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Caring for children in Third World countries: Medical Missions uses videoconferencing to save little lives

by Elliot M. Gold, Publisher, *Electronic TeleSpan*
(elliott@telespan.com)

Frank and Peg Brady wouldn't retire if someone handed it to them on a silver platter. After spending two decades hopscotching around the globe, helping large multinational corporations with small projects such as building dams, building aluminum plants, and installing telephone switches in Third World countries, Frank and Peg decided they needed to do something big with smaller people, children. Their target is the 40,000 under five years old who die each day, the majority in Third World countries, frequently dying due to poor or non-existent health care.

According to the [World Health Organization](#), children under the age of five bear the brunt, suffering nearly one-third of all disease in any country. In Third World countries, they die, often because of limited healthcare in their hospitals. "Mothers of seriously ill children delay bringing their children to hospitals in Third World countries," said Frank. "They've learned that if their child's illness is greater than the skills of the hospital, their children are 'inventoried,' and die, often from something they get in the hospital."

Frank and Peg, with two grown daughters of their own, decided to fix this. Based on their high-level connections, they sat down with other parents, specifically Former First Lady of Bolivia, Yolanda Prada de Banzer, First Lady Ruby Moscoso de Young of Panama, and the First Lady of Nicaragua, Maria Fernanda F. Alemán. They got the support of these First Ladies for a concept Frank and Peg called [Medical Missions](#), a global videoconferencing network, which would deliver medical specialists and technicians from children's hospitals in the United States, to children needing care in Third World hospitals. Then Frank and Peg went to [IntelSat](#) and got two full-time transponders for the delivery of two-way video to Eastern Europe and the Americas (North, Central, and South). Next they visited [Polycom](#) and got the company to donate a million dollars worth of videoconferencing equipment a year (approximately 100 systems to date), with the promise of specialized systems, this year, that will provide not only face-to-face communications between doctors, nurses, technicians, and children, but, more importantly, visual medical communications for the sharing of visual diagnostic data. Since that time [EDS](#) as well has contributed 120 Polycom videoconferencing systems to Medical Missions.

With no time to rest, Medical Missions immediately enrolled a dozen topnotch U.S. hospitals as "mentoring hospitals," all with a focus on children's health care. Three of the more notable are [St. Joseph's Children's Hospital](#) in Paterson, NJ, [Johns Hopkins](#), in Baltimore, MD, and [Columbia Presbyterian Hospital](#), in New York City. On average, each hospital has provided 30 physicians, who have participated in approximately three mentoring sessions with doctors in Third World countries. Then, the couple raised financial backing from several private philanthropic sources, the largest





donations coming from Constance Milstein of the Milstein Foundation and the Henry Niles Foundation (Greenwich, CT). On March 1, 2001, Medical Missions was launched; it now serves children in hospitals in 58 countries throughout Latin America, Eastern Europe, South Africa, Nigeria, and India.

Phases—Telemedicine mentoring and telediagnosits first, tele-surgery second

Medical Missions sees its work in two phases, the first of which is the use of video for telemedicine education and telediagnostic work. Not dissimilarly from the way many telemedicine networks operate in the US, physicians in the mentoring hospitals in the US meet regularly with physicians in the Third World hospitals to participate in remote examinations, often supplemented by the sharing of medical records and even CAT scan images. It's been a massive learning experience for both sides.

"After we founded Medical Missions, we often saw when we brought our doctors to the Third World via videoconferencing, the doctors there often didn't bring the right things to the examination," said Frank.

"There was no pre-triage, for example. Further, often the equipment they had needed repair. With the video network, we'd help the Third World hospitals repair their medical equipment. We've used videoconferencing equipment to troubleshoot dialysis equipment, for example, having technicians at each end there for equipment repair."

In the future, Medical Missions expects to be able to have physicians from mentoring hospitals "participate" in remote surgeries. Polycom has been working on some specialized video equipment to facilitate that, equipment that is expected to be in production later this year.

Big help for little children

The practicality of Medical Missions can be seen in two case studies.

Yordano—Yordano is a 12-year-old boy from Panama, who was born with only one eye and with severe cranial deformity. As he grew older, his cranial problem produced mild retardation. Two years ago, at the age of 10, through a satellite-video link with St. Joseph's



Hospital in Paterson, NJ, doctors in the mentoring hospital there were able to create an exact computer model of Yordano's head. By the age of 10 his skull was such that the cerebral cavity was too narrow to allow his brain to expand. Based on the model, physicians at St. Joseph's were able to take the elongated skull and add strips of titanium to reshape it to a normal shape, so that Yordano's brain now has space to expand. Cosmetically, they adjusted several disfigurements, allowing the addition of an eye socket.

In July, Yordano and his mother will fly to New Jersey, and will stay with the Bradys so Yordano can undergo surgery at St. Joseph's where doctors will implant a prosthetic eye and a titanium jaw.

Patrick—Born in Rio De Janeiro, Brazil, Patrick is the product of a teenage pregnancy, and is now being raised by his grandmother. When he was born eight years ago, he had a tumor the size of a baseball on his back. Today at the age of eight (photos on the next page), Patrick's entire chest and back are inflated by the tumor. Through a videoconference link with doctors at Johns Hopkins this past week it was determined that the tumors, which

are wrapped around his muscles, encapsulating his spinal column, can be removed. The surgery, which will result from the consultation with the mentoring hospital, will remove 90-95% of the tumor, giving Patrick his life back.

Medical Missions is always open to donations.

Mothers are always there

Frank says that during virtually all of the consultative sessions, the mothers and grandmothers of the children participate by being there with their children.

"I think that what we've seen is that a mother's love for her child is universal and it seems that the more seriously afflicted the child, the more the love for the child. We've seen that on a global basis."

Happy Mother's Day!

Frank Brady (fbrady@mmissions.org)

Peg Brady (pbrady@mmissions.org)

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I welcome your comments.

Elliot M. Gold, President, TeleSpan Publishing Corp.

