



INTO the HEARTLAND CAMPAIGN

SITE: ROSTOV-ON-DON
DISTRICT: SOUTHERN
COLLABORATION LAUNCHED: 2009

SEP 16 – OCT 1, 2011
SURGICAL-EDUCATIONAL
MISSION 3



Heart to Heart teaches teamwork along the continuum of care, from diagnosis to surgical repair to post-operative intensive care to patient follow-up. Every surgeon knows that success depends on the skills and cohesiveness of the entire team. No matter how masterfully a surgical procedure is performed, unless the patient has been properly diagnosed beforehand, and unless the patient will be transferred from the operating table to the hands of highly-skilled intensivists afterwards... a beautiful operation may be for naught.

RAISING AWARENESS ON SEVERAL LEVELS

Heart to Heart's third annual surgical-educational mission to the Rostov-on-Don Regional Cardiac Center reaffirmed for us the local team's desire and determination to work toward self-sustainability. Program progress in the pediatric cardiac intensive care unit (PCICU) had suffered a setback early in 2011, due to a delay in Federal funding (subsequently restored). This translated to a significant reduction in patient volume for the first four months of the year – which in turn left the PCICU staff with far fewer patients to care for. Despite diminished opportunities for hands-on experience, and a drop in PCICU staff morale, noteworthy progress in other areas continued.

The OR staff put their "down time" to excellent use, outfitting the Center's first dedicated pediatric cardiac operating room. Meanwhile, the cardiologists and echo specialists forged ahead, dramatically improving their English and, as a working group, implementing regularly-scheduled discussions on advanced topics. Thanks to the tenacity of Dr. Dmitri Bombin, the PCICU chief, and a heightened level of awareness among other department heads, the team as a whole has overcome many challenges this past year. Their initiative and resilience bode well for managing the difficult and complex change processes that lie ahead – all part and parcel of establishing a pediatric cardiac program.

HEART TO HEART 2011 ROSTOV-ON-DON TEAM: Children's Healthcare of Atlanta: Brenda Jarvis, senior PCICU nurse; Lisa Poppell, PCICU nurse
Emory University Hospital: Dr. Beth Wilson, pediatric cardiac anesthesiologist Mayo Clinic: Dr. Nathan Taggart*, cardiology fellow Nationwide Children's Hospital: Dr. Janet Simsic, pediatric cardiac intensivist Samara Regional Cardiac Center: Dr. Anton Avramenko*, operating room and conference interpreter
Tomsk Cardiology Institute: Irma Ozashvili*, medical interpreter and team coordinator UC Davis Medical Center: Olesya Dushkova*, surgical technologist; Brad Mortimer, perfusionist; Dr. Gary Raff, pediatric cardiac surgeon UCSF Pediatric Heart Center: Dr. Mark Cocalis, pediatric cardiologist; Dr. Laura Robertson, pediatric cardiologist Heart to Heart: Josie Everett*, executive director; Dr. Keith Flachsbart, cardiothoracic surgeon and Heart to Heart president; Natasha Lusin*, PhD, interpreter and medical statistician; Albina Popov*, interpreter and interviewer.

*fluent speaker of Russian



(Left photo) Tatiana Bykovskaya, MD, Minister of Public Health for the Rostov Region (at far left) speaks at a press conference during our mission. Also shown (from left): Professor Alexander Dyuzhikov, Chief of Cardiac Surgery, Rostov-on-Don Regional Cardiac Center; Dr. Vladimir Meleshkin, CEO, Rostov-on-Don Regional Hospital; Josie Everett, Executive Director, Heart to Heart; Dr. Mark Cocalis, Pediatric Cardiologist, UCSF Pediatric Heart Center. (Right photo) Before his surgical procedure, four-year-old Danil models his new hat, a gift from Heart to Heart medical volunteers Lisa Poppell, RN and Brenda Jarvis, RN who brought several dozen caps knitted by a fellow nurse from Atlanta.

During our mission, a press conference provided an opportunity to discuss several facets of Heart to Heart's collaboration with the Rostov-on-Don Regional Cardiac Center. Tatiana Bykovskaya, Minister of Public Health for the Rostov Region, expressed gratitude that a local team of specialists is being trained to provide state-of-the-art pediatric cardiac care to children within the region. Over the next several days, a three-minute television news clip about the collaboration was broadcast nationwide repeatedly on Russia's most popular TV channel. The national coverage reflects: how rare it is for children in certain parts of Russia to have access to open heart surgery; how excited people are, locally and nationally, about the development of an advanced children's heart center; and, how much the Russians appreciate the kindness of our cardiac specialists, volunteers who often travel with Heart to Heart on their vacation time. Heart to Heart was grateful to have this highly visible platform to continue raising awareness about the prevalence and treatability of congenital heart disease.

This year, Heart to Heart's 16-person team in Rostov-on-Don included ten pediatric cardiac specialists from the U.S. – eight physicians and two nurses. Two Russian colleagues (from other partner sites) joined our team to provide high-level operating room and conference interpreting; and three Heart to Heart administrative staff focused on program evaluation and also served as interpreters. Dr. Keith Flachsbart, Heart to Heart's Board President, rounded out the team. Dr. Flachsbart is an adult cardiac surgeon who began his career in congenital heart surgery; he is a veteran of several Heart to Heart surgical-educational missions to St. Petersburg, where he was instrumental in setting up a self-sustaining adult cardiac program. Dr. Flachsbart's primary focus in Rostov-on-Don was to evaluate program progress and to help refine Heart to Heart's evaluation methodology.

Progress to date: Mutual trust deepens, role modeling of teamwork continues

The level of familiarity and trust between Heart to Heart and the local team is now such that we were able to pick right up where we left off a year ago. This trust will prove invaluable in helping Heart to Heart promote the strong teamwork essential over the next several years for the local team to succeed.

We noted that, over the last two years, our colleagues in Rostov-on-Don have taken critically important steps toward a more collaborative team approach for the care of children born with life-threatening heart defects. Heart to Heart re-emphasized the need for further development of an infrastructure and systems conducive to an even higher level of teamwork. To this end, we strongly recommended daily multidisciplinary rounding; weekly multidisciplinary pre-operative conferences; and monthly outcomes reviews. Heart to Heart continues to promote closer integration among sub-specialties, to mentor department heads, and to teach advanced topics and skills to all team members.

“Today, modern technology and this international collaboration are allowing us to save our children. From the first days of their lives, they can receive care from professional cardiologists and cardiac surgeons.”

– TATIANA BYKOVSKAYA
MINISTER OF PUBLIC HEALTH, ROSTOV REGION

“Heart to Heart continually promotes high-level communication among specialists, from pre-operative evaluation through post-operative care. Anticipating problems, planning as a team, and regrouping when a problem arises are critical skills for a pediatric cardiac team. On every mission, teaching these skills is essential.”

– DR. LAURA ROBERTSON, PEDIATRIC CARDIOLOGIST
UCSF PEDIATRIC HEART CENTER

Cardiology: Diagnosing and determining treatment options

On this year’s mission, Heart to Heart pediatric cardiologists Drs. Mark Cocalis, Laura Robertson, and Nathan Taggart noted impressive advancement in the knowledge base of the Rostov-on-Don cardiology team as a whole. In Russia, pediatric cardiology and “functional diagnostics” (echosonography) are considered two separate specialties and are housed in separate departments. In Rostov-on-Don, members of these two departments are working more closely together than ever before. Since last year’s surgical-educational mission, they have been studying advanced anatomy, physiology, and hemodynamics together, enabling them to communicate more effectively amongst themselves. As a result, they are better able to present analyses and recommendations regarding optimal medical, cath lab, and surgical approaches.

Hard work ahead

The Rostov-on-Don program is in position to meet two important annual targets – an increase in patient volume and a decrease in patient age – by year’s end. The program has just entered the third year of our seven-year collaboration. As we approach midpoint, Heart to Heart’s main recommendation for the next 12 to 24 months is that the Rostov-on-Don team focus on the diagnosis and management of the spectrum of defects involved in Tetralogy of Fallot, a pivotal lesion in pediatric cardiac medicine. We look forward to working closely with our colleagues in Rostov-on-Don as they master the art and science of caring for children of all ages born with this common but complex birth defect.



Dr. Dmitri Bombin, Chief of the PCICU, and Dr. Larisa Zhivova (right), Chief of Pediatric Cardiology, candidly discuss their team’s progress and challenges with Executive Director Josie Everett. Heart to Heart makes it a priority to meet with department heads individually and collectively.



The surgical procedure required to repair Fyodor’s heart presented an excellent teaching opportunity. Mastery of the complete repair of Tetralogy of Fallot will be a key turning point for the local team.

ROSTOV-ON-DON PROGRAM YEAR 3 (including September 2011 surgical-educational mission)

FINANCIAL OVERVIEW

FINANCIAL SUPPORT

The Edwards Lifesciences Fund	50,000
Alcoa Foundation	49,000
Medtronic Foundation	35,900
Total Financial Support	\$136,900

IN-KIND SUPPORT

In-kind medical services	503,551
Non-medical In-kind {See Expenses below}	34,663
Total In-kind Support	\$538,214

TOTAL PROGRAM VALUE

Donated medical services	503,551
Expenses (excluding Non-med. In-kind)	136,900
Non-medical In-kind Donations	34,663
Total Program Value	\$675,114

EXPENSES

Ground transportation, In-kind	3,100
Interpreters, In-kind	5,500
Lodging, In-kind	19,440
Meals, In-kind	3,240
Program supplies	2,640
Pre- and post-trip coordination + logistics	67,160
Travel	31,007
Travel insurance, In-kind	1,680
Visas, In-kind	1,703
Year-round program development*	36,163
Total Expenses	\$171,633

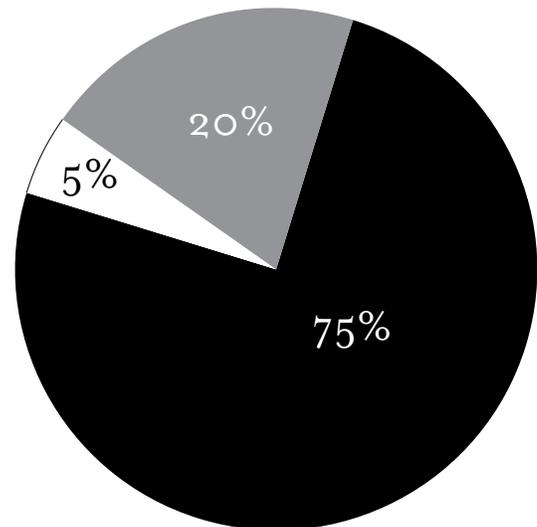
* Program documentation, strategic guidance, data collection + analysis, on-going feedback

PROCEDURES PERFORMED SEP 2011

Patient exams (75)	44,625
Echo studies + cath readings (75)	92,175
Cath lab - diagnostic (11)	88,704
Cath lab - interventional (1)	11,146
Pediatric open heart surgeries (5)	129,451
Anesthesia (5)	55,600
Perfusion (5)	13,130
Intraoperative epicardial echos (7)	8,400
Intraoperative TEE (1)	1,200
Post-op exams /readings (5)	1,920
ICU post-op care, MD (5)	10,740
RN/Tech support (ICU + OR)	10,460
Professional consulting + lectures	36,000
Total In-kind Medical Services	\$503,551

Data compilation as of November 23, 2011.

ROSTOV-ON-DON PROGRAM YEAR 3 TOTAL PROGRAM VALUE: \$675,114



- Heart to Heart In-kind Medical Services \$503,551
- Expenses (excluding Non-med. In-kind) \$136,900
- Non-medical In-kind Donations (Russian) \$34,663

ROSTOV-ON-DON 3 TOTAL PROGRAM VALUE:

80% of Rostov-on-Don 3 total program value consisted of services and products donated to Heart to Heart.

FINANCIAL SUPPORTERS

Our heartfelt gratitude to The Alcoa Foundation; The Estate of Nika Thayer; The Edwards Lifesciences Fund; The Medtronic Foundation; and, Joey's Corner for their generous support. We are honored to have them as partners.



The Estate of
NIKA PLESHKOVA THAYER



Medtronic
FOUNDATION



Edwards Lifesciences



Pro-bono Design: Joey's Corner | www.joeyscorner.org