

SITE: SAMARA REGION: VOLGA FEDERAL DISTRICT SITE LAUNCHED: 2003 OCTOBER 1-12, 2008 SURGICAL-EDUCATIONAL MISSION VI



In the Pediatric Cardiac Intensive Care Unit {PCICU}, Dr. Irina Baeva feeds a 5-month-old baby recovering from a cardiac catheterization.

The Heart to Heart team on our sixth mission to Samara was the smallest ever — for an exciting reason. As Dr. Gary Raff, our Lead Surgeon for this team, commented before the trip, "We have every reason to believe that the Samaran team is now able to provide exceptional cardiac care. We will take the minimum number of Heart to Heart medical volunteers, and our focus will be teaching specific advanced techniques, at our Samaran colleagues' request." After our 2009 mission, the children's heart program in Samara will be self-sustaining.

This was Dr. Raff's sixth annual surgical trip to Samara with Heart to Heart. The other Heart to Heart veteran volunteers were: pediatric cardiologist Dr. Mark Cocalis; pediatric cardiac anesthesiologist Dr. Laura Diaz; Natasha Lusin, PhD., interpreter and medical statistician; and Josie Everett, Heart to Heart's executive director. Josie has co-led every mission to Samara with Dr. Raff; she also serves as the operating room's chief interpreter.

HEART TO HEART 2008 SAMARA TEAM: Dr. Mark Cocalis, pediatric cardiologist, UCSF Medical Center; Liam Daizell, cinematographer; Dr. Laura Diaz, pediatric cardiac anesthesiologist, Children's Hospital of Philadelphia; Josie Everett, executive director, Heart to Heart; Dr. Gary Raff, pediatric cardiothoracic surgeon, University of California at Davis Medical Center; Natasha Lusin, PhD, volunteer coordinator/interpreter; Erika Trautman, producer and film editor.



Heart to Heart cardiologist Dr. Mark Cocalis maximizes educational opportunities while performing echocardiography examinations. For his Samaran colleagues' benefit, he describes out loud {through an interpreter} the anatomical and physiologic "clues" he discovers within each child's heart. These findings will help the team formulate an accurate diagnosis. Following each exam, he leads a discussion regarding possible surgical approaches.

ADVANCED EDUCATION: THEORY IN THE "CLASSROOM"

Although every Heart to Heart mission places a strong emphasis on education, this mission responded to specific requests by providing highly-focused lectures. Topics included: Long-term data on single ventricles; Diagnosis and treatment of pediatric heart arrhythmias; Ebstein's anomaly; Issues concerning the right heart; and, Pulmonary hypertension. Our Samaran colleagues had questions to which they had been unable to find answers in the medical literature — or, as yet, through their own experience. Our lecture series was rounded out with a half-day question-and-answer session led by Dr. Mark Cocalis.

ADVANCED EDUCATION: REAL-TIME IN THE OPERATING ROOM

Dr. Gary Raff led four open-heart surgeries. He had operated on one of his patients, five-year-old Dasha, once before, on a previous mission. Despite great advances in pediatric cardiac care, open-heart surgery is always high risk; a second operation brings additional risks. In Dasha's case, the surgeons unexpectedly entered her heart before she was on by-pass — her life was immediately at stake. Thankfully, Drs. Raff and Diaz, both trained at Children's Hospital in Philadelphia, instantly knew

what to do. Dr. Raff led the team in putting Dasha on bypass through her femoral artery. Our Russian colleagues had never seen circulation through the femoral artery used as an urgent response.

Our colleagues instantly understood Dr. Raff's thinking and what needed to happen. Within minutes, Dasha was out of danger, and the procedure resumed. Dr. Avramenko observed, "This was something you don't learn in books, details that determine the fate of a child." Dasha's heart was successfully repaired and her prognosis is excellent. {Real-time footage of Dasha's surgery is featured in "The Heart to Heart Story," our 20th-anniversary documentary video.}

NEARING SELF-SUSTAINABILITY: NO MORE BACKLOG IN THE SAMARA REGION

Samara is one of Russia's major metropolitan areas. It is the largest city in the southeastern part of European Russia, with 3.3 million inhabitants; the region includes eleven other cities. For the first time in this region, there is no backlog of children waiting for cardiac surgery. This was huge news, drawing local and national media coverage on a daily basis throughout the mission.



Echo specialist Dr. Yelena Mikhailovna performs an echocardiogram in the PCICU. In 2003, when Heart to Heart began our collaboration in Samara, our Russian colleagues had no PCICU. Hospital administrators leveraged available funds to build a stand-alone unit, and secured additional necessary funding from a private benefactor. To date, more than 1,500 children have received intensive care in this state-of-the-art unit.

EDUCATING BEYOND THE HOSPITAL: RAISING AWARENESS

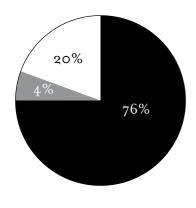
Heart to Heart considers it part of our mission to raise awareness about the prevalence of childhood heart disease around the world. In the United States, children born with heart disease are treated so promptly and effectively that many people in the US have simply stopped thinking about childhood heart disease. Meanwhile, it continues to be the most common birth defect all over the world – including in the US – yet treatment is still only available to IO-I5% of the world's children.

When working with the Russian media, Heart to Heart takes every opportunity to put our work in a global context. We are

thankful for the continued in-depth television, radio, and print coverage of our efforts to develop more children's heart centers in Russia while raising awareness of this global issue.

In Samara, the local staff is eager to communicate Heart to Heart's role in the dramatic progress of their regional heart center. Their ability to work with the media is an important part of an on-going effort to provide information and hope to the tens of thousands of parents whose children need life-saving modern heart care.

SAMARA VI, OCTOBER 2008



- Heart to Heart In-kind Medical Services
 \$326,215 {76%}
- O Expenses \$93,300 {20%}
- Non-Medical In-kind Donations \$15,637 (4%)

TOTAL PROGRAM VALUE: \$435,152

PROCEDURES PERFORMED

CathLab - Interventional (I) 10,062	5
	_
Patient Exams (43) 25,585	`
Echo Studies + Readings (42) 51,600	•
Pediatric Open-Heart Surgeries (4) 154,667	7
Anesthesia (4) 9,380)
Intraoperative TEE Studies + Readings (4) 4,800)
Post-Op Exams/Readings (4) 1,536	ò
Professional Consulting / Didactic 36,329)

Total In-kind Medical Services \$326,215

SAMARA VI SURGICAL-EDUCATIONAL MISSION, OCTOBER 2008: FINANCIAL REPORT

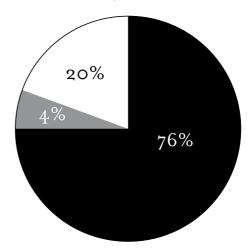
93,300

\$435,152

FINANCIAL OVERVIEW

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FINANCIAL SUPPORT	
Alcoa Foundation	50,000
Medtronic Foundation	37,990
Heart to Heart – Into the Heartland funds	2,310
Total Financial Support	\$90,300
IN-KIND SUPPORT Donated Medical Services Non-medical In-kind (see expenses below) Total In-kind Support	326,215 15,637 \$341,852
TOTAL PROGRAM VALUE	
In-kind Medical Services	326,215
Non-medical In-kind Donations	15,637

SAMARA VI, OCTOBER 2008



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- O Expenses \$93,300 (20%)
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TOTAL PROGRAM VALUE \$435,152

FINANCIAL DETAIL

Total Program Value

PROCEDURES PERFORMED

Expenses (excluding Non-med. In-kind)

Total In-kind Medical Services	\$326,215
Professional Consulting / Didactic	36,329
Post-Op Exams/Readings (4)	1,536
Intraoperative TEE Studies + Readings (4)	4,800
Anesthesia (4)	9,380
Pediatric Open-Heart Surgeries (4)	154,667
Echo Studies + Readings (42)	51,600
Patient Exams (43)	25,585
CathLab - Interventional (I)	10,062
CathLab - Diagnostic (4)	32,256

EXPENSES

-711 -1110-10	
Airfare	17,571
Airfare (In-kind discount)	1,757
Lodging (In-kind donation)	5,750
Meals (In-kind)	2,070
Interpreters (In-kind)	2,800
Ground Transportation (In-kind)	1,400
Travel Insurance (In-kind)	780
Visa Support (In-kind)	1,080
Incidentals	3,800
Program Supplies	12,142
Program Admin + Coordination	56,787
Total Expenses	\$105,937

SAMARA VI VALUE PROPOSITION

Every donated dollar was leveraged 5 times.

SAMARA VI TOTAL PROGRAM VALUE

76% of Samara VI total program value consists of services and products donated to Heart to Heart.

FINANCIAL SUPPORTERS

Our heartfelt gratitude to the Alcoa Foundation, Edwards Lifesciences Fund, Medtronic Foundation, The Estate of Nika Thayer, Joey's Corner and Joye Photography for their generous support of our journey *Into the Heartland*. We are honored to have them as partners.







The Estate of
NIKA PLESHKOVA THAYER



JOYE PHOTOGRAPHY