

fitsi health

a MicroBlok'S case study







patient



comfort matters

The Center for Disease Control and Prevention (CDC) estimates 2 million patients are diagnosed with hospital-acquired infections annually. Due to hard to clean equipment and the transfer of bacteria, approximately 98,987 of those 2 million patients died. This equals over 275 deaths a day, which is more than the number of breast and prostate cancer deaths combined. And the human consequences are not the only concern. Patients with hospital-acquired infections, on average, stay 19 days longer than other patients. This costs the healthcare system \$30 billion annually in the U.S. alone. The numbers are just too alarming to go on without being addressed.

Through her career as a nurse and nursing professor, Kathleen Puri was always bothered



that patients frequently do not have the ability to clean or sanitize their hands without the help of a healthcare worker. While healthcare worker hand hygiene has long been a topic of concern, patient hand hygiene does not receive the same attention. The major void in patient care and patient comfort inspired Kathleen to fight the issue head on. With this in mind, Fitsi, the ultimate bedside caddy was born.

Fitsi Cares

Kathleen quickly discovered that patients often skip washing their hands after using a bedpan, sneezing, touching unclean surfaces, interacting with other patients — all because they rather not trouble the nurse for assistance to the bathroom sink. Kathleen and her team determined many of the hospital-acquired infections, and feelings of inconvenience, could be avoided if patients had easier access to personal hygiene products and their personal belongings. Instead, whether it be the need for independence or pride, patients often subject themselves to further illness by not calling the nurse for assistance.

According to CDC, "Hand hygiene is one of the most important ways to prevent the spread of infections, including the common cold, flu, and even hard to treat infections." This means, due to insufficient patient hand hygiene and the exposure to various forms of pathogens, an alarming number of patients are contracting ailments far worse than their original diagnosis. Armed with the cause to help prevent many hospital-acquired infections, Kathleen had the perfect solution to create a breakthrough for patient hygiene.

Antimicrobial plastics formulated with antimicrobials help suppress the growth of odor and stain-causing microorganisms on the treated plastic, but they are not intended to be a substitute for good hygiene or to prevent foodborne or infectious illnesses.

To help them take Fitsi from idea to reality, Kathleen began working with her daughter, Caroline Mitchell, to bring her idea to life. Kathleen describes Fitsi "as a hospital bedside caddy designed to improve both the patient and caregiver experience. Fitsi gives patients the ability to clean their hands without the help of a caregiver as well as a place to store comfort essentials (moisturizer and lip balm) and personal items (phone, glasses, and more). Its patented design clips to a hospital bedrail and rotates to accommodate different bed positions and provide easy patient access." Fitsi is everything a patient could need, specifically their sanitation items, conveniently stored less than an armslength away.



When Cleanliness is Crucial

Fitsi Health knew they had the perfect concept, but they needed to ensure their design was built to last. Just as patients were vulnerable to various pathogens, the bedside caddy's plastic would also need protection from the many passing microorganisms.

While there were many antimicrobial options, finding one without the use of triclosan proved more difficult. Despite having many benefits, the Food and Drug Administration was investigating triclosan's properties as "studies in bacteria have raised the possibility that triclosan contributes to making bacteria resistant to antibiotics."

Through Fitisi's search to find an alternative to triclosan, they

discovered Plastics Color Corporation, a global leader in the plastic industry with over 50 years of experience providing color concentrates, functional additives and custom polymer masterbatches.

Kathleen stated, "Plastics Color's excellent customer service, paired with their knowledgeable and helpful team, is what ultimately led us to the selection and implementation of their antimicrobial solution."



Together it was decided that Plastics Color's silver ion based MicroBlok® S would be an ideal fit for Fitsi. Added in with the colorant and resin without any additional material alterations, MicroBlok is a long-term solution to inhibit the growth of a broad spectrum of microorganisms on the treated plastic.

Unlike antibacterial solutions' onetime quick fix to attempt to kill bacteria on contact, MicroBlok is the ultimate preventative measure to help address consumer concerns — not only today, but for the future as well. And best of all, the use of silver ions meant that triclosan was not needed or used to formulate the antimicrobial solution.





Perfect for hospitals, doctors' offices, or any facility where medical devices, medical packaging, or appliance cleanliness is crucial, MicroBlok offers the most comprehensive line of antimicrobials in the industry. MicroBlok's custom-formulated antimicrobials for polymers inhibit the growth of bacteria, which may cause stains, odors, and product deterioration.

Common medical applications that benefit from the inclusion of MicroBlok in addition to bedside caddies are plastic gloves, scrub brushes, surgical instruments and dental trays to name a few.

> "...excellent customer service, paired with their knowledgeable and helpful team..."

> > - Kathleen

Lab Tested. Patient Approved.

MicroBlok has undergone rigorous laboratory testing under ISO 22196:2011, which ensures it has the high efficiency antimicrobial action that Fitsi demands.

Backed by the product deterioration prevention power of MicroBlok, Fitsi is ready to provide a much needed upgrade in patient comfort and care for hospitals, nursing homes, and assisted living facilities alike.

about us

plastics color



pioneer in an industry constantly moving forward.
Delivering color concentrates, plastic additives, and master batches is just the beginning of our story. We partner with you, from concept to commercialization, to develop world-class solutions for your users - no matter what industry you serve.

We collaborate at the earliest stage of product development to answer challenges before they become real problems. We immerse ourselves into your operation, creating solutions for everything from the product itself to the packaging to the

production to the storage.

Our global standard for rawmaterial supply underpins quality assurance at all of our manufacturing facilities. For us, product consistency is the universal language.

We are particularly proud of our leading role in today's "plastics evolution." Fully equipped and accredited laboratories deliver customized support in processing, material selection, and physical testing. Enhanced correlation of color matching and quality control are givens as we understand color is critical to your

our services

solutions center
color matching
lab services
design assistance
clean compounding facilities
toll compounding
necessary certfications
technical expertise
regulatory guidance



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