Last Fall, a Heart to Heart team assembled to start our sixth surgical-educational collaboration in Russia. The first mission to our new partner site in the city of Kaliningrad (formerly Koenigsburg) gave rise to great excitement and optimism about Russia’s rapidly changing cardiac landscape. After 25 years of work in Russia, we see dramatic progress toward nationwide access to life-saving heart care for millions of people in this vast country.

Over the last few years, we have updated you on the considerable financial investment in cardiac medicine being made by Russia’s Federal Ministry of Public Health (MPH). On this mission, our sixteen-person team launched Heart to Heart’s first collaboration at a new, federally-funded cardiac center – one of seven across the country. The blossoming nationwide cardiac movement is perfectly aligned with Heart to Heart’s long-term goals for Russia.

Our Kaliningrad mission also marked Heart to Heart’s return to cardiac education and training for doctors and nurses who provide treatment to adults with heart disease.

Interactive presentation: The lecturer challenges the audience of cardiac specialists to analyze specific patient data to determine the best course of treatment. Left to right: Heart to Heart pediatric cardiologists Kavitha Pundi (Fellow), Frank Cetta, and Nathan Taggart, (center with microphone) senior medical interpreter Irma Ozashvili, Kaliningrad pediatric cardiac surgeon Vyacheslav Belov, cardiologist Svetlana Kuzmina-Krutetskaya (St. Petersburg).

EXCITING PROGRESS IN RUSSIA HERALDS A NEW ERA IN CARDIAC MEDICINE

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Bright new day: Russian cardiac care has entered a very promising era. Seven new federal cardiac centers have recently been built across the country. In 2013, Heart to Heart started collaborations at two of these centers, in Kaliningrad and Chelyabinsk. Heart to Heart’s goals align perfectly with these new developments, easing our path to train new specialists to provide modern, comprehensive cardiac care to newborn babies, infants, children, and adults.

Heart care for children and adults

Heart to Heart sent our first pediatric surgical-educational team to Russia in January 1990. Two years later, one of our key partners, the St. Petersburg MPH, appealed to us to help develop an adult cardiac center. After successfully establishing St. Petersburg’s first two centers of excellence, one for children and one for adults, Heart to Heart decided to focus exclusively on developing nationwide access for children with heart defects. In 2002 we officially launched our ambitious Into the Heartland Campaign to do exactly that.

Since then, Russia has come a long way – its middle class has grown considerably and is expected to continue growing quickly for at least the next decade. Thankfully, many international business leaders have chosen to invest in Russia, providing Heart to Heart with greater opportunities for partnerships and financial support to fuel further progress.

In response to epidemic incidence of deaths among adults and children from treatable heart diseases, in 2008 Russia’s Federal MPH initiated the installation of seven new German-built cardiac centers. Today these centers are in various phases of becoming fully operational. They are well-equipped with state-of-the art operating theaters, intensive care units, and diagnostic equipment. Each center is federally funded to perform 5,000 cardiac surgical procedures per year – an annual increase of 35,000 cardiac procedures nationwide at these centers alone! The Kaliningrad Federal Cardiac Center is the first of three new federal centers with whom Heart to Heart will partner over the next five years.

“The facility in Kaliningrad is superb. The hospital is adequately equipped from a technology standpoint to provide advanced pediatric and adult cardiac care. More importantly, the hospital has excellent and dedicated leaders who will be instrumental in leading the new pediatric team forward.”

KAVITHA PUNDI, MD
PEDIATRIC CARDIOLOGY FELLOW, MAYO CLINIC
FIRST-TIME HEART TO HEART VOLUNTEER
Teaching heart care for children

The recently opened Kaliningrad Federal Cardiac Center has recruited its staff from throughout Russia. Although the facility and location were new to us, many faces were familiar.

Chief Cardiac Surgeon Dr. Yuri Schneider, the head of the Kaliningrad center, is a long-time colleague of our founder, Dr. Nilas Young. They operated side-by-side on patients in St. Petersburg throughout the 1990s. Dr. Schneider is a talented and experienced surgeon – performing both acquired and congenital cardiac procedures – as well as a respected high-level administrator. He is acutely aware of the need for more advanced pediatric care in his country.

Kaliningrad’s lead pediatric cardiac surgeon, Dr. Vyacheslav Belov, previously worked in Yekaterinburg. Dr. Belov observed several Heart to Heart missions in Tomsk and Rostov-on-Don – years before a collaboration in Kaliningrad was even considered. His pediatric cardiac team is small, but growing as the center’s patient volume increases.

Many colleagues who came to participate on this mission have been part of the Heart to Heart family for years. Specialists from St Petersburg, Samara, and Tomsk joined us both to learn and to assist us – asking questions of our expert cardiologists, participating in patient case conferences, and providing interpreting. The energy and camaraderie between colleagues old and new was palpable and infectious; every day was wonderfully productive.

Focus on valve disease among adults

In all, the Heart to Heart team provided more than 15 lectures and examined more than 50 heart patients. Treatment options were discussed in a conference setting, both to ensure that each patient received the benefit of the collective wisdom of the specialists in attendance, and to maximize the transfer of knowledge. (See Procedures Performed, page 4.)

Our founder, Dr. Nilas Young, provided a lecture on a state-of-the-art treatment modality for adult valve disease. He also performed open heart valve repair and replacement surgeries on four patients. (See photo at right.) Dr. Young’s courage, persistence, and talent continue to make Heart to Heart thrive. Both teams were honored to have him with us.

“This is the first time in twenty-five years that Heart to Heart has launched a collaboration at a center already outfitted with state-of-the-art operating rooms, diagnostic equipment, intensive care units, and information technology. These are tremendous advantages.”

JOSIE EVERETT
EXECUTIVE DIRECTOR, HEART TO HEART

Kaliningrad Federal Cardiac Center: The center began operating on adults and children in 2012. For our medical volunteers, collaborating with strong able leadership at a modern center is a great opportunity to have enormous impact.

Congenital heart disease: CHD is the leading birth defect in the world. It strikes children at the same rate throughout the globe, regardless of location. Heart to Heart’s Kaliningrad site will provide state of the art heart care to children in this area of Russia for the first time.

Addressing valve diseases: Heart to Heart founder Dr. Nilas Young, presented a lecture on a cutting-edge technology called transcatheter aortic valve replacement (TAVR). Shown here operating with Russian colleagues to implant an Edwards valve on an adult patient.
## FINANCIAL OVERVIEW

### Financial support
- Medtronic Foundation 92,831
- The Edwards Lifesciences Fund 19,500
- St. Jude Medical Foundation 4,882
- Other/individual donations 25,496
- **Total Financial Support** $142,709

### In-kind support
- In-kind medical services 220,924
- Non-medical in-kind (see Expenses below) 31,440
- **Total In-kind Support** $252,364

### Total program value
- Donated medical services 220,924
- Expenses (excl. non-medical in-kind) 142,709
- Non-medical in-kind donations (Russian) 31,440
- **Total Program Value** $395,073

### Expenses
- Ground transportation, in-kind 2,800
- Interpreters, in-kind 3,100
- Lodging, in-kind 19,360
- Meals, in-kind 2,420
- Program supplies 3,336
- Pre- and post-trip coordination + logistics 55,572
- Travel 30,801
- Travel insurance, in-kind 1,440
- Visas, in-kind 2,320
- Year-round program development 53,000
- **Total Expenses** $174,149

### PROCEDURES PERFORMED SEP 2013

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Patient exams (48)</td>
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<tr>
<td>Echo studies + readings (48)</td>
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<td>Cath lab - diagnostic (5)</td>
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<td>Intraoperative TEE (6)</td>
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<td><strong>Total In-kind Medical Services</strong></td>
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Data compilation as of May 21, 2014

64% of the total program value consisted of goods and services donated in-kind to Heart to Heart and utilized in Kaliningrad in Program Year 1. The remaining 36% consisted of financial support from our major sponsors and individual donors.

THANK YOU to our major sponsors, whose support continues to fuel our progress.