“Imagine how much faster the best treatment could have been determined and administered if there had been a rapid diagnostic that could have told me and the doctor what the infection was, and which medication would work best. I could have completely avoided unnecessary antibiotics and the hospital stay, saving money and time, and recovering faster.”

Dr. Rick Bright’s entire career has been devoted to public health and infectious disease, but he never could have anticipated just how personal it would become.

While working in his garden, Dr. Bright cut his thumb on a plant, and at first, didn’t think too much about it. As the spot turned into a bump and then a red flush crept up his hand, his colleague, an infectious disease physician, recommended that he get medical attention quickly, but it wasn’t until late into the evening that Dr. Bright decided to heed the physician’s advice.

Little did he know that his journey was only beginning. He tried two urgent care clinics – both were unable to help him. At the third clinic, a doctor prescribed a common generic antibiotic and offered to check the wound again in five days, but the redness continued to spread. Dr. Bright’s primary care physician referred him to an orthopedic surgeon, who promptly sent him to the hospital, where he received pain meds and an IV antibiotic. The orthopedic team prescribed a third antibiotic after closer examination and sent him home advising a follow up with his doctor in a couple of days.

But the infection persisted, and Dr. Bright ended up in the emergency room where he received two more antibiotics and spent the night while the orthopedic team planned for surgery that would possibly remove his thumb.

After a sixth antibiotic and an antifungal medicine, an infectious disease doctor did a pre-op check and decided to delay the surgery. Six days after the first visit to the urgent care clinic, he received test results that indicated he had MRSA, with limited treatment options. Dr. Bright was especially disheartened as he realized that he was freely roaming the orthopedic surgery unit among potentially vulnerable patients. More concerning, only one of the antibiotics he was on was working; the others were just burning his veins and potentially driving more resistance.

Ultimately, while in pursuit of an effective treatment for MRSA, Dr. Bright suffered hearing, vision, concentration, and muscle complications which lasted an additional two weeks.

The gardening incident gave Dr. Bright personal insight into the many challenges that confront medical professionals and every patient fighting a drug-resistant infection. As a result, he has become more committed than ever to overcoming this challenge, to identifying solutions, and to fostering partnerships that will help us get ahead of antimicrobial resistance and protect our nation’s health security.