



# IMPACT EVALUATION REPORT

**Program:** Remedy Mission IV

**Location:** Sulaymaniyah, Iraq

**Dates:** February 28 - March 11, 2011

**Surgical Partners:** International Children's Heart Foundation

**Other Partners:** Living Light Int'l, Kurdistan Save the Children, Kurdistan Regional Gov't

**Surgeries Provided:** 18

**Cost Per Child in Aid from Int'l Donors:** \$1,800

**Diagnostic Catheterizations Provided:** 4

**Diagnostic Echo-cardiograms Provided:** 86

The following report was compiled by the Preemptive Love Coalition (PLC) for our donors and other constituents for the purpose of evaluating the impact of our surgical training programs in and across Iraq. In an effort to operate with excellence and transparency in all aspects, this report includes surgical, financial, and training data.

## Summary

At the end of February 2011, the Preemptive Love Coalition (PLC) brought the International Children's Heart Foundation (ICHF) to Sulaymaniyah, Iraq - with the help of Living Light International, Kurdistan Save the Children, and the Kurdistan Regional Government - for our second round of training and surgeries aimed at long-term development for local cardiac care professionals at the Sulaymaniyah Center for Heart Disease (SCHD).

At the beginning of the mission the Health Minister for the Kurdistan Regional Government asked us to submit a proposal for the expansion of pediatric cardiac care across the three governorates.

Over the course of the two-week mission, we provided diagnostic testing to 86 children with congenital heart defects, performed diagnostic catheterizations on 4 children, and provided heart surgery to 18 children. The mortality rate was particularly disappointing for this mission, leading to three key actions after the mission before any further missions would be under-taken at the Sulaymaniyah Center for Heart Disease.

The total cash cost of the mission to all partners (including local entities) was \$87,097, with a total cost-per-child of \$4,839.

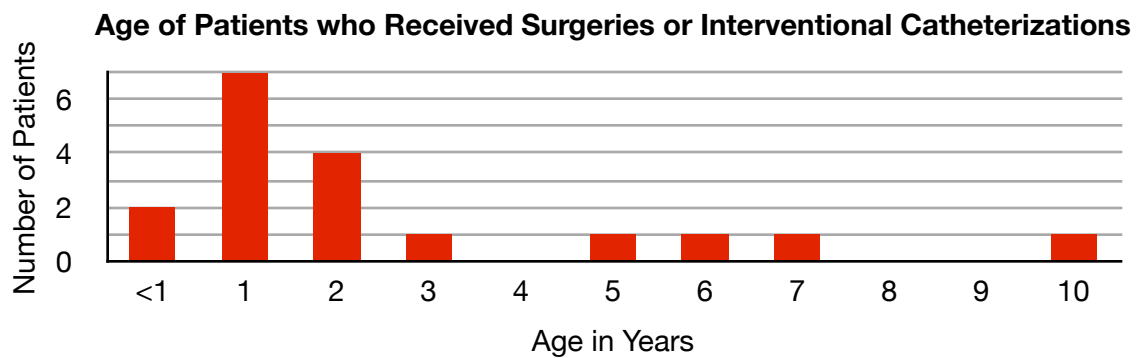
The total cash cost of the mission in aid from our international donors was \$32,400, with a cost-per-child of only \$1,800.

# Our Patients

Patients were jointly selected by the local medical professionals and the international surgical team from a prepared list. Patients were selected variously on the basis of perceived urgency, time on the waiting list, and simplicity of surgery (for training purposes).

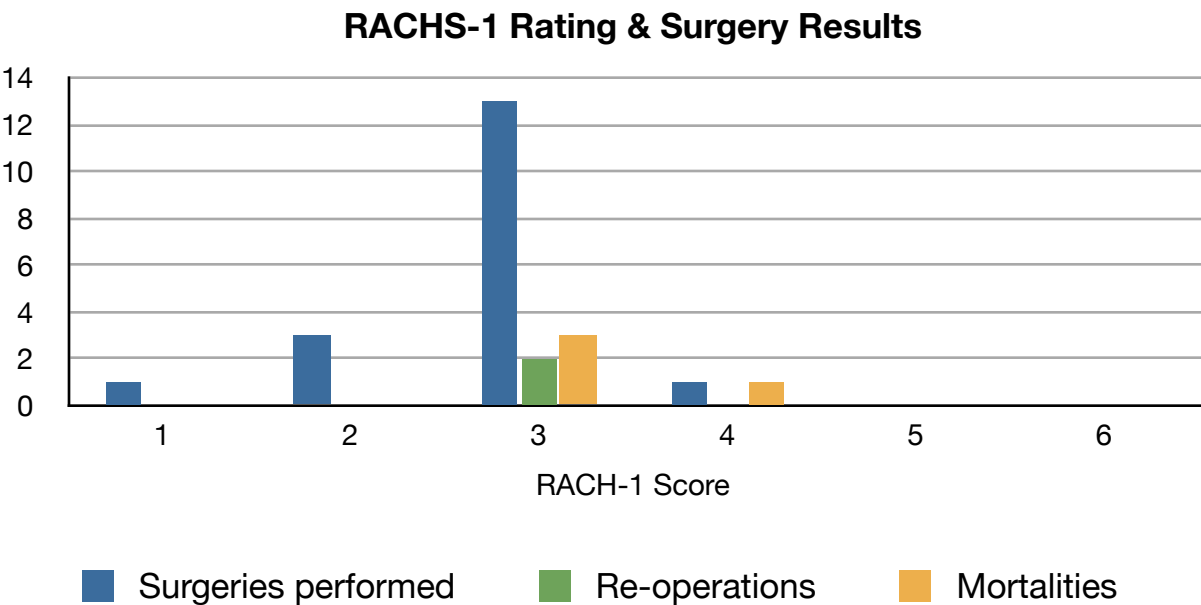
Patient information is recorded for medical purposes on perfusion and anesthesia reports and recorded redundantly into PLC's own database.

The following chart expresses the age of the patients who were selected to receive heart surgeries or interventional catheterizations during Remedy Mission IV.



# Risk Adjustment for Congenital Heart Surgery Score (RACHS-1) and Summary of Surgeries Performed

Each qualifying patient is assigned a RACHS-1 (Risk Adjustment for Congenital Heart Surgery) score. This scale allows physicians to rate the risks of mortality for patients undergoing corrective surgery for congenital heart defects. Based upon the type of defect(s) present, a score is assigned from 1 (the lowest risk of mortality) to 6 (the highest risk of mortality). The following chart summarizes relevant surgical data from Remedy Mission IV and the number of patients assigned to each RACHS-1 score.



## Complications and Mortalities

All pediatric heart surgeries in world class pediatric hospitals carry at least a 2-10% chance of mortality. Our entire *raison d'être* is predicated on the reality that hospitals in Iraq are even less prepared for these complicated surgeries. They are, therefore, susceptible to higher mortality rates. Of course, the local and international team do not merely accept these complications and mortalities. We publish our results precisely because we are constantly striving for public accountability and trying to attain greater levels of expertise and surgical perfection. We think that your donations - and our claims of success - should be based on real data.

## Re-operations

Two patients had re-operations (not counted in the surgery total).

## Mortalities

There were two in-hospital mortalities during the course of the mission. A third mortality occurred in the ICU after the international team had left the country. Two of the three mortalities occurred in patients who experienced complications during surgery *and* in the ICU. A fourth mortality occurred after the international team had left the country when a local nurse mistakenly discharged a patient from the post-op ward to go home too early.

The four total mortalities constituted a very disappointing 22.2% mortality rate for the mission. Our post-mission conferences and deliberations on the matter resulted in the following protocols:

1. A mandatory reduction in “RACHS scores” presented to the international team by the local team
2. A mandatory international ICU team to be left behind after surgeries stop to stave off post-mission ICU deaths and errant discharges
3. A post-poning of our next planned mission to the Sulaymaniyah Center for Heart Disease (originally scheduled for June 25, 2011) due to lack of preparation of materials, equipment, staff, and protocols

# Training of Local Staff

This report will not attempt to make claims regarding the long term, macro-development that was wrought through any single surgical mission. We will seek to address macro-development in an annual program report.

However, there are some quantitative data worth noting.

A conservative estimate of total hours of hands-on training that took place during this mission may be calculated as follows:

- 6 int'l surgical team x 16 hrs/day x 12 days in Iraq = 1,152 hours
- 9 int'l nursing team x 12 hrs/day x 12 days in Iraq = 1,296 hours

We conservatively provided 2,448 hours of hands-on training to doctors, engineers, technicians, and nurses that would not have otherwise been provided without this program. This estimate is extremely conservative, as each international team member often trained up to four local counterparts at any given time. The real number of hands-on training hours is likely closer to 5,000 hours.

# Financials

## In-Kind Donations of Supplies, Medications, Equipment, & Volunteer Time

Each Remedy Mission lasts 14 days, including approximately 2-3 total days for travel, 9-10 total days for surgery, and one day of rest mid-mission. During each mission, our international medical team of volunteers give their time and expertise to develop the local surgical and ICU staff.

The formula we use to calculate the in-kind value of the time volunteered is derived from the American International Health Alliance and the United States Agency for International Development:

- Physicians & biomedical engineers = \$1,275/day
- Nurses & technicians = \$675/day

Total value of time donated by ICHF staff and volunteers = \$192,150

- 6 Physicians/Engineers X 14 days X \$1,275 = \$107,100
- 9 Nurses/Technicians X 14 days X \$675 = \$85,050

Total value medical supplies & equipment donated by ICHF = \$292

## Financial Partners

Multiple organizations and individuals contribute to cover the total financial cost of each Remedy Mission. While PLC plays a vital role in coordinating, organizing, and executing each surgical mission, we have designed the program so that the majority of the necessary funds come from local sources. This financial report does not attempt to account for "indirect costs," such as the costs to local healthcare systems, the cost of a family to travel to the surgery site, the opportunity costs of lost income for families as they wait for surgery, etc.

That said, the total cost per surgery for Remedy Mission IV, including the expenses paid by the local government, was \$4,839. Because local accommodations and airfare were covered by local sources (and because some of the amounts we have are estimates), we believe the most important number is the amount paid by PLC's international donors, \$1,800 per child in aid from non-local sources.

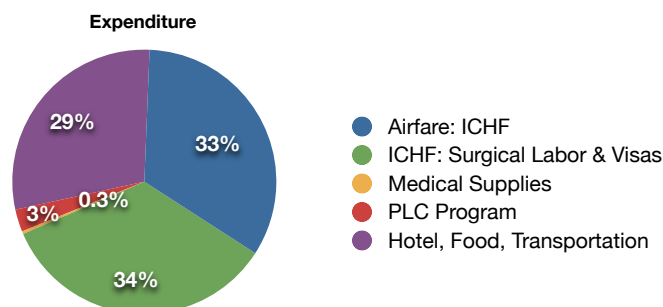
## Breakdown of Expenses

The chart below shows how each dollar was spent to cover the total cash needs of Remedy Mission IV.

Expense	Amount	Donor Group
Airfare: ICHF Staff & Vols	\$29,287	Kurdistan Save the Children
Retainer to ICHF for Surgical Labor†	\$30,000	PLC International Donors
Local Accommodations (Food, Hotel, Transport)	\$25,410†	Health Directorate, Sulaymaniyah, Kurdistan Regional Government, Iraq
PLC Program Staff	\$2,400	PLC International Donors
<b>Total</b>	<b>\$87,097</b>	

‡ Some organizations demand a strictly volunteer team, but we are unaware of a model in which volunteers alone can run as many missions per year as we require. We accomplish our nationwide goals by paying to secure the personnel provided by ICHF.

† PLC was not privy to the exact amount spent on this item. Amount is derived from per diem recommendations by the United States Government for this area of Iraq.



## List of Donors for Remedy Mission IV

Special thanks to the following donors that gave a total of \$36,067 specifically to this project:

FBC Midland  
Fidelity Charitable Gift Fund  
Nahoko Takato  
Natasha Miller  
Sarah Dafler  
Michelle Fisher  
Jonathan Hooper  
Sarah Spears  
Lauren Sawyer  
Shanaz Waise  
Amy Carol Wolff  
Rebecca Evans  
Bill & Barbara Porcher  
Kingdom Fund Association  
Pepper Edwards  
Ben Fisher  
Jay Burke  
Cory Burke  
Keri Worthy  
Scott Maynard  
Chelsea Lamb  
Ken Tsai  
Grace Bono  
Leslie Slade  
Philip Zastrow  
Jeremiah Richter  
Justin Myers  
Peggy Brooks  
Lilianna Granda  
Jon & Sarah Hensley  
Bonnie Wright  
Chris Schneider  
Denise Baustert  
Cecelia Hug  
Mary French  
Cory Paulson  
Julie VanMater  
Richard Betori  
Kyle Trafton  
Dawn Moore  
Wei Ong  
Neda Kadkhodaie  
Timothy Mansour  
Jesse Lowery  
Jennifer Self  
Chris Taylor  
Clay Baker  
Kevin Bullock  
Donald and Carol Ballanti  
Amy Larson  
Ashley Spelce