



PHOTO: iStock/ThinkStock
A sample of the kind of devastation inflicted on the Philippines after Super Typhoon Haiyan hit that Southeast Asian island country in November 2013.

What does business process improvement have to do with a typhoon?

IMS BROGAN APPLIES LEAN SIGMA SKILLS TO MAKE PHARMA'S GOOD WORKS GO FURTHER

By Warren Perley

When Dr. Filomena Bautista, a family doctor based in Mississauga, Ontario, flew on an emergency aid mission into the Philippine city of Tacloban at the beginning of January 2014, she saw first-hand the devastation that Super Typhoon Haiyan had wrought two months earlier.

It looked like a ravaged war zone with uprooted trees, crushed vehicles, washed-out roads and concrete shells of what remained of homes which had been blown away or collapsed. In essence, the city of 221,000, located 579 kilometres southeast of Manila, had almost been wiped off the map.

Bautista and four other volunteer doctors from the Filipino-Canadian Medical Association (FCMA) were lashed by driving rain when they arrived on January 8, 2014 – exactly two months after the typhoon struck on November 8, 2013. Five days before they arrived, the Philippine government announced that the typhoon had affected 16 million of its citizens, killing at least 6,166 people, injuring another 28,626 and forcing 4 million out of their homes.

Hundreds of Filipinos lined up daily at seven clinics set up in tents on the outskirts of Tacloban where, during their five-day medical mission, Bautista and her FCMA colleagues treated 3,500 patients, using medicines and medical supplies furnished in Physician Travel Packs (PTPs) by Health Partners International of Canada (HPIC). More than 40 percent of those treated were children.

HPIC, with headquarters in the Montreal-area municipality of Dollard des Ormeaux, is a not-for-profit relief and development organization with 19 employees. Its mandate is to help organize and deliver essential medicines and medical supplies donated by Canadian pharmaceutical and medical supply companies for distribution via health professionals, NGOs, clinics and hospitals in the Developing World.

Among the donated medical supplies HPIC organizes for shipment abroad, their PTPs are highly valued by doctors and volunteers on medical missions because of their portability and convenience. These “portable clinics” are packed with medicines, including antibiotics, fever reducers, and antiparasitic treatments that improve health and save lives.

Michel Harpin, Executive Director of Donor Relations at HPIC, said that the crisis in the Philippines provided HPIC with statistics which prove that a streamlining process implemented internally in 2012 resulted in more PTPs being shipped overseas faster than ever in 2013.

Some 1,083 PTPs were sent abroad last year, of which 492 went to the Philippines in November and December 2013 to deal



PHOTO: Sonny Lauzon and Dody Bautista
Members of the Filipino-Canadian Medical Association who treated typhoon victims in Tacloban in January 2014 with medical donations supplied by HPIC: (L to R) Dr. Gerson Mobo, Dr. Richard Ma, Dr. Filomena Bautista, Dr. Romy Tan, and Dr. Judith Nakua.

with the ravages of the typhoon. The 1,083 PTPs represent about a 30 percent increase over the number shipped the previous year. “Our response to that emergency was a good indication of our improvement,” Harpin said.

Rethinking the Process

Within a short time of his joining HPIC in 2012, Harpin noted that there was a need to streamline the process for matching the requirements of NGOs for medicines with the ability of pharmaceutical companies to donate such medicines.

In some cases, it was taking HPIC between six and eight weeks to identify the need of NGOs for various medicines and to get back to the pharmaceutical

companies with those requests, a delay which Harpin characterizes as “wasted time.”

HPIC has two principal formats for its donations: PTPs and bulk shipments.

- For bulk shipments, pharmaceutical companies contact HPIC to let them know which medicines they have in stock with a shelf life of at least 10 months.

The HPIC team then contacts their NGO partners, numbering between 30 and 40, to let them know which medicines are available and to ask whether they could use any for their programs. On the supply side, HPIC works with up to 50 donors, including branded and generic pharmaceutical corporations and medical supply companies.

HPIC then goes back to the pharmaceutical and healthcare companies with the NGOs' requests and has the medicines and supplies shipped to HPIC's warehouse in Mississauga, where they are repackaged and shipped to the NGOs.

- For the PTPs, HPIC contacts the pharmaceutical companies and asks for specific medicines with a shelf life of 18 months.



PHOTO: HPIC
HPIC's Michel Harpin wanted to streamline the process to match donors with recipients of medical supplies.

"Medicine is perishable, so the clock is ticking as soon as we get it," Harpin said, explaining why he felt that it was so important to cut between six and eight weeks from the back-and-forth process of matching NGOs' needs with available donations from healthcare companies.

When 40-foot containers of bulk shipments are sent overseas with various medicines inside, HPIC has to coordinate the contents in terms of the shelf life of each product. This means that time lost at the beginning of the process in matching donors with recipients could force some products out of the supply mix if their shelf lives have dwindled too low.

Also, some developing countries are becoming more stringent, demanding a shelf life of at least 12 months even for medicines intended to be used immediately for crisis situations, he said.

"It hit me that there were medicines being offered to us that we couldn't accept for that reason," Harpin said. "Some had what I thought was sufficient shelf life, but the process was taking too long to match the need with the offer."

Seeks CSR Expert

Harpin knew HPIC had a challenge on its hands, but he wasn't sure how to go about solving it until he spoke with Lucie Bourgeois, founder of Umalia, a company which works with private and not-for-profit organizations to ensure

that Corporate Social Responsibility (CSR) initiatives and partnerships are strategically designed, positioned, and implemented to achieve far-reaching benefits.

It didn't take long for Bourgeois to identify IMS Brogan, the Canadian business unit of Connecticut-based IMS Health (IMS), as the perfect potential partner to help HPIC streamline two of its important processes:

- The PTP application procedure
- The response time for bulk medicine shipments

With a global technology infrastructure and unique combination of real-world evidence, advanced analytics and proprietary software platforms, IMS connects knowledge across all aspects of healthcare to help clients improve patient outcomes and operate more efficiently using its core transformational competencies.



PHOTO: L. Bourgeois
Umalia's Lucie Bourgeois identified IMS Brogan as a strategic partner to help HPIC streamline its donor process.

Bourgeois was aware of the strong commitment of IMS Brogan to CSR projects. In Canada, IMS Brogan supports the work of academic and medical research institutions by offering its unique information and analytic assets, and consulting expertise. It also supports employees for disaster relief, fund raising for cancer-related causes, and annual United Way/Centraide campaigns.

Bourgeois, who founded Umalia in January 2012, also knew that Michael Brogan, president of IMS Brogan, was someone who believes in companies making a difference to society by giving back to those in need.

So in June 2012, she met with Brogan to explain the win-win business nature of such collaboration with HPIC, in addition to its positive social aspects. The logic was clear: Helping pharmaceutical clients move more of their product by streamlining HPIC's role as the fulcrum between healthcare donors and NGOs.



PHOTO: IMS Brogan
President Michael Brogan committed IMS Brogan's resources to helping HPIC speed up its donation process.

Of course, the fact that Bourgeois "walks the talk" when it comes to CSR gives her a lot of credibility. Before founding Umalia, Bourgeois, a mother of three young daughters, worked for six months as a volunteer on humanitarian projects in the African countries of Senegal and Burkina Faso because, she says, "I wanted to make a difference using my competencies."

Furthermore, as part of Umalia's own CSR program, the company dedicates several weeks per year to support communities and NGOs in Canada and abroad. The company has also made a long-term commitment to a community in Africa, supporting it through environmental and social projects, and helping it develop partnerships with the private sector. Bourgeois also volunteers her time on the board of several non-profits, including Handicap International, which works to improve the lives of people living with disabilities in impoverished countries.

In all her CSR endeavours, Bourgeois searches out what she calls "culturally cohesive partners." In HPIC and IMS Brogan, she knew she had two such compatible partners.

Process Improvement

IMS Brogan gave financial support to HPIC to help defray logistics and consulting fees for the project, but most importantly it provided process improvement expertise to match donors and NGOs more efficiently for both PTPs and bulk shipments.

"Lean Sigma activities, increasingly embedded in the way we operate, are playing a key role in driving a strong learning culture at IMS. As it expands to include client-facing functions, we've found opportunities to do more than improve efficiency within our own operations," says Brogan. "We can now focus on delivering value as a transformative consulting partner to the healthcare industry."

During the last decade, Lean Sigma, also known as Lean Six Sigma, has become a business standard for efficiency based on minimizing waste created by delays, rework and defects. Lean Sigma relies on cross-functional sessions where employees work collaboratively to identify process changes, most of which are implemented within 90 days.

Key objectives are to leverage new opportunities for customer value, enable incremental benefits for the business, accelerate the pace of change, maintain or improve quality levels, and optimize process efficiency.

Karen Carre, assigned by IMS Brogan to work with HPIC and Umalia, received her Lean Sigma certification following a professional training course in Philadelphia in 2011, the same year that IMS instituted the program. Since that time, IMS has had several hundred of its employees trained in Lean Sigma, a powerful process improvement approach that optimizes efficiency and value at an accelerated pace.

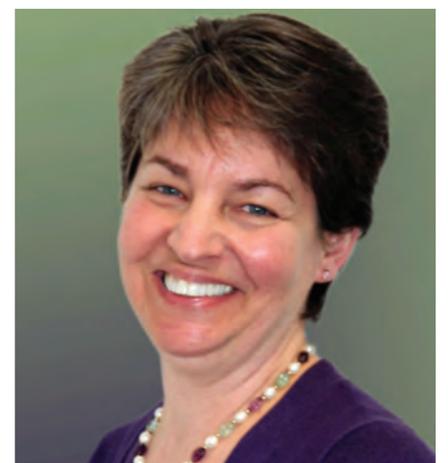


PHOTO: HPIC
IMS Brogan's Karen Carre provided Lean Sigma expertise in process management.

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Michael Brogan

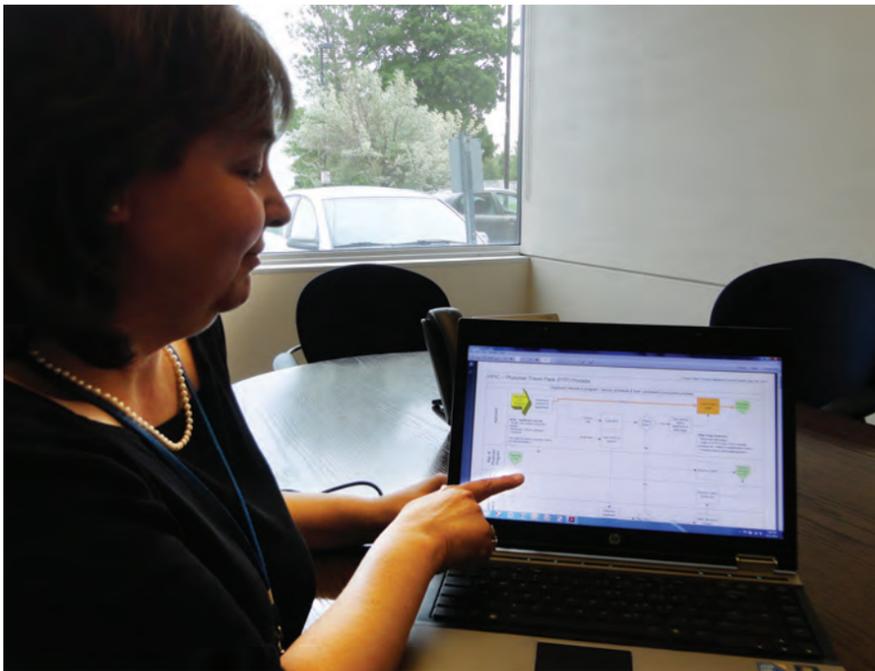


PHOTO: Warren Perley
Karen Carre showing a visitor to her office one of the charts she created as part of the streamlining process for PTP donations.

Just as with the martial arts, such as judo and ju-jitsu, the Lean Six Sigma process has a system of colored belts – yellow, green, and black – which denotes the level of expertise of a practitioner.

Harpin, who took the job at HPIC in 2012, was aware of IMS's capabilities in business process enhancement. He describes Karen Carre as a "black belt" in Lean Sigma.

Through needs analysis, IMS Brogan could optimize the process for converting data – such as the information exchanged between HPIC, its donors and recipients – into actionable steps resulting in medical supplies getting more quickly into the hands of NGOs and their patients.

Carre says she "jumped at the opportunity to help HPIC" because "using my skills to help people in need makes me feel good about myself." Interestingly, employee engagement is one of the benefits which accrue to companies, such as IMS Brogan, which donate to CSR projects.

Black Belt Chops Wall

The first thing Carre did was to facilitate brain-storming sessions at HPIC, using a 25-foot boardroom wall for "process mapping", where every step involved in bulk sales and PTPs was represented by an 8 1/2" x 11" piece of paper.

Harpin says Carre would ask "detailed" and "rigorous" questions of HPIC staff about each step in the process to try to understand which of them could be jettisoned and which could be improved.

Carre, using various Lean Sigma process mapping techniques, applied colored symbols to the sheets to indicate what

they represented in the process: pink for delays; blue for decision points; green for data. She created many "swim lane diagrams" showing roles and tasks, and applied Xs for steps she thought were extraneous to streamlining the process for PTPs and bulk shipments.

"People couldn't believe how big the (HPIC) process was until they saw all the sheets on the wall," she recalled. "It left an impression."

Carre would convert the steps depicted on the wall into graphs and tables so HPIC staffers could better understand the current process and what steps needed to be eliminated in order to reduce delays by dropping non-value tasks.

As a result, HPIC was able to drop a number of steps to make the process smoother. With help from IMS, HPIC implemented a new procedure to put PTP applications online. Much duplication was eliminated and inventory was consolidated, Harpin added. "The process from beginning to end was made faster, more efficient and with less cost."

In its 24 years of existence, HPIC has distributed more than \$430 million of wholesale medical aid, Harpin says.

HPIC needed help speeding up the process of matching medical-supply donations with recipients. As part of a CSR initiative, IMS Brogan donated its expertise to help them optimize the process.



PHOTO: HPIC
The process enhancement efforts supported by IMS Brogan helped streamline the delivery of disaster relief supplies by HPIC when Typhoon Haiyan struck the Philippines. Here we see GlobalMedic, a Toronto-based team of paramedics who arrived in Iloilo province within days of the typhoon striking on November 8, 2013. They delivered 10 PTPs of medical supplies, which they used to treat 780 men, 1,450 women and 1,850 children.

In 2013 alone, after implementing the changes suggested by IMS in 2012, HPIC shipped 36 20-foot containers of bulk medical goods and PTPs worth \$22.5 million at the wholesale level.

Due to the success of the streamlining project facilitated through Umalia and IMS Brogan, HPIC is now developing a web-based program which will permit donors to post their available medicines and supplies online. NGOs will then choose which of those posted items they wish HPIC to ship to them.



PHOTO: HPIC
In its 24 years of existence, HPIC has distributed more than \$430 million of wholesale medical aid worldwide, including this South American river delivery.

"We needed someone to take a bird's eye view of our duplication," Harpin said. "That's the donation I most appreciated receiving from IMS Brogan – access to Karen's expertise."

Results Felt Afar

While IMS Brogan was weaving its Lean Sigma magic on behalf of HPIC, the resulting improvements in the speed of supplies reaching patients were felt about 13,679 kilometres away in Tacloban one year later as Dr. Filomena Bautista and other Canadian volunteers used PTPs to treat Filipinos devastated by Super Typhoon Haiyan.

Packed into two hand-carried boxes, each PTP weighs about 50 pounds and contains a standard assortment of medicine for primary care including antibiotics, analgesics, antihypertensives, topical creams, anti-ulcer medication, antifungals, oral rehydration, antiparasitics, antimalarials, antiemetics, antihistamines, vitamins, eye/ear drops and ointments, as well as medical supplies.

The PTP boxes, adorned with stickers of Canada's red-and-white Maple Leaf flag, made quite an impression on Filipinos being treated. "The local people were very happy to receive all this free medicine," Bautista told me in a telephone interview. "They were amazed at how much was sent to them in the PTPs between November 2013 and January 2014. They were appreciative."

The PTPs used by Bautista and her colleagues with the FCMA were transported to the Philippines by GlobalMedic, a team of paramedics from Toronto. Within days of the typhoon striking on November 8, 2013, GlobalMedic



PHOTO: HPIC
Victims of disasters are elated to receive PTP boxes packed with medicines and medical supplies from Canada. Hand-knitted Izzy Dolls, used instead of Styrofoam to pack the boxes, bring untold delight to thousands of children in need around the world.

brought 10 PTPs to Iloilo province located on Panay Island, where they treated victims at mobile clinics. Using the 10 PTPs, GlobalMedic was able to help about 780 men, 1,450 women, and 1,850 children.

In his follow-up report to HPIC, Michael Mucklow of GlobalMedic wrote that the PTPs were an excellent package of essential medicines for rapid deployment in the immediate aftermath of the disaster.

"There were hundreds of people waiting in long lines, most of them mothers hoping desperately to get help for their children who were with them," Mucklow wrote in his report. "We will never forget the smiles on their faces when our team of volunteers, paramedics, and nurses arrived at the clinic with big white boxes with the Canadian flag on the side.

"Immediately the room brightened up. The women's faces turned into smiles, and their expressions were full of hope. The feeling that we, as a team, had in delivering this kind of hope is hard to explain in words."

While the mothers were overjoyed to receive medicines for their families, their young children broke into ear-to-ear grins when they saw colorful, six-inch-high, hand-knitted Izzy Dolls, which HPIC uses instead of Styrofoam to pack its PTPs.

Twelve Izzy Dolls are placed in each PTP and then given out to some of the younger children awaiting treatment. About 12,000 of these comfort dolls are made every year for HPIC by hundreds of volunteer knitters across Canada. Some 100,000 children in more than 100 countries have received Izzy Dolls in the last decade, along with their PTP medicines.

The story behind the Izzy Dolls fits well with the CSR philosophy espoused by HPIC, Umalia, IMS Brogan and the many pharmaceutical and medical supply companies with whom they work.

Canadian Forces Master Corporal Mark Isfeld was killed in 1994 by a land mine while serving as a peacekeeper in Croatia. His mother, Carol, had created

the Izzy Doll while he was alive so that he would have something to give to the children he met in the countries where he served.

When he died, his comrades in the 1 Combat Engineer Regiment asked his mother to keep making the dolls in his honor for them to give out. Before she passed away, Carol Isfeld passed the torch to Billy Willbond and his organization ICROSS to continue making and distributing the dolls free of charge.

A few years ago, Willbond, in turn, asked HPIC to take over and continue this volunteer mission to bring comfort and joy to children around the world by distributing the Izzy Dolls in memory of Master Corporal Isfeld.

"HPIC does a lot of good," Carre said. "They go over and above what they are expected to do. It's a feel-good story, and it's the real thing."

It's also the essence behind the principle of Corporate Social Responsibility, as practiced by companies such as HPIC, Umalia, IMS Brogan and their many suppliers and clients. ■

ORIGIN OF LEAN SIGMA

Part of the concept behind Lean Six Sigma can be traced to Romanian-born, American engineer Joseph Moses Juran, who acted as a management consultant starting in the mid-1950s to help Japanese industry raise the quality of their manufacturing production by convincing top executives about the need for company-wide training in quality control.

By the mid-1970s, Japanese products had established an international reputation for high quality, which prompted Motorola to become one of the first American companies in the 1980s to adopt a continuous improvement process in manufacturing to catch up to the Japanese in quality control.

In 1986, Motorola dubbed it Six Sigma based on minimizing variability in the manufacturing process by adopting standard measurements to determine product defects. General Electric adopted the philosophy in 1995, followed in the last two decades by leaders in other industrial sectors ranging from healthcare to insurance, telecommunications and software.

In October 2003, author Michael George published a book titled *What is Lean Six Sigma?* which combined the concept of better quality (Six Sigma) with a faster process (Lean). It can apply to both manufacturing and service-related process optimization, including the analysis of healthcare data performed by IMS.

IMS Brogan used Lean Sigma expertise to streamline its complex internal processes, and now offers such services to help pharmaceutical clients optimize productivity.



PHOTO: HPIC
A collection of colorful Izzy Dolls brings a smile to the face of an unidentified South American girl.

Warren Perley is a career journalist and president of Punctuation Grafix.