THE CAREREADY[®] HANDWASHING FIX

HEALTHCARE

handwashingforlife



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Motivation matters. Data is the difference.

HandwashingforLife[®]'s <u>HandsOn™ Process</u> is a practical set of proven measures to change caregiver handwashing behaviors, protecting patients, residents, themselves, their colleagues and the business itself. The enduring outcomes of the HandsOn process are secured by implementing electronic hand wash monitoring (EHWM).

What follows is a 5-step template for the collaboration needed to successfully create and implement a sustainable *CareReady® Hands* solution.

handwashingforlife®

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THE PROBLEM

THE PROBLEM

Pre and current COVID-19 caregiver handwashing face the same hurdle. The level of personal commitment is lower than the competing forces created in their workplace. Traditional compliance measurements, mainly programs based on observation, are falling short. The sample size is too small to be meaningful and the reporting too late to motivate significant behavior change. Good handwashers are not rewarded and poor ones are not disciplined. C-suite executives are out of the loop as there are no numbers, no meaningful reports to track trends and guide investments in programs of continuous improvement. Handwashing frequency by caregivers is consistently low. This has been established in multiple studies. The CDC reports that caregiver handwashing rates are less than 50%. This contributes to the spread of <u>healthcare-associated infections</u> that affect 1 in 31 hospital patients on any given day.

THE CAUSES

THE CAUSES

The fault does not lie with caregivers but rather the culture created by decades of under-washing without organizational response. CDC's annual counts of death rates from Healthcare Associated Infections, HAIs, come and go, raising few flags and stimulating no specific corrective actions from operators. A facility P&L is well scrutinized but there is no line to acknowledge variations in outcomes. Care-dollars often trump careoutcomes. This same misguided priority feeds into operational budgets, squeezing out patient-centered measures like handwashing that cannot withstand the demand for an evidence-based defense. Armed with numeric data covering every angle of efficiency, budget-dominated committees annually cut the defenseless handwashing initiative until poor handwashing has become the accepted norm. "We are doing everything we can and follow CDC guidelines." Efficiency measures are often more valued in healthcare career progression than effectiveness of care. It is also a source of executive advancement and the criterium for significant bonuses. Handwashing solutions carry the risk of exposing the current reality.

THE SOLUTION

THE SOLUTION

THE 5-STEP HANDSON[™] SYSTEM

CAREREADY[®] HANDS & TOUCHREADY[®] SURFACES



THE HANDS-ON SYSTEM'S CORRECTIVE ACTIONS

A simple sequence of five problem-solving steps provides a fact-finding framework to assess the reality of the risk and set up a sustainable solution:

- 1. Assess the Risk.
- 2. Set Standards.
- 3. Optimize. Set Conditions For Success.
- 4. Motivate & Train.
- 5. Monitor & Report Performance.



This chronology of thought keeps the objective in focus and wraps up with a sustainable risk-based resolution. The process opens with an intuitive approximation for each step by experienced stakeholders. The sequence is repeated again and again as drill-downs open collective eyes to new solutions. The HandsOn System's pattern of analysis serves the continuum of planning from the Strategic Plan down to the Budget. It helps assure daily cost-saving decisions are first measured by potential compromises in patient safety.

The HandsOn System is an answer to the risks created by overzealous staff, rewarded for productivity and cost-savings, without adequate consideration of the risks to the enterprise. **"Measured-savings trumps the unmeasured risk."** (Jim Mann, Founder, The Handwashing For Life Institute)

1. RISK ASSESSMENT



THE HANDWASHING RISK WORKSHOP

A workshop is an expedient vehicle to commence the transition to a truly cleanliness-valued, patient-centric culture. It facilitates a collaborative hand hygiene risk assessment by a panel of internal experts whose support can be missioncritical when implementing any corrective actions should they be required.

The members of this cross-departmental team are selected for their knowledge and experience of current operations. The size of the group is limited to seven to encourage all-in participation. A team of five is even more effective in reaching better decisions in less time.

MYWIN WORKSHEET

Operators seldom know their specific handwashing frequency rate but generally feel it is well below what they would like. Agreeing a standard is facilitated with the MyWIN template, displayed under the "Setting Risk-Based Standards" section. (WIN is an acronym for Wash Index Number.)

WASH INDEX NUMBERS WORKSHEET

Date: / / My Name:	
Arrival Our Names (Shift):	
Pre / Post Break	
Restroom Use	
Task Change	
Pre / Post Gloving	
Facial / Grooming / Sneeze / Cough	
Patient / Resident / Caregiver / Visitor Contact	
Rub-ins	
Rub-withins	
Rub-outs	
Other	
Departure	
Total Hand Washes by type of Wash (per Shift)	
My / Our Total Hand Washes (per Shift)	
MyWIN™ (HW/EH)	My Hours / Shift
OurWIN™ (HW/EH - Total Team Hand Washes / Total Employ	vee Hours) Our Hours / Shift
PatientWIN [™] (HW/Census) ResidentWIN [™]	Patients-Residents / Shift

Notes & Comments

require higher wash rates.



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1) WIN numbers are considered a minimum and special high-risk situations may

 Wash quality standards are measured by the ProGrade[™] system; a standard of 20 seconds in considered a minimum in Handwashing For Life's Core Handwash.

THE HANDWASHING RISK WORKSHOP

HANDWASHING HURDLES

The next instrument of collaboration initiates the needed discussion with an interactive assessment of current handwashing hurdles and compliance estimates.

The team first agrees if they likely have a problem, a gap between their agreed standard and current practices. If so, they determine which of the five categories (reasons and excuses) apply in their operation and prioritize. This downloadable graphic depicts the hurdles to achieving a safe level of handwashing. It serves to facilitate collaboration and the ranking of contributing factors.

HANDWASHING FOR LIFE'S **The 5 Handwashing Hurdles** WINNING WITH THE HANDSON™ SYSTEM Care Electrine Awarenet Operation's Priori -rushvs. the risk .Con Touch

THE HANDWASHING RISK WORKSHOP

The assessment team now moves on to develop a summary statement of the current handwashing risk along with a numeric approximation – your Hand Hygiene Risk Credit Score, your handwashing "FICO" number. The Hurdles and Circles of Success exercises yield critical work-products of this collaboration and serve as decision support when lighting the path of continuous improvement.



THE CIRCLES OF SUCCESS

The Circles of Success is another collaborative tool to facilitate drilling down on each of the five HandsOn System steps. It takes its name from the fact that every facility that is able to keep its doors open is operating at some level of success but could likely do better when it comes to handwashing.

Each step is scored after asking and discussing "How are we doing in (insert step)?" The 5 scores are added, divided by 5, yielding the FICO style score equivalent for the current handwashing practices – your Handwashing Risk Credit Score.

Handwashing For Life's experience in 20+ years of monitoring handwash compliance enhancement programs determined that only operations with electronic monitoring could reach the Very Safe range of 700-850. Without electronic monitoring and appropriate reporting, gains were found to be unsustainable. Electronics exponentially increase the surveillance factor, converting



Each of the five steps of the HandsOn System are assessed by an internal, cross-functional team. How well are we doing at understanding the risk of missed handwashes? What do we see? What do we hear? This sequence is repeated for each step, assigning grades for each, using a numeric scale that mimics the famous FICO scores of credit worthiness.

Add the numbers, divide by 5, and see how prone the operation is to an outbreak from missed handwashes.

... THE CIRCLES OF SUCCESS

subjective estimates based on random observation to statistically significant, verifiable compliance data. Handwashing behaviors become part of a measurable process.

Today's practices in risk assessment tend to ignore those flowing from missed handwashes. First, it is not a topic reaching C-Suite agendas. Variances from our standard? Near misses? This void in executive awareness is the first symptom of a process that is likely out of control. It flies under the radar until a crash occurs without any warning! This breach in the defenses against hospital and nursing home acquired infections is not one of pure complacency but it has simply slipped into a routine that now serves as an indicator of the current reality, the current culture. Poor handwashing is baked into the daily routine. It has become an accepted but unrecognized standard from the BR (board room) to the ER (emergency room). Breaking this time-hardened pattern starts by interrupting it long enough to seed a solution and attentively nurturing the replacement behavior for at least three months.

A remodel or new construction project provides one of the best stages for this HandsOn System driven transformation, breaking through the barrier of the status quo. The design team, including Infection Prevention and Operations, brings forward a discussion based on construction objectives, patient-flow and control of risk. This is a timely window to conduct the Handwashing Risk Workshop, capturing the views of multiple departments and to set the stage for collaborative process-controlled designs.

2. SETTING STANDARDS



AGREEING RISK-BASED MEASUREMENTS

Away-from-home care in most all age groups is increasingly valuing cleanliness in their choosing of a care facility. Positive images among family, friends and the local community are often the keys to provider profitability. Some provider will earn the #1 rank locally and this is increasingly based on HAI rates and other patient-safety trends.

Handwashing is centerstage as the value of HCAHPS grows (Hospital Consumer Assessment of Healthcare Providers and Systems.) Patient perspectives are now pressuring caregivers to wash their hands. This active hand cleansing goes a long way in convincing patients and their visitors of management's true priority, an expression of their Patient-First culture. The caregiver's entrance into a patient room is an opportunity to mark his or her scorecard, preferably electronically. They are either a "Washer" or a "Walk-by" of the handwash/ sanitize station. Their behavior either mirrors the corporate mission statement plaque extolling excellence, leadership and loving care or exposes the carelessness.

Patients, residents and their visitors are increasingly seeing the condition of the public areas of a hospital or nursing home as an indicator of management's true value of cleanliness, a visual "signature" of the organization's actual culture. Public and patient restrooms and proving to be one of the best little spaces for big investments in cleanliness.

Sustainable restroom hygiene has this basic challenge: No one wants to clean them but everybody wants them clean. Your restrooms will never be what your patients, residents or visitors seek until you resolve this paradox. Its resolution lies in identifying workers who do actually care, understand the WHY and see the restroom's connection to wellness, including their own. They must commit to the caring for all users and be rewarded for their professionalism. Besides payday recognition, supplying the crew with best practice tools (e.g. safe-to-use cleaning products, single-use paper towels and reliable equipment) is also a meaningful sign of leadership's appreciation of their mission-critical role.

FUSING DEPARTMENTAL PRIORITIES: THE PATIENT-FIRST STANDARD

Care levels compete with efficiency goals. The caregivers themselves are closest to those served which shapes their daily priorities. Their skills and languages may differ but they share a primary objective – Care. Patient and resident care has its measurements ranging from time to answer call-button requests to monthly infection reports and social media driven patient surveys. They

manage the moment where all the planning and training comes together.

Quality Assurance/Patient Safety knows the science and severity of pathogens but not their HAI probability and the impact on profitability. Their objective is to monitor the measurables in order to help Operations avoid infections and promote healing. They keep logs, look for trends and support Operations in their quest to do it all while delivering the numbers which are often directly connected to business continuity. Quality Assurance/Patient Safety is measured by teamsmanship, patient/ resident surveys and HAI trends.

Care facilities are also competitive businesses, often with very thin margins. Shift managers, the Operation's representatives, are charged with leadership and are accountable for the performance Healthcare providers in most cases are rightfully proud of their patient and resident care. After all they likely see their operation as a finely tuned network of policies and procedures focused on their clients' wellness. It is a human behavior to love what we create. This fosters further operational enthusiasm but can dangerously



of the staff. Their objective is to deliver all the numbers that have been set according to the business model. They are rated by the shift, week, month and year, primarily on efficiency measures. Costs are commonly calculated and reported as \$/Patient whereas the ideal would be \$/Outcome.

 Image: Conceal important realities

 and diminish objectivity.

 A condition is created and

 recognized as the "ugly

 baby" barrier to accepting

 reality. C-suites become

 disconnected from the truth

 that their handwashing is

 running at 30% compliance,

 not the 90% reported

Read More at http://

handwashingforlifehealthcare.org/blog/ mike-mann/handwash-compliancehealthcare-s-ugly-baby

FUSING DEPARTMENTAL PRIORITIES: THE PATIENT-FIRST STANDARD

Trivializing hand hygiene results in a pervasive attitude often blocking the path to an informed solution. The CDC's advice that Handwashing is the single-most important means of preventing the spread of infection is ignored this year, same as last. It has become something akin to the overlooked sign on restroom mirrors reminding staff to wash their hands. It becomes eclipsed by one's repeated pattern of walking right on by, perhaps a type of muscle memory or an immune reaction built up over time by the lack of consequence. Poor handwashing continues to be the provider's number one unresolved issue with regard to the risk of HAIs.

Patient care is a Total Quality Management (TQM) process simply summarized by outcomes, often subject to interpretation of patient satisfaction scores. It is the interaction of procedures and sub-processes that can be addressed individually and collectively. W. Edwards Deming, the father of TQM, has defined quality as a strategy aimed at the needs of the customer. Joseph M Juran, another authority on quality, has defined quality as conformance to requirements.

The key principles of TQM are customer focus, obsession with quality, scientific approach, long-term commitment, teamwork, continual improvement systems, education, training, freedom through control, and unity. [Agarwal A., Aeran H., Uniyal S., Nautiyal A. Quality assurance in dentistry: a need in Indian scenario. Int J Oral Health Dentistry. 2015;1(4):172–176.] These are the drivers when creating a Patient-First handwashing program.

A common organizational issue often restricts common-sense solutions. Quality Assurance (QA) led departments are more likely seen internally as Quality Control (QC). This flawed interpretation encourages Operations to focus on the more measurable factors of efficiency. Patient care staff can be cut until quantitative indicators raise a red flag. Operations has numbers to make their case while QA does not. This tension between QA and Operations is widespread and can run deep. Health care organizations rely heavily on quality assurance/patient safety programs to develop ways to monitor and ensure that mandatory minimum standards are being met.

The Medical Director often oversees the acute care quality programs and depends on quantitative data to assess program effectiveness. They usually have a dedicated department with a system in place to audit the protocols for effectiveness. The problem with handwashing compliance is that the Medical Director and staff have no empirical data to work with. They have been dependent on the overstated subjective compliance numbers gathered by observation, yielding anything but statistically significant numbers. Operators have neither meaningful standards nor audit tools. "Care" must be a controllable process yet handwashing is not. Typically Quality Assurance is monitoring mandatory requirements but for handwashing there are none.

FUSING DEPARTMENTAL PRIORITIES: THE PATIENT-FIRST STANDARD

Quality Assurance staff unintendedly creates more work for hospitals and nursing homes. They are often seen as "care-prevention" as they are forced to introduce and enforce new mandatory policies, interfering with today's bedside accountabilities. Quality Assurance staff may experience resistance when directing departments to create performance improvement projects like handwashing.

Read more at http://www.ehow.com/ about_6304653_quality-assurance-healthcare_.html

Handwashing and high-touch surface cleanliness serve as starting points to set up a level of process control to minimize the potentially existential threat of an infectious outbreak. Collaboratively achieved and agreed numeric standards is the intention. The Joint Commission, CDC, and FDA's SFS (Smarter Food Safety) all call for metrics to achieve cross-departmental commitments and to verify a path of continuous improvement. Numbers provide the common language, neutralize the hidden departmental agendas and add program sustainability.

THE 5 COSTLIEST HEALTHCARE INFECTIONS ARE AS FOLLOWS:

The total annual costs for the 5 major infections were \$9.8 billion:

- 1. 33.7% SURGICAL SITE INFECTIONS
- 2. 31.6% VENTILATOR-ASSOCIATED PNEUMONIA
- 3. 18.9% CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS
- 4. 15.4% C. DIFFICILE INFECTIONS
- 5. <1% CATHETER-ASSOCIATED URINARY TRACT INFECTIONS.

https://jamanetwork.com/journals/ jamainternalmedicine/fullarticle/1733452

TOUCHREADY® SURFACE STANDARDS

Many surface cleaning choices of protocol are made spontaneously as the staff/ caregiver assesses the nature of the soil and associated risk. This is to be protected via training rather than advocating more prescriptive protocols which go beyond common sense – a common cause of non-compliance. If you can reach your TouchReady[®] surface cleanliness standard by using convenient cleaners more often, the basic clean-as-you-go method, you can keep surface-to-hand contaminations to a minimum. After the risk is gauged by the employee, further decisions depend on standards along with agreed methods to measure, track and report.

Here are three variations to consider:

- Spray and wipe with a versatile product, allowing users the flexibility of using more product, adding a soak time and muscle where needed – all without the need to don gloves. Convenience is a cleaning frequency multiplier.
- 2. For deeper cleaning and germ killing, spray surfaces with the same chemical,

let sit for minutes, and then wipe with a single-use paper towel.

3. Wipe with a single-use fast-drying towelette.

Operators are encouraged to set an initial standard by documenting what they currently do with regards to the cleaning and monitoring of high-touch, non-food contact surfaces. Surface cleanliness is a powerful message of patient and resident care. Science confirms the importance of surface hygiene, particularly when looking at Norovirus which survives on surfaces for days and continues to close schools, send cruise liners back to port and kill nursing home residents. Coronavirus too endures on surfaces with similar outcomes.

This <u>research animation</u> is used to dramatize the reality while building cleaning protocols for both surfaces and hands. It is also recommended as a component in many training situations.



ATP, Adenosine TriPhosphate, is the technology of choice to first provide a numeric expression of current practices and second, to motivate improvements. Mere measurement increases the importance of the task and its compliance.

TOUCHREADY[®] SURFACE STANDARDS

A UV marker system such as MarX® (Brevis Corporation) is a low-tech method to verify adherence to the standard. This too improves the following of established protocols but does not directly provide numeric values. It is a simple yes-no measurement, cleaned or not. Operators may mark and monitor as few as three target surfaces at a time. This simplifies the recording and yet provides the incentive for the staff to comply. Some operators draw on the HACCP principle of taking the corrective action as close as possible to the occasion of the compliance breach. MarX is a powerfully visual training tool.

Numerics can be assigned to the MarX protocol by reporting the verified-cleaned surfaces as a percentage of total: stamped 10, 9 cleaned off = 90%.

TouchReady[®] surfaces keep clean hands CareReady[®].

CAREREADY[®] HAND CLEANLINESS STANDARDS

Handwashing effectiveness can be measured and documented with a highly impactful individual experience. The staff simply self-applies a UV tracer like GlitterBug®. Hands are washed according to operator policy. Results are visually observed and transferred to a ProGrade™ template that serves as a record. The operator sets the passing grade that calls out the importance of handwashing technique and sets the minimum performance.

Form at end of document.



$\mathbf{MyWIN}^{{}^{\mathrm{\tiny TM}}}-\mathbf{OurWIN}^{{}^{\mathrm{\tiny TM}}}$

WASH INDEX NUMBERS WORKSHEET

MyWIN[™] / OurWIN[™] WASH INDEX NUMBERS

Staff must be involved in converting their actions per shift into an hourly reference point. **Handwashing frequency** standards are set first, collaboratively, by the workers, in groups of 3–5. After reviewing their work patterns and the illness–susceptibility of those served, numbers for an 8–hour shift are established. Once agreed, the number is divided by 8 to normalize the standard as Hand Washes per Employee Hour – HW/EH. Supervision makes the final call. This HW/ EH index allows comparisons of shift to shift and unit to unit.

Form at end of document.

 Date: / / My Name:	
 Arrival Our Names (Shift):	
 Pre / Post Break	
 Restroom Use	
 Task Change	
Pre / Post Gloving	
Facial / Grooming / Sneeze / Cough	
Patient / Resident / Caregiver / Visitor Contact	
Rub-ins	
Rub-withins	
Rub-outs	
Other	
Departure	
Total Hand Washes by type of Wash (per Shift)	
My / Our Total Hand Washes (per Shift)	
MyWIN™ (HW/EH)	My Hours / Shift
OurWIN [™] (HW/EH - Total Team Hand Washes / Total Employee Hours)	Our Hours / Shift
PatientWIN™ (HW/Census) Patien ResidentWIN™ (HW/Census)	nts-Residents / Shift

Notes & Comments:

require higher wash rates.



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1) WIN numbers are considered a minimum and special high-risk situations may

 Wash quality standards are measured by the ProGrade[™] system; a standard of 20 seconds in considered a minimum in Handwashing For Life's Core Handwash.

SITUATIONS DRIVE HANDWASH TECHNIQUE

Handwashing methods are infinite when wash-time and multi-step interventions are considered. Does one-size-fit-all when looking at who washes where and why? The how is also an important choice.

Handwash protocols in healthcare are dictated by the situation. The provider focuses on risk and takes behavioral factors into consideration. Circumstances are defined and grouped. The training begins.

Implementing the final choices rarely goes like clockwork. The rush of patient service issues arise and are ironed out first. The pervasive bias of efficiency can quickly kick in and erode the planned practices, always receding toward the origional "status quo." The degrading from the desired standard starts immediately. The remedy is timely compliance data reporting.

care ready^w hands Risk-based Regimen Selector



NOTES:

a) The angle of each bar reflects the range of outcomes dependent on soil/contamination levels, products of choice (including paper toweling), dosing and technique. Performance assumes quality materials at each step.

b) Regimen choice is driven by the situation and covered in employee training.

c) Each of these regimens can be followed by donning single-use gloves for added protection.

RESEARCH REFERENCE:

1) Edmonds 2010, Edmonds 2012, handwashingforlife - Core Handwash	
2) Edmonds 2012	
3) Estimated	
4) Estimated	
5) Alocohol hand santizer effectiveness increases as the presence of soil decreases, Edmonds 2012, Pickering 2011	
6) Estimated	
7) Estimated	
8) Edmonds/BioScience Labs published peer reviewed study JFP, Edmonds 2010	
Links to the research and added details are available at handwashingforlife.org	

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FADERSHIP

3. OPTIMIZE



OPTIMIZING THE CONDITIONS FOR SUCCESS

Conditions for success are important to establish prior to starting a behaviorchanging handwash initiative. Coronavirus control is critical and now that COVID-19 vaccines are available, they are a mandatory component.

Operators, particularly in Long-Term Care, are advised to consider the Hep A threat, knowing that it is one of the few pathogens which can be controlled by a vaccine. The Hep A virus, much like Norovius, is often carried by infected workers, frequently without symptoms (asymptomatic), making handwashing an essential intervention.

Here is what a hep-A vaccine program did for a concerned Las Vegas market:

III employees 450 are a major 400 threat. Many are screened 350 out with 300 vigorusly enforced 250 ill worker policies and 200 procedures. 150 But then there 100 is hepatitis A ... 50 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 YEAR 64 124 209 273 385 188 110 69 49 26 17 7 13 5 10 CASES

> This profile of hep A reductions follows the introduciton of the Southern Nevada / Las Vegas Health Card Program, where workers are vaccinated for hep A as a condition of their employment.

... OPTIMIZING THE CONDITIONS FOR SUCCESS

Handsink location is another vital condition for success. Long distances from critical control points clearly discourage use. Touchfree dispensers and faucets encourage frequent washing as does quality of supplies. A well-lit clean and uncluttered space is another environmental inducement for positive Patient-First behaviors. This best practice package makes it easier for busy caregivers to do the right thing at the right time.

The handwashing process itself must be under control to swiftly deal with the variables faced beyond the budget period. Consider the COVID-19 experience. The better control of the process the quicker the response to new challenges which stretch resources to the point where operational survival becomes the goal.

This pattern suggests a constant flow of viral attacks on our healthcare system, with Nursing Homes taking the brunt:

- 1918/9 Spanish Flu,
- 1957/8 Asian Flu

- 1968/70 Hong Kong Flu
- 2002/3 SARS
- 2003/4 Bird Flu
- 2009/10 Swine Flu
- 2013/6 Ebola
- 2019/20 Coronavirus/ COVID-19

Episodes like these are very trying but create leaders in the eyes of the public. Who best meets the patient/resident needs? Brand awareness grows. HAI understanding grows. The value of handwashing grows. Winners gain a strategic benefit which can be leveraged for long-term sustainability and profitability.

Reliabile equipment is also key factor for success and often under-appreciated by the purchasing "value engineers" who are limited to reading product claims and writing generic specifications. Hand sanitizers are one of the best examples. Registered labels for a plethora of products show 70% ethyl alcohol, indicating equality. <u>Clinical results prove otherwise. Total</u> formulation matters.



Convenience breeds compliance. <u>This hygienic installation</u> integrates a deep-draw non-splash handsink with reliable <u>no-touch dispensing</u>. It is the "no-excuses" option when setting the conditions for employee success. Add usecounting technologies to reward compliance and discipline non-performance.

...OPTIMIZING THE CONDITIONS FOR SUCCESS

Equipment malfunctions, harsh soaps, disintegrating paper towels and empty dispensers are among the cues revealing management's true priority and give the caregivers a green light for skipping handwashes.

A newly added condition for success is technology-based electronic handwash tracking. This is now available from multiple sources, most all with proven track records in multiple facilities. They all cost considerable short-term time and money but their payback is commonly in the first year. Investments in the best of systems is less than the cost of infections.

Data gathering technologies now include recognition by voice, video, infrared, thermal imaging, RTLS (real-time location system), manual entry and their combinations. The best systems include caregiver engagement capabilities such as color change within the badge, signaling compliance to patients or residents. A wearable-badge system provides an array of reporting options down to the individual level. They also serve to acknowledge supervisory leadership and team performance.

Investment justification is rather simple once a facility understands and accepts the reality of un-budgeted annual patient infection costs. This graphic illustrates the needed math (full article):

Infection Budgeting 200 Bed Hospital



4. MOTIVATE & TRAIN



MOTIVATE & TRAIN

Good trainers have been long-standing hallmarks of healthcare. He or she infuses knowledge, technique and "training session motivation." Are safe-level standards being met the following month, week, day or as soon as the supervisor is out of sight? Research says no.

When Handwashing For Life Institute researchers install counters in soap dispensers or deploy more sophisticated technologies to measure compliance, they consistently find handwashing rates at about 30–50% of what the operator considers safe.

When Quality Assurance and Patient Safety staff encounter these documented low numbers, they enlist Training to schedule added in-service sessions. This results in a temporary upward blip and the operation soon returns to its previous equilibrium. The organization is satisfied that they have done everything. What they have really done is reach the limits of training without measurement. Handwashing compliance technologies can now accurately identify the level of staff compliance. Does it match up with the atrisk patient population? Does it align with your liability insurance and tolerance for risk?

Programs to enhance handwashing must start with an assessment of risk so that the solution is risk-based and patient wellness is protected. Operations must agree, commit and declare the standards to which staff will be rewarded or disciplined.

Having Operations explain the Why behind professional handwashing and then declaring the agreed standard as their expectation, will do more for raising handwashing compliance than years of training. Once standards are in place, consider initiating the Day One Training policy to highlight its priority. Handwashing For Life Institute's current work on electronic handwash compliance clearly documents the poor hand hygiene reality of caregivers. It is encouraging to watch how monitoring and keeping score quickly changes the game. It is the foundation for motivating behavior change and raising the bar for handwash frequency and patient safety.

New behaviors are formed but it takes weeks to burn in and become a new habit. "There is no influence like the influence of habit." writes Canadian author Sir Gilbert Parker.

Too often, training is seen as the singular factor in changing handwash behaviors. We train, stop and expect improved results. There are 7 steps to sustainable behavior change and most stop after step 2 or 3. Knowledge doesn't change behaviors. Conviction and repeated practice are the key missing links.

MOTIVATE & TRAIN

Changing behaviors is also not done in a vacuum. Each employee, even within the management, is faced with a unique combination of the "headwinds" depicted in the outer band of this graphic. Time frames for behavior change projects must be set with mile markers established for each step.



INCENTIVE PAY: AN ASSET FOR SUSTAINABILITY

Handwashing measurement makes a bonus payment program feasible and meaningful. A performance-rewarding pay package is the ultimate answer to sustaining gains and solving the industry's appalling handwashing compliance rates. Wireless data-gathering technologies connect staff behavior with their coaches. This fills the void in patient safety reporting and can now be monitored by C-Suite executives.

Operators, with assistance of Human Resources, can help create and implement a monthly incentive component within the pay package. Here is a sample where an employee's job performance can earn him or her up to \$1,200 per year, paid weekly or monthly. CareReady[®] Hands & TouchReady[®] Surfaces

The Performance Monitoring Solution



5. MONITOR & REPORT


REPORTING RAISES WASHING, LOWERS ILLNESS

Diligence through the first 4 steps gives operators the knowledge and pathway for implementing their Patient-First handwashing system. They have the riskbased standards agreed and the conditions for success in place. The staff is motivated and trained. Handwashing moves from a random act to a process-driven event. The critical environmental and behavioral factors required for sustainable solutions are embodied within a controllable process.

Most readers have likely found that knowledge doesn't change behaviors as they perhaps reflect on past episodes of losing weight. Early success of their new nutritional plan is measured on the bathroom scale. Progress is verified daily as incremental change provides the motivation to continue pursuing their goal.

Imagine a weight-loss regimen without a scale or taking a patient's pulse without a time piece. That has been the handicap in healthcare handwash improvement programs. There has been no meaningful caregiver feedback to mark progress. There have been no rewards for success and no discipline for shortfalls. Observationbased handwash monitoring protocols, "secret shoppers", have failed in motivating compliance.

The pulse of handwashing must be monitored regularly and reported first to the caregiver who can best take swift corrective actions if needed. This newly available data leads supervision and C-suites to align their resources to assure the new behaviors are verified and maintained.

By virtue of electronic data gathering and wireless communication technologies, C-Suite executives can better address the handwashing dilemma – Care vs. Efficiency. They represent the ownership and are the only ones who can define the acceptable level of care and associated risk, knowing it will never be zero. Their fiduciary responsibility goes beyond the short-term budget and calls on them to deliver long-term profitable care and avoid brand-damaging risks. This is the core of sustainability.



Collaboration is the chain that fuses together the links of multi-department objectives into the single CareReady Hands solution. The agreed need for a handwashing fix is succinctly verbalized, possibly serving as a title for your project. Consider personalizing these three slides from an APIC 2019 lecture to include in your proposal to the executive committee or board:

REPORTING RAISES WASHING, LOWERS ILLNESS

Hand Hygiene Events, HAI Rate & Hand Hygiene Compliance Over 4 Years Hospitals with 2000 beds



HAI Reductions 10 Most Recent



HAI Reduction by Hospital



Infection Budgeting 200 Bed Hospital



In conclusion, knowledge doesn't change behaviors. An effective controllable process can. Conviction and repeated practice does. Standards, monitoring and employee rewards are the critical factors in changing handwashing behaviors in a sustainable way. Clinical-care and culinary-care follow the same steps for a CareReady® hands outcome.

Visit a culinary-care solution to see how a hospital kitchen implemented the HandsOn System and resolved its persistent hand hygiene issue, complete with electronicassisted monitoring and reporting. Their Circles of Success "FICO" number earned them passage to the inner circle of success with a 700+ score.

REPORTING RAISES WASHING, LOWERS ILLNESS

Clinical-care handwashing success is best described in this graphic summary.

HAND HYGIENE EVENTS, HAI RATE AND Hand Hygiene compliance over 4 years



This simple graph is the result of enormous data collection, only possible in patient care because they regularly report their illness/infections and a quasi-frequency standard is possible by comparing staff handwashes and patient room entry and exit. That is not possible in healthcare kitchens as there are more than one entry point into the kitchen and there is no collective tracking of illness directly caused by the establishment. For added perspectives on healthcare kitchens download the ServeReady* Healthcare Kitchens Handwashing Fix.

This research is a composite study of multiple sites, provided by BioVigil®, based in Ann Arbor, Michigan. It shows that EHWM not only raises handwashing rates, it more importantly registers a corresponding drop in infections, HAIs.

E. EXECUTIVE SUMMARY



The dotted vertical orange line indicates the implementation date of the electronic surveillance system. Follow the green and red lines that respectively track the falling total infections and specific C.diff drop. The blue line marks the rising handwashing frequency as a percentage of goal. "That's why we wash so often, protecting the health of our teammates, ourselves and the people we serve." The grey line traces the millions of electronically "observed" hand hygiene events captured for this research.

This research is a composite study of multiple sites, provided by BioVigil®, based in Ann Arbor, Michigan. It shows that EHWM not only raises handwashing rates, it more importantly registers a corresponding drop in infections, HAIs.

... EXECUTIVE SUMMARY

Life-saving handwashing is rooted in the hand washers' understanding of the WHY, "Why are we asked to wash our hands so often." This research graph answers that question and provides a base to motivate mission-critical compliance, advancing the Patient-First culture. It simply illustrates that increased monitoring and timely reporting of handwashing rates not only raises compliance but more importantly reduces the infection rate.



NB: A whitepaper seeks to report solutions and methodologies that are backed up by statistically significant evidence. They are commonly written in an academic style. Some helpful findings are equally important but research funding is unavailable or unrealistic to pursue. This document was created by an experiential team focused on the handwashing factor for healthcare providers looking to improve the health and wellness of their work force and the prople they serve.

THE CAREREADY[®] HANDWASHING FIX

HEALTHCARE



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F. FORMS & GUIDES

HandsOnTM ProGrade Form RECORDING YOUR HANDWASHING EFFECTIVENESS





handwashingforlife®

MyWINTM – OURWIN WASH INDEX NUMBERS WORKSHEET

 Date: / /	My Name:	
 Arrival	Our Names (Shift):	
 Pre / Post Break		
 Restroom Use		
 Task Change		
Pre / Post Gloving		
Facial / Grooming / Sneeze / Cough		
Patient / Resident / Caregiver / Visitor	Contact	
Rub-ins		
Rub-withins		
Rub-outs		
Other		
Departure		
Total Hand Washes by type of Wash (pe	r Shift)	
My / Our Total Hand Washes (per Shift)		
MyWIN ™ (HW/EH)		My Hours / Shift
] OurWIN ™ (HW/EH - Total Team Hand W	ashes / Total Employee Hours)	Our Hours / Shift
PatientWIN™ (HW/Census) ResidentWIN™	Patient	s-Residents / Shift



HandsOn[™] Handwashing Training System

VISUALIZED AND PERSONALIZED GERM REMOVAL Notes & Comments:

1) WIN numbers are considered a minimum and special high-risk situations may require higher wash rates.

2) Wash quality standards are measured by the ProGrade[™] system; a standard of 20 seconds in considered a minimum in Handwashing For Life's Core Handwash.



HandwashingforLife® 1216 Flamingo Parkway, Libertyville, IL 60048 handwashingforlife.org | 1.800.446.3628

Handwashing: The Behavior Change Reality

INTENTION IS MILES FROM A GOOD HABIT





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CARE READY™ HANDS Risk-based Regimen Selector



NOTES:

a) The angle of each bar reflects the range of outcomes dependent on soil/contamination levels, products of choice (including paper toweling), dosing and technique. Performance assumes quality materials at each step.

b) Regimen choice is driven by the situation and covered in employee training.

c) Each of these regimens can be followed by donning single-use gloves for added protection.

RESEARCH REFERENCE:

1) Edmonds 2010, Edmonds 2012, handwashingforlife - Core Handwash	
2) Edmonds 2012	
3) Estimated	
4) Estimated	
5) Alocohol hand santizer effectiveness increases as the presence of soil decreases, Edmonds 2012, Pickering 201	11
6) Estimated	
7) Estimated	
8) Edmonds/BioScience Labs published peer reviewed study JFP, Edmonds 2010	

handwashingforlife®

Links to the research and added details are available at handwashingforlife.org

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HANDWASHING FOR LIFE'S

The 5 Handwashing Hurdles

WINNING WITH THE HANDSON™ SYSTEM

