Diseases that infect patients while they are hospitalized kill thousands each year. Hand washing is a very effective means of preventing these diseases. In a hospital, hand washing can literally mean the difference between life and death.

You would think that physicians, of all people, would be particularly aware of the benefits of washing their hands—especially in a hospital. Accordingly, you would think they would wash their hands often, and always between patients. But such is not the case.

Even in excellent hospitals, physicians may unwittingly pass along bacterial infections, killing the very people they aim to heal. Many studies show physicians washing their hands less than half of the times they should.

And, it turns out that doctors are more lax about complying with hand hygiene than other health care workers. One study, for example, showed that as few as 12% of physicians at one hospital were washing their hands before and after seeing patients.

Cedars Sinai, a Los Angeles Medical Center that consistently ranks among the best in the nation, surveyed its physician’s hand hygiene compliance and discovered that the rate was low—only about 65%.

Not only was this endangering patients’ health, but it could cause the hospital to fail an upcoming inspection. As a result, Cedars Sinai would lose it status as an accredited healthcare facility. The upcoming inspection required 90% compliance with hand hygiene. The administration knew it had a problem on its hands—literally—and acted quickly to develop methods to promote physician hand washing.

First they asked the inevitable question, "Why don’t physicians always wash their hands?" The physicians replied that often it was a matter of convenience—sinks were not always located where they were easy to access, and they were sometimes blocked by other equipment. Sometimes there simply were no sinks in the areas where the physicians worked.

Some of the physicians’ replies also revealed denial on their part. Many were sure that they could not possibly be harboring disease germs. “After all,” they thought, “it was the other staff members who were responsible for spreading disease.”

Physicians also tended to overestimate how often they washed their hands. One study, for example, showed that physicians reported their own hand washing as high as 3 out of 4 times, but it was actually closer to 1 out of 10 times.

Based on these factors, the hospital designed incentives that were appropriate for physicians but would not alienate them. First they tried tacking up posters throughout the hospital, and sending email and fax messages to the physicians. They also distributed bottles of an alcohol-based gel sanitizer to physicians as they arrived for work. Hospital maintenance crews installed dispensers containing this solution throughout the hospital.

Next they formed a “Hand Hygiene Safety Posse” that roamed the hospital, distributing $10.00 Starbucks® cards to any physician caught in the act of washing his or her hands.

Six weeks into the program, staff members again spied on the physicians and reported their hand washing behavior. There was some good news—the numbers were up. The surveillance revealed a 15 % increase in hand washing—from 65 to 80%.

The bad news was that the inspectors for accreditation would be looking for 90% compliance. Things needed to get better, and quickly, as the inspection date was fast approaching.
A hospital epidemiologist delivered the bad news to hospital's leadership, a group composed of many of the hospital’s most reputable physicians. The news was discouraging, but the hospital’s epidemiologist had an idea. She wanted to make one last attempt to increase hand washing compliance.

The epidemiologist distributed petri dishes to each physician attending the meeting and asked each to press his or her palm against the agar, a spongy growth medium designed to grow bacteria. Then these agar plates were sent to the lab to allow microbes time to grow.

In a few days the results were in. On each petri dish was the discernable imprint of a palm, and inside that was bacteria—lots of it. Many bacteria had formed large masses called colonies. These showed up as disgusting, globular masses. These grotesque handprints were then photographed. One that was deemed to be particularly offensive was selected to become a screen saver, which would later appear on every computer in the hospital.

Not long after the disgusting screen saver debuted, the hospital took another look at hand washing compliance among physicians. It had shot up to 100%. The hospital went on to pass its inspection and maintained its accreditation status. Hospital officials confirmed that hand hygiene compliance had remained at nearly 100% ever since.

The screen saver turned out to be a simple fix for a problem that was deceptively complex. It provided compelling evidence that the physicians needed to wash their hands, regardless of how much of experience they’d had, and how inconvenient it was to do so. It also showed the physicians, rather vividly, that they too were carriers of disease-causing bacteria. It wasn’t just the other hospital staffers that were to blame.

In behavioral terms, actually seeing the microbes cultured from the physicians’ own hands proved to be a very powerful Antecedent—“A” in the ABC Analysis. Its power came from its strong link to consequences: the physicians could see that there were disease-causing microbes on their hands that could harm the very patients that they wanted to heal. It led the physicians to change their Behavior (B)—they began washing their hands. So the Consequence (C) was to avoid harming patients. And “to do no harm” is what physicians pledge in the Hippocratic Oath they traditionally take prior to beginning the practice of Medicine.