



The HealthStore Foundation* operates the Child and Family Wellness Shops and Clinics (CFW) in Kenya. HealthStore's Mission is to improve access to essential drugs, basic healthcare, and preventive services for children and families in the developing world, using business models that maintain standards, are geometrically scalable, and achieve economies of scale. It is pursuing this mission with the help of Carego International, an organization that works to improve healthcare delivery through IT solutions built on Progress* Pacific*. Carego has already leveraged the simplicity and full functionality of Pacific to help it deliver a range of cutting-edge, cost effective IT projects directly or through partners in Indonesia, Vietnam, Egypt, Pakistan, and India.

CREATING A HEALTHCARE SOLUTION FOR REMOTE REGIONS OF THE WORLD

Globally, 21,000 children die each day, half of them in Africa and two-thirds of them because they lack access to quality medical care and essential drugs. Indeed, a handful of preventable and treatable diseases account for some 70 percent of those deaths.

Rather than simply focusing on traditional charitable activities to address this challenge, Greg Starbird, CEO of The HealthStore Foundation explains that his organization sought to create a grassroots infrastructure, with incentives and built-in quality standards, to solve the problem for the long-term - in a dynamic, flexible, and cost-effective manner. A crucial element in delivering that vision turned out to be information, and finding a way to deliver that information was made possible by the Carego International healthcare application, built with Progress Pacific.

Initially, The HealthStore Foundation launched the Children and Family Wellness (CFW) network, a branded franchise system of 'micropharmacies' that started operation in central Kenya in 2000. From that start, CFW continued to grow, applying the same model that had proved successful initially.

However, even as CFW was succeeding in reaching millions of underserved people, saving and improving lives by delivering more quality and affordable medicine, the organization was challenged by the difficulties of providing the right information and the right products at the right time, further enhancing the quality of its offerings, and preparing to scale-up further.

To make its model work well, CFW needed to better see and use patient, financial, and inventory data. "From the beginning, the only way we had to keep records was by paper, and that presented problems ranging from differences in handwriting and transcription errors to the high cost of having to regularly move paper records, orders, and money from dozens of clinics to our HQ, suppliers, and others," Starbird explains. "We also



CHALLENGE

To bring a leading-edge healthcare solution to underserved global communities, leveraging Progress Pacific* as the underlying platform to support its "microclinics."*

SOLUTION

Leveraging the capabilities of Progress Pacific, Carego International is working with HealthStore to deliver a simple, high-function, low-cost IT system to support the delivery of healthcare services through CFW sites in developing regions.

BENEFIT

Carego's Progress Pacific-based PaaS provided the simplicity and functionality CFW needed to build a solution perfectly suited to deliver affordable healthcare in Kenya

needed a way to integrate third party payments into the network efficiently and accountably.” But workable and affordable solutions were hard to find.

That’s when Starbird and CFW turned to Carego and Progress Pacific to craft a practical and affordable solution. Carego used Pacific’s rapid application development capabilities, by which most all of the application is created via drag-and-drop, point-and-click actions, with little to no handwritten code needed. The result was tailored to provide exactly the functionality CFW needed.



TABLETS AND THE CLOUD

While many small businesses in Africa manage to function without a consistent means to store, organize, and share data, that wasn’t the case for CFW. The potential of each site to contribute to broader public health goals is enormous, and information was the direct route to achieving that goal. Likewise, to function optimally, to maintain quality and oversight, and to serve the best interests of each patient, it is vital to have rapid access to accurate records and medical information. And, of course, like any business, CFW needs to manage the flow of products and ensure the proper handling of financial information.

For HealthStore, finding a technology sweet spot that would match the organization’s bare-bones economics [each CFW site is set up with as little as \$5,000 in investment], while at the same time matching the available infrastructure and the skills of the health workers, seemed an impossible dream.

For example, although, there is cell phone coverage across much of Kenya, some CFW clinics are located in areas without reliable connectivity. Furthermore, although HealthStore found some solutions available on simple cell phones that could provide text-based reporting capability, they were too limited in functionality. Nor were bulkier systems designed for desktops and servers at hospitals, with multiple user roles and high-bandwidth needs, well-suited to the needs of CFW.

Carego’s offering, built on Progress Pacific, was able to deliver the perfect answer. Pacific provided a proven data connectivity solution enabling Carego to reliably interweave data from multiple discrete sources within a single application. Pacific also provided persistent access to the specific elements CFW needed to integrate—across languages, platforms, and devices.

The ultimate solution provided a high level of functionality via an Android-based tablet or smart phone, while tolerating the inconsistent mobile service available in the region. “With the help of Carego and Progress Pacific, we were able to develop an application that could store information locally, on the tablet or smart phone, and synch and upload when a mobile connection became available,” says Starbird.

“We have been thrilled to partner with HealthStore. Together, we get to improve healthcare and build our businesses through the underlying technology of Progress Pacific.” adds Steve Landman, CEO of Carego International.

BENEFITS

The solution will provide CFW with fast and reliable data on patient visits, morbidity statistics, inventory levels, and financial performance. It will enable CFW to advocate for its clinics to be accredited under emerging third-party payment arrangements. And interestingly, “The Carego platform will enable us to gather rich insights on consumers and on healthcare in opaque, fragmented environments. Think of all the transactions every day in a typical village, town, or slum. The information about these transactions is available only to individual proprietors and/or customers. By contrast, imagine a branded network of standardized, franchised providers, equipped with this technology; we’re already seeing hundreds of thousands of patients each

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CEO
The HealthStore Foundation

year in our clinics in Kenya. Getting granular transactional data—otherwise invisible—about who comes in, what diseases they have, what they purchase during what times of day, and during which seasons is truly golden information, especially when it can be combined with information from other CFW sites hundreds of miles away,” says Starbird.

The information CFW gathers can also help local Ministry of Health officials get a clearer picture of the health needs of the population, and help the global health community and others to gain a much better understanding of household-level healthcare decisions. This will help them develop a strategy for attracting lowest-income patients—those most in need of care.

And because the application is touch-screen-based, it is easy to learn for people with little or no computer experience, and allows the nurse to manage everything from shop inventory to recording patient data – even linking to third-party payers. Now, a CFW nurse will have her tablet in-hand to greet a patient coming through the door. The device serves as the tool for registering the patient, accessing or updating histories and prior visits, charting progress, tracking sales, and driving inventory replenishment. Then, “The shift from paper to tablets will take effort, but we’re confident CFW nurses will soon realize that the Carego solution adds tremendous value to their businesses, while saving them time,” says Starbird.

He adds, “Baking this technology—technology made possible by Progress Pacific—into the operating system of a respected franchise, represents a radical shift for those at the base of the pyramid who desperately need improved access to healthcare,” says Starbird. Starbird says this technology is a key component of how CFW will scale to hundreds of sites in Kenya in the years ahead, serving more and more of those in need.

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Greg Starbird
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ABOUT THE HEALTHSTORE FOUNDATION

The HealthStore Foundation (www.healthstore.org) is a US 501(c)(3) nonprofit corporation whose mission is to improve access to essential medicines, basic healthcare, and prevention services in the developing world using business models that maintain standards, scale geometrically, and achieve economies of scale. HealthStore’s “CFW” [Child and Family Wellness] franchise network has served over 4 million people in Kenya since 2000. Each CFW clinic is owned and operated by a local nurse who makes a living while saving lives; the CFW system targets a short list of diseases responsible for approximately 70% of illness and death in local communities. Last year, HealthStore spun out its Rwanda franchise network to an offshoot organization operating in partnership with the Rwandan Ministry of Health. This year, HealthStore is advising the implementation of a franchised clinic system sponsored by USAID, the foreign aid arm of the U.S. government, in the eastern DR Congo.

ABOUT CAREGO INTERNATIONAL

Carego is a technology driven, social impact organization focused on bringing affordable and effective quality care to those that need it the most. They are committed to transforming healthcare delivery in emerging markets through cloud-based open source products, self-contained facilities and expert consulting services. Their offerings support the knowledge-driven practice of medicine for the lowest possible total cost of IT ownership. They believe in empowering healthcare providers with the tools needed to move healthcare forward – to a truly electronic, interoperable and efficient healthcare system. By improving health systems, they help their customers deliver quality care and improve the health of the populations they are serving. For more information, please visit www.caregointl.com

PROGRESS SOFTWARE

Progress Software Corporation [NASDAQ: PRGS] is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership.

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