

Identifying Motivators for Hand Hygiene: External and Internal Factors



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Learning Objectives

- Recognize common challenges to the performance of hand hygiene
- Discuss the role of external and internal factors that influence behavior change
- Identify motivators for hand hygiene
- Describe methods to inform improvement efforts



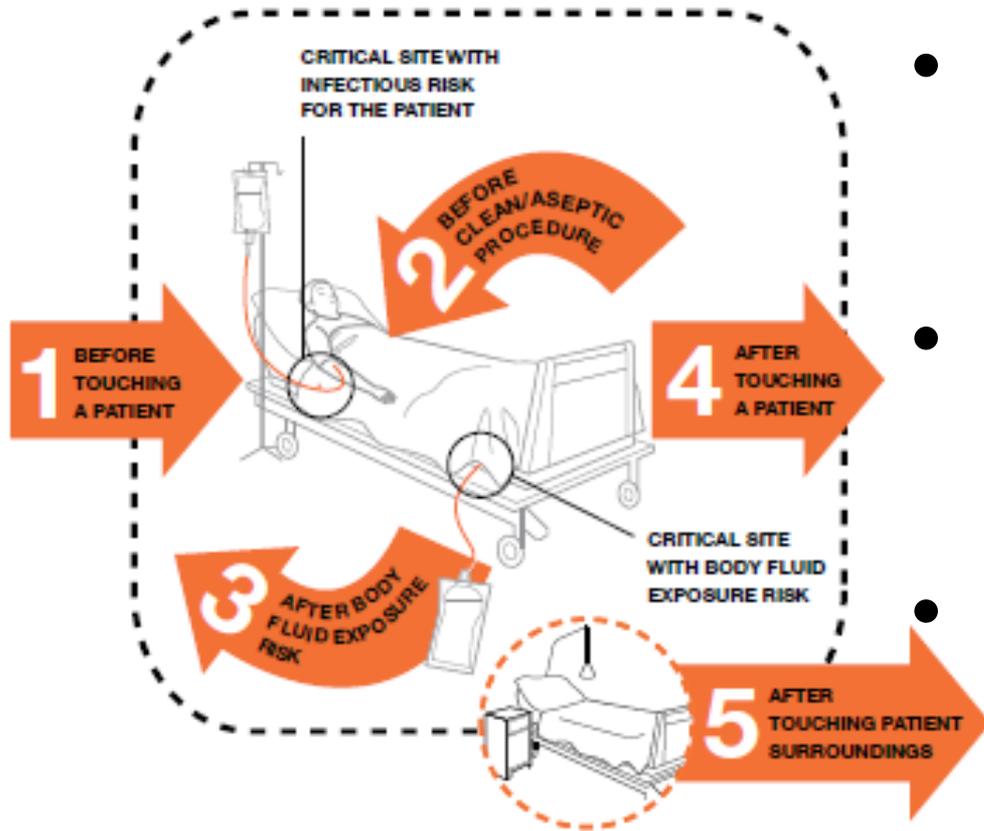
State of Hand Hygiene

- One of the most effective measures to prevent healthcare-associated infections
- Adherence to hand hygiene
 - 40% Intensive Care Units (ICUs) and 60% other settings
- Practice varies among healthcare personnel within the same unit and same facility

(Boyce JM, Am J Infect Control, 2002; Erasmus V, Infect Control and Hosp Epidemiol, 2010; Boyce JM, WHO Hand Hygiene Guidelines, 2009; Image from Clean Hands Count Campaign, CDC)



Review of Core Concepts



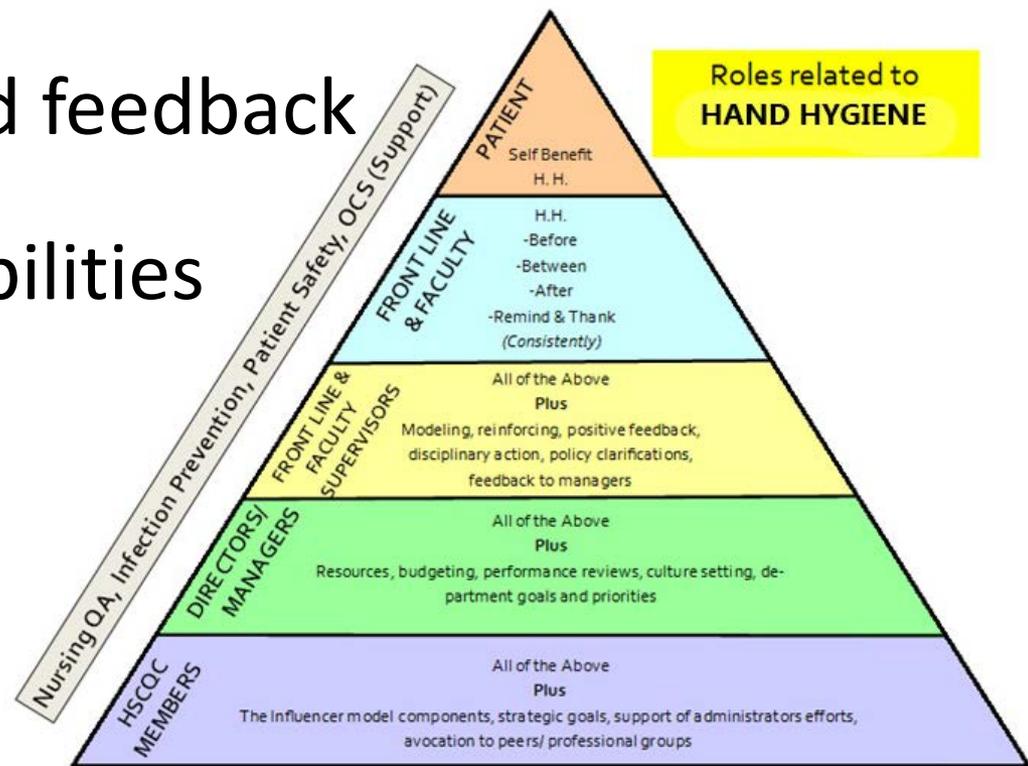
- Five moments of hand hygiene
- Benefits of alcohol-based hand rub
- Myths and misconceptions

(Image from *Your Five Moments of Hand Hygiene*, WHO, 2009)



Review of Adherence and Monitoring

- When and how to monitor
- Presenting data and feedback
- Roles and responsibilities

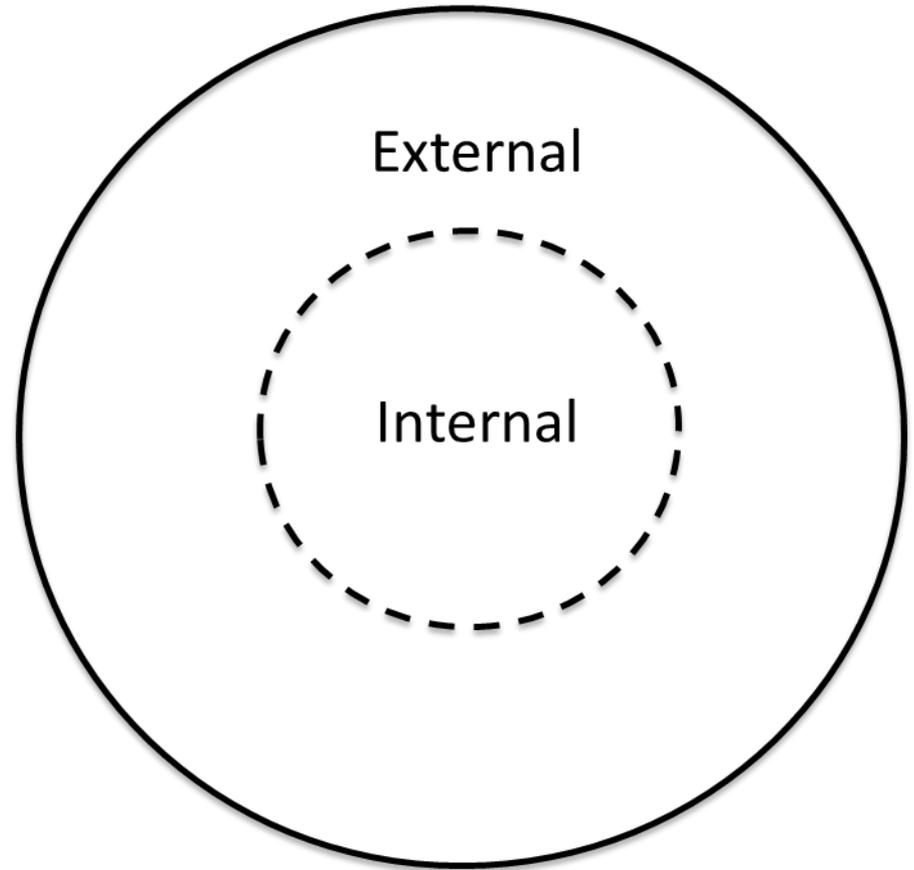


(Image from the University of Michigan Health System Infection Prevention and Epidemiology)



Drivers of Hand Hygiene

- External Motivators
 - Societal
 - Organizational
 - Community
- Internal Motivators
 - Knowledge
 - Attitudes
 - Beliefs
 - Values



(Boyce JM, WHO Hand Hygiene Guidelines, 2009)



Challenges: External

Lack of:

- access to resources and supplies
- 1-1 feedback
- ongoing education
- cues to prompt hand hygiene

Unsupportive culture

- Staff not encouraged to discuss errors



Safety Culture

“Where people are not merely encouraged to work toward change; they take action when it is needed”

- Visible leadership commitment
- Open discussion of safety
- Resources



Safety Culture

(Develop a Culture of Safety, Institute for Healthcare Improvement)



External Motivators

- Education
 - Indications and importance
- Performance measurement
 - Audit and direct feedback
- Communication campaigns
- Provision of resources
- Leadership engagement



(Musuuza J, Infect Control Hosp Epidemiol, 2016)



Challenges: Internal

- Believe guidelines don't apply
- Not sure when and how
- Lack of social support
- Too busy, just forgot



(Boyce JM, WHO Hand Hygiene Guidelines, 2009)



What Motivates People?

Option 1

- Higher pay
- Rewards and incentives
- Punishment for non-adherence

Option 2

- Interesting work
- Challenging work
- Freedom and responsibility

(Herzberg F, Harvard Business Review, 1968)



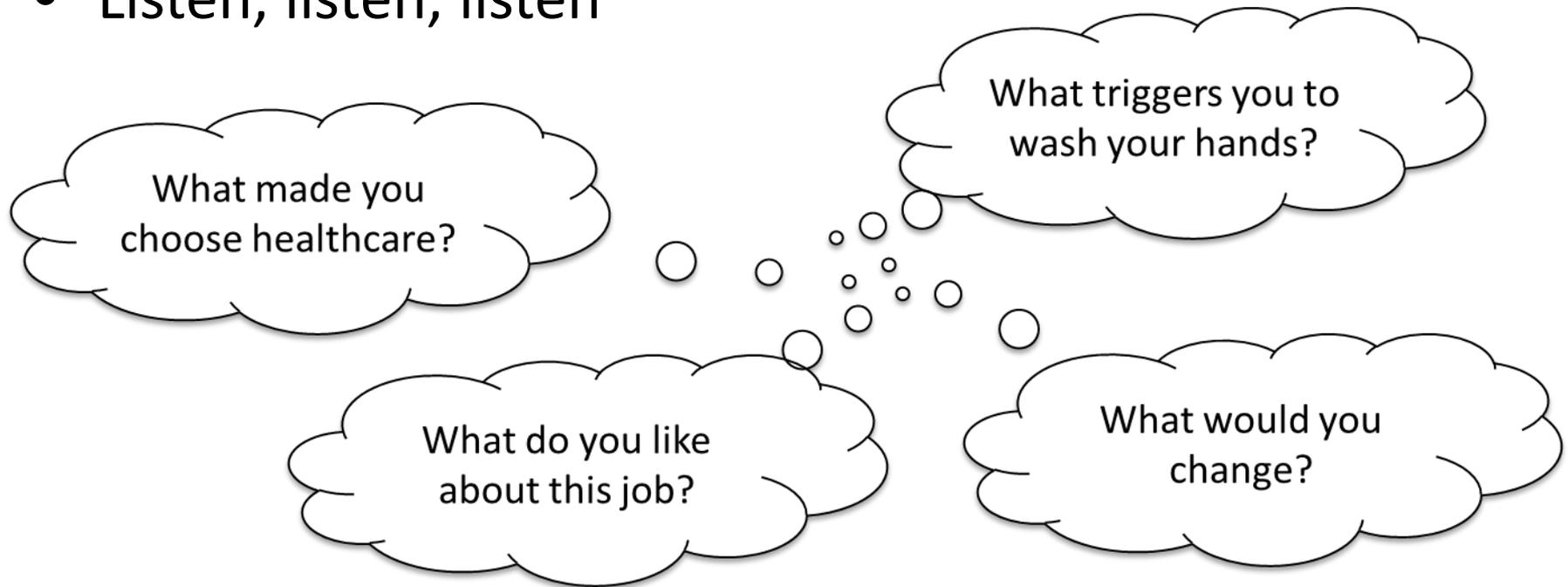
Challenges to Motivating Change

- Apathy
 - Lack of interest or concern
- Complex change
 - Multiple steps vs Single step
- Personal change or organizational change
- Integration into every day



Listening to Staff

- Don't assume you know – go ask
- Listen, listen, listen



*(Sinek S, Starting with Why. How Great Leaders Inspire Action, 2009;
Grant A, Originals. How Non-conformists Move the World. 2016)*



Steps for Motivating Hand Hygiene

- Ensure structure is in place
 - Staff have knowledge and resources
- Brainstorm with staff
 - Start simple, ideally personal changes
- Approach the change with positive attitude
 - Set small goals that allow for celebration



Novel Approaches

- Mindfulness to prompt hand hygiene
- Motivate by focusing on patients
- Positive deviance approach
- Staff-led assessments with immediate feedback

(Gilmartin H, The BMJ, 2016; Grant AM, Psychological Science 2011; Marra A, Infect Control Hosp Epidemiol, 2010; Sickbert-Bennett E, Am J Infect Control, 2016)



References

- Boyce JM, Pittet D. Guideline for hand hygiene in healthcare settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA hand hygiene task force. *MMWR* 2002;51(RR16): 1-48. Available at <https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf> .
- Boyce JM, Chartier YMC, Cookson B, et al. *WHO guidelines on hand hygiene in health care: First global patient safety challenge*. 2009. World Health Organization. Available at http://apps.who.int/iris/bitstream/10665/44102/1/9789241597906_eng.pdf
- Develop a Culture of Safety. Institute for Healthcare Improvement Web Site. Available at <http://www.ihl.org/resources/Pages/Changes/DevelopaCultureofSafety.aspx>
- Erasmus V, Daha TJ, Brug H, et al. Systematic review of studies on adherence with hand hygiene guidelines in hospital care. *Infect Control Hosp Epidemiol*. 2010; 31(03):283-294.
- Grant A. *Originals: How Non-conformists Move the World*. New York: Penguin; 2016.
- Gilmartin, HM. Use hand cleaning to prompt mindfulness in clinic. *BMJ*. 2016; 352: i13.
- Grant AM, Hofmann DA. It's not all about me: Motivating hand hygiene among health care professionals by focusing on patients. *Psychological Science*. 2011; 22(12):1494-9.
- Herzberg F. One more time: How do you motivate employees? *Harvard Business Review*. 1968; 65(5):87-96.
- Marra AR, Guastelli LR, de Araújo CMP, et al. Positive deviance: a program for sustained improvement in hand hygiene adherence. *Am J Infect Control*. 2011; 39(1):1-5.
- Musuuza JS, Barker A, Ngam C, et al. Assessment of fidelity in interventions to improve hand hygiene of healthcare workers: A systematic review. *Infect Control Hosp Epidemiol*. 2016; 37(05):567-75.
- Sickbert-Bennett EE, DiBiase LM, Willis TMS, et al. Reducing health care–associated infections by implementing a novel all hands on deck approach for hand hygiene adherence. *Am J Infect Control*. 2016; 44(5):e13-e1
- Sinek S. *Start with why: How great leaders inspire everyone to take action*. New York: Penguin; 2009.



THANK YOU!



Speaker Notes



Speaker Notes: Slide 1

Welcome to this module titled, “Identifying Motivators for Hand Hygiene: External and Internal Factors,” which will discuss common barriers to the performance of hand hygiene and how external and internal motivators influence behavior. In this module, we will highlight techniques to engage staff in discussions to improve infection prevention practices.



Speaker Notes: Slide 2

The content for this module was developed by Heather Gilmartin, an investigator and post-doctoral nurse fellow at the Denver VA Medical Center and a lecturer at the University of Colorado and informed by a multidisciplinary team of physicians, nurses and infection preventionists dedicated to improving patient safety and infection prevention efforts. In particular, we would like to thank and acknowledge Doctor Laraine Washer, Russ Olmsted and the STRIVE national project team for their contributions and review of this module.



Speaker Notes: Slide 3

When concerns are raised about a hospital's infection prevention program numerous initiatives at every level of the organization are often started to make improvements. Often these changes are undertaken without first getting people on board or knowing whether your staff have the right skills, behaviors and resources to deliver the desired results. The risk of wildly implementing programs without checking with your staff produces stressed out and unmotivated people that are exhausted by the pace, demands and burdens of these programs.

In this module, we will focus on providing you tools to build a supportive environment for hand hygiene that is focused on what motivates people to change. We will review the common challenges to the performance of hand hygiene; discuss the role of external and internal factors that influence behavior change; and identify motivators for hand hygiene. We will end with methods to engage staff in discussions to inform improvement efforts.



Speaker Notes: Slide 4

What do we know about hand hygiene in healthcare?

According to the Centers for Disease Control and World Health Organization guidelines, hand hygiene is one of the most effective measures to prevent the spread of healthcare-associated infections. We also know that adherence to hand hygiene is low. In a systematic review of studies on adherence to hand hygiene guidelines in hospitals, Dr. Erasmus and colleagues reported that adherence was between 30-40 percent in intensive care units (ICUs) and 50-60 percent in other settings. They also reported that adherence was 32 percent for physicians and 48 percent for nurses. Healthcare personnel washed their hands 21 percent of the time before patient contact and 47 percent of the time after patient contact. If the goal is to wash our hands to prevent the spread of infection to ourselves and others, we are not doing a very good job of this.



Speaker Notes: Slide 4 Continued

The World Health Organization guidelines also tell us that hand hygiene behavior varies significantly among healthcare personnel within the same unit and within the same settings. This suggests that individual factors influence practice. This area, what motivates individuals to practice hand hygiene, is the topic we will review today.



Speaker Notes: Slide 5

But first, let's review. In the first module, we reviewed the core concepts of hand hygiene including the five moments outlined by the World Health Organization. We also discussed the benefits of alcohol-based hand rub versus soap and water. Lastly, we reviewed tools to bust the myths and misconceptions around how much product should be used, if you should perform hand hygiene before putting on gloves and what method of hand hygiene is best to remove *Clostridioides difficile* spores.



Speaker Notes: Slide 6

The second module focused on methods for monitoring and reporting adherence to hand hygiene practice. We discussed when you should monitor hand hygiene, what methods can be used (including direct observation versus self-report) and how to report the data to encourage action. Lastly, we reviewed the importance of defining everyone's role and responsibilities related to hand hygiene and how this can help keep people accountable for their actions.



Speaker Notes: Slide 7

But, what drives people to wash their hands? And what motivates people to want to change their behavior?

The business world has focused on motivation for a long time, mostly because they want to know what motivates us to buy things. Though we will be talking about hand hygiene today, the information you'll learn can be applied to any part of your life, such as motivating your children to brush their teeth or motivating your family to pick their clothes up from the floor. The list could go on and on.

There are two forces that drive behavior change –external motivators and internal motivators. Let's start with the external. These drivers include societal expectations, organizational influences and community factors. An example of a societal motivator are the rules and regulations provided by government organizations such as the Centers for Medicare and Medicaid Services (CMS). This regulatory body requires hospitals to adhere to certain evidence-based practices to ensure a high-level of patient care delivery.



Speaker Notes: Slide 7 Continued

The provision of education, monitoring and reporting adherence rates, and providing feedback on hand hygiene practice is part of this program. A motivation to comply with these regulations is the threat of having your organization penalized if adherence is not at a certain level.

An example of an organizational level motivator is your organization's mission. This may state that providing safe care to patients is an organizational priority. Staff are motivated by rewards and recognition when organizational goals are met.

Lastly, are community factors, such as social networks or norms that exist between individuals or group? These can be the expectations set forth from your co-workers or from your manager about how care is provided in your unit. If hand hygiene is the norm, then when someone is observed not washing their hands, others feel safe to stop them and ask them to take the time to protect patients.



Speaker Notes: Slide 7 Continued

The other forces that drive behavior change are internal motivators. They are what define us as an individual and inspire our actions. They are informed by what we know, what we believe, and how we see the world.

For instance, if you believe your role as a healthcare provider is to do no harm, then a focus on washing your hands is a natural action and one you practice routinely. You may need occasional reminders, but you believe it is important, you know when, where and how to clean your hands, and you value yourself and your patients enough to take the time.

Whereas external motivators are meant to enforce human behavior, internal motivators are meant to inspire human behavior. Let's now look at some of the common challenges to hand hygiene to see how external and internal motivators are used to change practice.



Speaker Notes: Slide 8

The 2009 World Health Organization hand hygiene guidelines includes an entire chapter on the common challenges to adherence. The most well-known challenges are a lack of access to sinks, alcohol-based hand rub, face-to-face feedback on practice, and ongoing education for all staff.

In addition, an organizational culture that is deemed unsupportive, either due to a weak focus on safety culture, or lack of role models and peer support, or little encouragement to discuss errors, can negatively influence hand hygiene practice. To address external challenges to hand hygiene, you should focus on putting supplies where staff need them, along with letting people know how they are doing, providing routine education for every member of the clinical staff, and using cues and reminders at the point of care.



Speaker Notes: Slide 9

Let's talk a bit about safety culture. In the hospital setting there are many competing priorities. The conflicting needs of patients, families, providers, regulators and the business of providing healthcare create many challenges. Forward thinking healthcare organizations realize that the primary reason they exist is to take care of patients and they want to keep them as safe and healthy as possible. This mindset leads to a focus on safety culture. In a safe culture, people are encouraged to report problems, rather than to hide them, so they can be addressed.

The Institute for Healthcare Improvement is an organization that has been guiding healthcare institutions in this journey. They define safety culture as an organizational focus where people are not merely encouraged to work toward change; staff can take action when it is needed. They suggest that when leaders are visibly committed to change, when staff feel empowered and safe to openly discuss safety concerns, and when resources are provided to achieve results, a safety culture can be created and sustained.



Speaker Notes: Slide 9 Continued

This cannot just be a slogan though. The creation of a safety culture requires every person, from the chief executive to the physicians, nurse's aides and environmental services staff to become involved and commit to changing their behavior. Administrators can provide the financial resources, while managers and program leaders can routinely visit units to talk with frontline staff. This will build trust and allow for staff to share their ideas on how to improve patient care. Lastly, it means that frontline staff need to be open and willing to change their behavior.

The creation of a safety culture is an external motivator to change behavior. It is impactful and if sustained can greatly change the way healthcare is delivered. Let's dig a little deeper into the components that support this type of culture, with a focus on hand hygiene programs.



Speaker Notes: Slide 10

Which interventions are most frequently used to support a safety culture? For hand hygiene, the most common interventions include education, performance measurement, communication campaigns, provision of resources, and leadership engagement.

Providing education on what is expected, why it is expected, how to perform the actions, the indications and importance of each action and who is accountable is the first step. Second is providing this education using adult learning principles. Adults learn best when convinced of the need for knowing the information. Learning is enhanced when the adult learners bring their personal and professional experiences into the coursework and when the learner has some control over the nature, timing, and direction of the learning process.

Performance measurement involves collecting data on hand hygiene practice and providing direct feedback to the people who are having their practice monitored.



Speaker Notes: Slide 10 Continued

Communication campaigns (these may include posters, banners, stickers and computer screen savers) keep the topics of interest in front of healthcare personnel. These campaigns are meant to provide education, reinforce education and act as cues to prompt busy healthcare personnel to adhere to best practices.

Providing resources includes making the materials necessary for hand hygiene available, accessible and strategically placed so staff do not have to go looking for products.

Lastly, hospital leadership should actively encourage staff to become involved in these programs through performance feedback and using rewards and recognition, or threat of punishment to encourage adherence.

Let's now move to those challenges to hand hygiene that are driven by internal motivation.



Speaker Notes: Slide 11

The 2009 WHO Guidelines identified multiple challenges to hand hygiene, including internal issues such as staff not believing that hand hygiene guidelines applied to them or were practical in their setting.

In addition, the guidelines indicated that many healthcare personnel are not sure about when and how to perform hand hygiene. Common questions included whether to perform hand hygiene after contact with the patient's medical equipment or personal belongings, when to wash hands with glove use, and the step-by-step process of hand hygiene.



Speaker Notes: Slide 11 Continued

Other internal challenges include the lack of social support to work towards perfect practice. The lack of positive role models and peer support has also been shown to negatively impact efforts to improve adherence. Lastly, healthcare personnel state, with all honesty, that they often are too busy and just forget.

These challenges, the lack of belief or disagreement with guidelines, along with a lack of knowledge, though education is readily available, and the perception of busyness cannot be altered by external motivators alone. Interventions that tap into people's internal motivation, are needed to change these behaviors.



Speaker Notes: Slide 12

So let's talk about internal motivation. What drives people and how do we tap into this to get them to do what we want them to do? The psychology of motivation is complex, but what has been unraveled are that most quick fixes do not work in the long-term.

So, what do you think motivates people? For most people, they would say option one - to pay them better, or provide them with rewards or a nicer workspace, or threaten punishments if goals are not met. The second option, make the work more interesting, is actually the right answer according to behavioral scientists. Make the work challenging and give personnel increasing freedom and responsibility to design and control their daily activities. Which is the correct answer for your organization? The simplest and most direct way of finding out is to ask your colleagues.



Speaker Notes: Slide 12 Continued

But since you are not the CEO, you should start with what you have control over. Can you increase their pay? Probably not. You can offer rewards and punishment, but that is mostly work for you and is hard to sustain. In regards to punishment, it is pretty miserable to be the enforcer. What you can do is give employees the space to achieve something that they initiated and be recognized for the work they are doing. If you choose this approach, you will hand your colleagues the responsibility and give them the freedom to keep it going. This may be hard for you – to take your hands off of the steering wheel. But you may find that by giving up firm control on how employees improve hand hygiene rates, you might have more time to provide engaging and real-time education. Or it may allow you more time to walk around units and learn from your staff.

Before you get started though, let's review what you might run into, to allow you to prepare in advance.



Speaker Notes: Slide 13

What might you run into when you head out of your office to start talking to people about improving hand hygiene rates? Remember, you will be asking them to change a behavior that they have had for years.

The first challenge you may come across is apathy, when someone is not interested or sees no need to change their behavior. How do you move them from apathy to action? You start by asking them why they are not interested and then you just listen so you can understand. Is it a lack of knowledge? Is it anger or dissatisfaction with the organization? Is it fear of change? If you listen to people without any plan beyond listening to them and learning from them, they will tell you what you need to know.



Speaker Notes: Slide 13 Continued

The next challenge is to consider the change you are asking them to make. Is it simple or complex? If you are proposing a simple behavior change, like only black ink for writing in charts, and you ensure only black ink pens are available throughout the unit, most people will get on board. But, if the behavior change you are proposing is complex, like asking busy healthcare personnel to perform hand hygiene per the CDC guidelines, you may want to make little changes, such as asking them to focus on just before entering a patient room. One change at a time is more likely to lead to long-term success.

Third, consider if the change is something one person can make without having to depend on anyone else. If so, they may get on board right away. If the change requires that an organization buy and install new products and requires co-workers to keep an eye on each other, change will take more time. Lastly, for long-lasting behavior change, we have to attempt to integrate the behavior into everyday activities. How do we create the new normal?



Speaker Notes: Slide 13 Continued

Unfortunately, human nature often pushes us back to our old habits because they are comfortable and easy. Think about the last time you tried to cut sweets from your diet. It lasts about a week then you go back to eating what you always ate. This is a constant struggle that can be addressed by anticipating when, where and why relapses will occur and using external motivators, such as audit and feedback to monitor for return to previous behavior. This can help nudge the new behavior to be the new normal. So let's talk about how to get your staff on board.



Speaker Notes: Slide 14

Your role as the person put in charge of hand hygiene improvement in your facility is not to come up with all the ideas. Your role is to create an environment in which ideas can be discussed and tested without fear of judgement (i.e. safe space). The staff on the frontlines are the most qualified to find new ways of doing things.

So how do you find out what staff want to try out - to improve their hand hygiene practice? Ask them. Go out onto the unit and find someone who has time to talk. You can bring them the ideas from this module – things that have worked other places and things that are reported in the CDC and WHO guidelines to get things started. But then let them work through what will work in their unit.



Speaker Notes: Slide 14 Continued

Your role is to create a safe space where people won't get in trouble for sharing their experiences and ideas. If you find a pause in the conversation or aren't sure how to start, ask them why they chose healthcare as a profession. Ask them what they like about their job, their co-workers, and their patients. Ask them what they would change on their units if they could do it their way. Opening a discussion about what motivates your co-workers will help you understand why they do what they do. Listen without a plan, this is not the time for feedback or education. Do not interrupt. At the end, ask if they have anything else they want to say. This type of open discussion in a safe space will build teamwork, a sense of community and allow for interesting ideas to be revealed.



Speaker Notes: Slide 15

So now you're learning from your staff about what brought them to work in your facility. You've collected some interesting ideas on how to improve hand hygiene, but you now want to put at least one plan into action. Let's walk through how you can do this.

Tomorrow you find the charge nurse and give her a summary of what you have been hearing from staff and a couple of the ideas that have been suggested to improve hand hygiene. You ask if you can have a brainstorming session over lunch or at the end of their staff meeting. You bring a whiteboard and some post it notes.

You can start with these questions: Do staff have the things they need to perform hand hygiene? Does the unit have soap, water, towels and alcohol-based hand-rub when and where they want to use them?



Speaker Notes: Slide 15 Continued

Give out post-it notes and ask staff to put them where they want alcohol hand gel. Put together a list of how many gel stations are needed, paper towel holders, or soap dispensers and work to get them installed. This will show staff that you are there to support them.

Next meeting: Ask how the clinical staff want to learn about infection prevention? Do they want on-line modules? In person education? Do they want to play games and role play good and bad behavior? Do they want you to have “open office hours” so they can come and ask you questions? Do they want you to walk around and have you observe their practice and give them feedback or ideas on how to do things differently? Whatever format your staff indicate will motivate them to change. Provide it often and make it fun.



Speaker Notes: Slide 15 Continued

Next meeting: Host a brainstorming session to collect ideas for your action plan to improve hand hygiene. Bring the whiteboard and post-it notes again.

In your brainstorming session, indicate that all ideas are on the table with no concern for how practical they are. Encourage out of the box ideas that will work on their unit. Put all the ideas on post-it notes then break them into two categories – the ones listed in slide 14 as “option 1” (higher pay, rewards and incentives, punishment) and “option 2” (interesting and challenging work that gives staff freedom and increasing responsibility). Focus on the option 2 items first, for they are the ones that we all can control.

Suggest that they start with simple, ideally personal changes. Ones that a single person can own and do not require multiple steps or organizational change. End the meeting by having the group select one idea and set a small, achievable goal.



Speaker Notes: Slide 15 Continued

It could be designing posters to remind staff to wash their hands or each of them committing to give someone a “high five” when they catch them washing their hands before and after entering a patient’s room. Approach the plan with a positive attitude.

Keep the brainstorming meetings going –every other week or once a month. Use it as a time to give staff feedback on progress and then continue brainstorming on what can be done next or what should be done differently. Keep staff engaged, challenged and interested in their work. Follow this with a celebration when the goal has been met. Promote those who are taking the initiative by having them lead the group or allow them to be recognized by having them present their achievements to leadership. The steps for motivating employees can be summed up in one way. You have dedicated and intelligent healthcare personnel in your facility. Use them to solve the problems that impact them.



Speaker Notes: Slide 16

Though your team will come up with ideas of their own, here are some programs that have been successful and could be tried in your facility. The first approach is using hand hygiene as a prompt for a moment of mindfulness. I suggested that pausing and taking a deep breathe, focusing on your thoughts and emotions, and experiencing the feeling of soap and water or gel on your hands - while performing hand hygiene - can help busy healthcare personnel slow down and bring a sense of presence and focus before and after they enter a patient's room. My paper referenced on this slide provides a guide for how to perform mindful hand hygiene that could be posted next to sinks or hand gel stations.

Another approach was studied by Grant and Hoffman. They wanted to know what the most effective message to improve hand hygiene was. Their study found that hand hygiene was greater when signs posted next to hand gel dispensers read, "Hand hygiene prevents patients from catching diseases" instead of "Hand hygiene prevents you from catching diseases."



Speaker Notes: Slide 16 Continued

The sign that focused on the patient was more effective. When you design your posters or stickers, make sure the message focuses on how forgetting to wash your hands can hurt a patient.

Another approach was studied by Dr. Marra and colleagues. They wanted to know if a positive deviance strategy, where healthcare personnel who were good examples of hand hygiene practice, could change peer behavior. Positive deviance training was provided by the research team and is described in the paper. The units with the positive deviant driven hand hygiene program experienced a statistically significant increase in hand hygiene practice and a reduction in HAI incidence.

So, if you have colleagues who are doing a great job at hand hygiene, mobilize them to find solutions to low hand hygiene practice and ask them to model excellent behavior.



Speaker Notes: Slide 16 Continued

A final approach was studied by Dr. Sickbert-Bennett and colleagues. In this study they asked all members of their hospital, from the leadership team to physicians to cleaning staff, to observe for hand hygiene on the clinical units and to report adherence using a form or an on-line app. They asked that the people conducting the observations provide immediate feedback with their observations. They called this the “All Hands on Deck” program and it was meant to engage every member of the facility in hand hygiene awareness and promotion. This will get every member of your facility on board and create a community that focuses on keeping patients safe and free from infection.

You now have the tools to go learn what motivates your staff.

Remember, your role is not to come up with all the ideas or to be the enforcer of rules. Your role is to create an environment in which ideas can be discussed and tested. The staff on the frontlines are the most qualified to find new ways of doing things. You help them make it happen.



Speaker Notes: Slide 17

No notes.



Speaker Notes: Slide 18

No notes.

