### BRINGING THE BEST OF MODERN MEDICINE TO THOSE WHO NEED IT MOST

#### David A. Walton, MD, MPH

2014 Jimmy and Rosalynn Carter Humanitarian Awardee

It would be reasonable to assume that David A. Walton, MD, MPH has a master plan guiding the improvements in medical infrastructure and advances in clinical practice he has led in Haiti over the last 14 years. But Dr. Walton says there is no grand plan and you come to realize when you talk to him that his approach is like that of any good clinician. When presented with a problem, he assesses it logically and with an open mind, and then sets about finding and implementing the best solution.

Dr. Walton has been addressing medical needs in Haiti this way since shortly after his first trip to the impoverished island nation in 1999, when he visited as a research assistant to Paul E. Farmer, MD, PhD, cofounder of Partners In Health. By 2010, when a devastating earthquake struck Haiti, Dr. Walton had already left a lasting mark on the healthcare landscape, leading projects such as the renovation of a shabby clinic into a thriving center for primary care; the design and construction of a novel 60-bed community hospital; and the establishment of a noncommunicable disease clinic in central Haiti, a model that has been replicated in 12 other Haitian hospitals.

The landscape in Haiti changed, both literally and figuratively, after the magnitude 7.0 earthquake, but Dr. Walton's commitment and drive did not. His largest project to date is a 300-room, state-of-the-art, solar-powered hospital in Mirebalais that opened in 2013. "In a country still rebuilding, both physically and psychologically," wrote Paul Farmer "this hospital not only provides tertiary care capacity, but it also serves as a much needed antidote to despair."

The National Foundation for Infectious Diseases is proud to honor Dr. Walton with the 2014 Jimmy and Rosalynn Carter Humanitarian Award in recognition of his profound capacity to effectively connect global health research, training, and service to improve the lives of the poor and suffering in Haiti.

# EYE-OPENING COLLEGE TRIPS SOW THE SEEDS FOR FUTURE WORK IN HAITI

David Walton made several trips to Central and Latin America while in college as an undergraduate Spanish major. His goal was to gain greater command of the language and immerse himself in the culture. But what he experienced sowed the seeds for his work in Haiti. "I grew up in a comfortable, middle-class suburb. These trips were my first real exposure to inequality. I knew on some primal level that the kind of



poverty and health inequality I saw on these trips was wrong. I knew I wanted to do something to remediate the suffering, but had no idea what to do or how to make a difference."

The answer came in his second week of medical school when he attended a talk by Paul Farmer about Partners In Health. It was then, he said, that the light bulb went on. Here was a group putting into action the kind of work that young David Walton felt he needed to do. He quickly volunteered and was assigned to do research for Paul Farmer.

The Internet was still in its infancy; paper journals and copy machines had not yet been replaced by online searches and PDFs. After sitting in classes all day, he would retire to the sub-basement of the Harvard medical library and dig into the archives. He describes the work as "interesting, exhausting, non-glamorous, and as far removed from actually *doing* something as possible." But even then he realized how much he was learning; absorbing large amounts of information that would shape his work for years to come.

After his first year of medical school, Dr. Farmer asked him to travel to Haiti as his research assistant. "It wasn't what I was dreaming about for my last free summer as a medical student, but it was exactly what I needed," says Dr. Walton. "I was finally exposed to what I had researched and helped write about. The trip was nothing short of remarkable. The suffering I saw in Haiti was orders of magnitude worse than anything I'd seen before, but in the midst of it was a hospital. The Haitian doctors and nurses were doing something amazing—they were healing physical and psychological wounds. It was extraordinary."

## TAKING ON LARGE AND SMALL PROJECTS, AND GOING WHERE THE NEED IS, WHILE COMPLETING HIS TRAINING

Where others saw roadblocks, David Walton saw possibilities. He is the first to admit this probably reflected his young naïveté more than a unique imagination. Still, it served him well as he took on his first project, rehabilitating a small clinic in Lascahobas that was largely defunct, serving just 20 patients a day. Through his work with Partners In Health, he knew the necessary ingredients for a successful clinic. Over the next several years, Dr. Walton led a team of Haitian medical professionals in the renovation, design, and construction oversight of a new inpatient wing, adding laboratory services, procuring plain film radiography, creating a social services department, retooling the fee structure to improve access to care, and creating an entirely new staffing structure. Within eight months of opening, the new clinic saw visits increase from an average of 20 to over 300 per day.

The next project was decidedly larger—leading the design and construction of a new community hospital in Lacolline. This hospital, the first of its kind, redefined the way in which medical infrastructure and healthcare delivery interact in Haiti. Dr. Walton and his team were faced with the challenge of replicating the best in infection control procedures in a way that could be built and maintained in Haiti. Their design exploited the natural airflow of the tropical environment, pairing it with ultraviolet lights and stand fans in the larger areas. Together, these elements help clear airborne pathogens, most especially tuberculosis, which is endemic in Haiti. The open hallways at Lacolline are aesthetically pleasing, but also serve an essential purpose. The 60bed hospital opened in 2008 and now serves as one of the primary referral centers for the lower central plateau of Haiti.

Overlapping with these projects were several changes to clinical care. HIV care in Haiti was not integrated with other fundamental healthcare goals, such as primary care. With the implementation of a comprehensive HIV prevention and care initiative, Dr. Walton helped to reinvigorate flagging efforts to promote universal primary healthcare in central Haiti.

Dr. Walton also changed the model of care for non-communicable diseases. Patients in Haiti with non-communicable diseases were typically treated episodically as symptoms warranted. Dr. Walton established a clinic that fully integrated community-health workers and instituted directly observed therapy for patients with heart failure, diabetes, hypertension, and other chronic illnesses. This model of care has been replicated in the 12 Partners In Health hospitals in Haiti.

David Walton did not allow the borders of the country to limit healthcare opportunities for Haitians. He has been instrumental in the four-fold increase in Haitians receiving care abroad for treatable



conditions that could not be addressed in Haiti. He also brings better care to the island inhabitants through new partnerships. Treatment of patients with a malignancy had been ad hoc prior to 2008 with a near 100% mortality. Dr. Walton engaged the Dana Farber Cancer Institute to begin a more formalized cancer treatment program within the Partners In Health hospitals so that patients with solid tumors and hematologic malignancies could be diagnosed and treated more proactively.

From 2008-2009, David Walton spearheaded and supervised the renovation of an ambulatory care center and created the first freestanding dedicated women's health clinic in central Haiti. As a result, in-hospital deliveries tripled, pre-natal care visits increased dramatically, the frequency of elective gynecologic care visits improved, and community health worker involvement in women's health issues expanded within the clinic's coverage area.

# MOVING FORWARD POST-EARTHQUAKE: MIREBALAIS HOSPITAL

The largest of Dr. Walton's projects began after the earthquake. There was no precedent or template for Hôpital Universitaire Mirebalais, which opened in 2013 as the first state-of-the-art public teaching and referral hospital in central Haiti. In 2010, among the rubble from the earthquake and in response to a request from the Ministry of Health, Dr. Walton organized a team that turned an empty lot into this beautiful 300-bed facility that now serves an average of 500 patients per day.

Dr. Walton led a team of 12 hospital leaders and joined with Jim Ansara, a Massachusetts-based construction magnate and philanthropist, to develop and build the hospital from the ground up. With an eye toward creating a sustainable physical environment that could deliver care to the people of the central plain, Dr. Walton and his team created a management structure, planned clinical service delivery, and addressed every issue related to the business, such as staffing, budget, purchasing and supply chain management, establishing financial systems, creating processes to work with the Ministry of Health, quality assurance, and more.

"David Walton redefines what is possible in global healthcare reform. And he does it in a spirit of solidarity—not charity." -Marjorie Benton, Member, Board of Trustees, Partners In Health

The 200,000+ square foot Mirebalais Hospital is the largest solarpowered hospital in the developing world. Its 1,800 solar panels make the hospital self-sustaining during the day—the only hospital of its kind anywhere. Dr. Walton says environmental sustainability was extremely important to him, Jim, and the team, but based on the cost of smaller scale solar installations that came before, this appeared to be a prohibitively expensive proposition. But to David and Jim, ecologic sustainability was the right thing to do so they set about making it a reality.

Sunlight, after all, was one of the few abundant resources in Haiti. In typical fashion, Dr. Walton extracted positive messages wherever he could. While he describes deforestation as a tragedy, he points out that in Haiti it meant less obstruction between sunlight and the solar panels. He and Jim explored ways to reduce construction costs. They raised funds by raising awareness of the benefits of solar power at Mirebalais and focusing on how it would impact better clinical care.

The unsteady local power grid with its frequent surges would put millions of dollars of medical equipment at risk. Solar power was more reliable. The money saved each month could be invested into medicines, staff, additional equipment, and so much more that would be needed at Mirebalais. By their calculations, the solar panels would return their investment in about five years.

They raised the funds and completed this one-of-a-kind facility, which Dr. Walton hopes can be a model for others. He believes each project is a learning experience. Every new building or change in how we deliver care is built on what we learned—whether yesterday or decades prior.

# LOOKING TO THE FUTURE: THE STUDENT IS AN INSPIRING TEACHER

Dr. Walton has achieved so much not only because of his tireless work ethic and great vision, but because he inspires and teaches those around him. According to Paul Farmer, he is typically the first to arrive on site and the last to leave. His dedication and positive energy make everyone around him, from doctors and nurses, to drivers, carpenters, and electricians want to work harder and closer together.

In addition to his many accomplishments in Haiti, David Walton has built an impressive body of written scholarship in infectious diseases, healthcare delivery, medical ethics, and global health, publishing in *The American Journal of Tropical Medicine and Hygiene, The Journal of Public Health Policy,* and *PLOS Neglected Tropical Diseases.* 

He is a natural role model whose innate skills as a teacher have been critical to the training of the next generation of global health physicianleaders in both Boston and Haiti. He formally supervises physicians and medical students whose impacts are already being felt across the field of global health.

In the end, David Walton does what so few can. He helps people see what is possible—bringing hope to areas where it was lost.

"Dr. Walton possesses a rare blend of clinical acumen, academic achievement, and great gifts as a teacher. As a clinician, researcher, and manager, David Walton has displayed ingenuity, tenacity, and a deep commitment to the health and well-being of the poor and sick."

-Paul E. Farmer, MD, PhD