right into his mother's room without washing her hands. Dr. Hooker couldn't get out of his chair quick enough to stop the nurse and knew his mother was now at risk. That event eroded his trust in the entire team. Two days later, he transferred his mother to another facility.

Unfortunately, this disregard for proper hand hygiene is not uncommon. On a national average, hand hygiene compliance rates remain stalled below 60 percent (1). The Center for Disease Control and Prevention reports that in the U.S., two million people suffer each year from hospital-acquired infections (HAI) (2). Of these patients, some experts estimate that as many as 90,000 die annually.

Hovering just above 60 percent compliance, leaders at Spectrum Health, the largest not-for-profit healthcare system in West Michigan, were determined to move the needle on compliance among their 16,000 employees and 1,500 physicians.

In 2009, Spectrum's infection control leaders partnered with researchers at VitalSmarts, a corporate training company, to apply a unique change-management model to improve hand hygiene compliance. The VitalSmarts Influencer model (diagrammed below) was recognized as the Change Management Approach of the Year by MIT Sloan Management Review due to its multifaceted approach to securing change (3). The following will outline how Spectrum Health embraced this change model to bring about unprecedented improvements in hand hygiene compliance to ensure patients are not subject to the potentially fatal risks Dr. Hooker's mother luckily avoided.



Determine Results

Spectrum leaders began by clarifying the measurable results they ultimately wanted to achieve. Because prevention efforts behind all interventions aimed at reducing transmission are complex, the team agreed improving hand hygiene compliance would be the ultimate measure of success. They also agreed to closely monitor and routinely report infection rate reduction as a secondary measure of their success.

Identify Vital Behaviors

The premise of the Influencer model is that the solution to most problems is driven by a small handful of behaviors. Spectrum Health adopted the following three vital behaviors:

- 1. **WIWO.** Wash in and wash out every time staff enters and exits a patient's room—no matter what procedure is planned or occurs in the patient encounter. This behavior was taken from the Michigan Health and Hospital Association. It is also consistent with the WHO and CDC hand hygiene recommendations.
- 2. **Hold one another accountable for performing hand hygiene**. Each staff member is 100 percent accountable for his or her own behavior as well as 100 percent accountable for the hand hygiene behavior of his or her coworkers.
- 3. **Say "Thank You."** When a staff member is reminded to wash his or her hands (even if he or she has just washed) he or she is to say "thank you for reminding me" and wash again.

Spectrum leaders believed if staff adopted these three behaviors, they could significantly influence and improve hand hygiene compliance by creating behavior change throughout the Spectrum Health System.

Consider Six Sources of Influence

The Influencer model organizes influence strategies into six sources that both motivate and enable people to change through personal, social, and structural forces. The researchers behind the Influencer model found that when initiatives combine at least four sources of influence, they are ten times more likely to succeed than those that utilize less than four sources (4).

Source 1, Personal Motivation – The goal of this source is to ignite every person's passion for hand hygiene—to cause every person to see the three vital behaviors as "the right thing to do." Leaders at Spectrum initiated the following tactics:

- 1. Link to a personal experience. Staff members were asked to share their personal experiences related to HAIs—similar to Dr. Hooker's experience. Physician champions caused staff to reflect on the impact of poor hand hygiene as well as revealed the physicians' personal passion for hand hygiene.
- **2. Link to an experience in the news.** Some units used the example of a local news story that reported on the repercussions of unfortunate medical errors to enforce the importance of hand hygiene.
- **3. Teach the skills to others.** Spectrum Health encouraged staff to participate in community-education experiences. Several units volunteered in the Children's Hospital and in local schools to educate children about hand hygiene.
- **4. Become your patient's advocate.** Leaders, staff, and physicians tapped into staff members' initial motivation for entering healthcare. Most had the goal to improve the health of patients and take on the role of patient advocate.
- **5. Connect with purpose.** Staff members were asked to sign commitment boards that asked for formal commitment to upholding the three vital behaviors.

Source 2, Personal Ability – Even the most motivated staff members will fail to change their behavior if they don't know how to adopt the new skills. As a result, the units implemented the following strategies that ensured every staff member felt competent and comfortable performing the vital behaviors.

- 1. Provide formal training. Spectrum Health employees were trained in Relationship-Based Care and Crucial Conversations. Staff members were encouraged to utilize skills learned in these training programs to hold others accountable for hand hygiene.
- 2. Create scripts. Each unit created brief, nonjudgmental, and friendly sample scripts for reminding someone to wash their hands, for responding to a reminder, and for pushing a bit harder if they met resistance from their colleague.
- **3. Conduct role plays.** Staff members practiced the scripts until they felt comfortable speaking up on their own. Physicians participated in practice sessions—convincing nurses and staff that physicians wanted and valued reminders.
- **4.** Address resistant doctors and staff. Initially, a few members of the healthcare team had concerns about the WIWO policy. These individuals were identified and carefully approached by a peer champion. Several of these skeptical physicians and staff later became passionate supporters.

Sources 3, Social Motivation – The following social motivation strategies were designed to make sure all staff members knew their leaders, peers, and the physicians on their units supported adopting the vital behaviors.

- 1. **Demonstrate support from senior leaders.** Senior leaders, including the hospital president, spoke out and wrote memos supporting the hand hygiene initiative and demanding improvements. They also provided the team that led the initiative with access to consultants and other resources.
- **2. Recruit managers and physicians.** It was essential to have the unit managers and key physicians actively support the initiative. These managers and physicians made a point of asking staff to remind them when they forgot to wash their hands.
- **3. Work through opinion leaders.** Many units had frontline staff members who worked alongside managers to lead the unit. These informal leaders were asked to lead the way in practicing perfect hand hygiene and reminding others when they made behavioral oversights.
- **4. Showcase public commitments and permissions.** Colorful and signed commitment posters were placed in public places, for the staff, physicians, and even patients and family members to see.
- **5. Make it fun.** Confronting others can be stressful, so staff and physicians found ways to lower the pressure. A staff member in the ER dressed as a clown with her oversized pockets full of small hand sanitizer bottles. A physician named herself the "queen of clean" and wore a plastic gold tiara. These extra steps helped to communicate that any staff member can hold others accountable without ruining relationships.

Source 4, Social Ability –The purpose of social ability is to create a team approach—giving any individual the support required to Wash In Wash Out and remind others to wash. Leaders at spectrum implemented the following strategies:

- 1. Everyone reminds everyone, regardless of role or position. Every staff member agreed that while he or she always intends to wash his or her hands, circumstances occasionally lead him or her to forget. As a result, whenever someone saw another employee forget to wash, he or she would greatly appreciate being reminded.
- 2. Use opinion leaders to convert skeptics. Unfortunately, some people did object to being held accountable. The physician and manager champions took time to speak with these people and gain their support.
- **3.** Make the infection control team a resource and partner. It's easy for units to see the hospital's infection control team as enforcers, rather than as resources. The team took great care to be helpful by arranging resources for the units and meeting frequently to learn about each unit's needs.

Source 5, Structural Motivation – Structural motivation creates incentives and rewards for acting on the vital behaviors. These rewards are most effective when used in moderation and in ways that enhance personal and social motivation. Spectrum used the following structural motivations:

- **1. Use individual rewards.** Early adopters were publically rewarded with stickers and gift certificates. In addition, a verbal "thank you" became a valued reward throughout the initial stages.
- **2. Celebrate success together.** Individual units celebrated improvements in their compliance with parties. Leaders displayed thank you cards in the cafeteria to celebrate milestones.
- **3. Offer a grace period.** Before the vital behaviors became a part of staff members' performance report, a grace period was implemented by each unit.

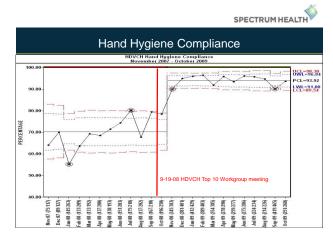
Source 6, Structural Ability – Structural ability includes changes in the physical environment to make hand hygiene more convenient, easier to remember, and easier to track. Spectrum changed their environment in the following ways:

- **1. Ensure access to hand hygiene dispensers.** Hand sanitizer dispensers were placed just inside and outside of every patient room, every meeting room, and every manager's office.
- **2. Use reminder cards.** Pocket cards were created outlining the vital behaviors as well as a thank you for the commitment to the safety and health of the patients for complying with Wash In Wash Out.

- **3. Track performance.** Each unit became responsible for measuring and tracking their own hand hygiene performance. The units displayed the data in a public area indicating ownership over the numbers.
- **4. Use visual cues.** Signs and posters were placed in every unit, and screen savers were installed on most computers. Hand sanitizer stations were placed at main entrance locations for use by staff, families, and visitors upon entering the hospitals.
- **5. Conduct a PR campaign.** Spectrum Health shared their hand hygiene program with the community—broadcasting to the public the health system's improvements and sharing the importance of hand hygiene at public events.

Lasting Impact of Hand Hygiene Intervention

As units acted on the three vital behaviors and implemented their custom six-source plans, Spectrum Health realized rapid and sustained improvements. Within the first two month, Spectrum tracked compliance at 90 percent. And these improvements continue. A year later, Spectrum Health reported a compliance rate at an unprecedented 95 percent and is currently tracking at 98 percent.



Leaders at Spectrum Health now see hand hygiene as the perfect microcosm for developing the skills and norms required for a highly reliable patient safety culture. Based on this initiative, they have determined that the hallmarks of a safety culture include: 1) anyone who has a concern is expected to speak up immediately and others are expected to listen; and 2) everyone holds everyone accountable for safe practices, regardless of their role or position. Through the Influencer model, Spectrum Health has accomplished both of these hallmarks within the area of hand hygiene and is beginning to see changes in several other areas of performance.

Authors:

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About Spectrum Health: Spectrum Health is the largest not-for-profit healthcare system in West Michigan with seven hospitals, more than 140 service sites and 2,000 beds systemwide. It has the largest children's hospital

in West Michigan and the largest adult open heart program in the state. It is the largest regional provider of cancer care and has one of the top joint replacement programs in the nation. The service area covers Michigan with 500,000 Priority Health plan members and more than 8,000 employers.

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