



*Vicente Sotto Memorial Medical Center NICU
Cebu City, Philippines*

2018 FINAL REPORT

Chao Foundation and Transparent Fish Fund

(March 2019)

I. PROJECT Brilliance \$100,000 Investment in Human Capital and Market Penetration

1. Quantifiable annual target:

Human Capital: **COMPLETE**

Continue to fund on the ground staff members responsible for driving market development activities (sales research, prototyping and implementation) for jaundice treatment in Asia and East Africa.

The Brilliance Expansion and Strengthening Program (Brilliance ESP), our experimental sales laboratory, is designed to extend the reach of D-Rev's award-winning Brilliance line of phototherapy devices to the most underserved and high-need areas of India and East Africa. We currently employ five business development executives who carry out Brilliance ESP's daily operations in Uttar Pradesh, Madhya Pradesh, Bihar and Delhi. Based upon our experience in India, we staffed East Africa with one regional manager and one business development executive, which is a market introduction model that has thus far proven successful. The significant investment from the Chao Foundation and Transparent Fish fund has allowed our team to surpass its goal of **monitoring 600 hospitals to monitoring over 1,000 in 2018 (2,700+ over the course of two years).**

Brilliance units have been sold to **hospitals and distributors in 53 countries (3 additional countries in 2018), and have treated 186,600 babies under the Chao grant period (557,100 in total).**

Sales in South East Asia increased by 17% with 96 units sold in the region during the same period. We saw the largest growth in Malaysia due to our work building a relationship with distributor Atalis Healthcare based in Subang Jaya, Selangor. The distributor doubled its purchase this year after increased efforts from Phoenix and excellent feedback from the field.

Sales in Asia (total) grew by 65% from 2017.

Market Penetration: **ONGOING**

Support "tender" specialists who are able to lobby for governmental contracts:

In progress: D-Rev entered a formal partnership with Medical Equipment Group (MEG, and a supplier to UNICEF) to update tender specifications for Phototherapy devices. Currently we are waiting to set a meeting with the WHO to further discuss this priority.

Planning for the launch of awareness campaigns in new markets:

Launched: Our partnership with Phoenix Medical Systems to announce new policy initiatives for the 60th Anniversary of Phototherapy in India proceedings commenced. We recently launched the first stage of our awareness campaign, with custom-designed posters in Hindi that we will display at more than 500 doctors' facilities in our ESP program area. Participating doctors are tracking the number of parents who indicated they returned to the clinic based upon reading the posters. **We have also begun our first pre-validation trial in India for a low-cost jaundice**

screening device developed in part by our advisor, Dr. Henk Vreman. If validated, D-Rev hopes to acquire this product to distribute in all markets.

Our ECHO Newborn Health teleClinic pilot which launched mid-year in India has now concluded five sessions. With over 40 doctors registered in the program, we estimate that our clinic is improving care for over 5,000 newborns over 6 months. We plan to expand to super-hub status with Project ECHO in 2019 by launching 3 more ongoing ECHO teleClinics across India, South East Asia, and East Africa to increase confidence and expertise among PCPs on treating newborn jaundice and biomedical engineers who service devices to increase device uptime. D-Rev will be featuring our partnership with Project ECHO by hosting a Skoll World Forum Ecosystem Event with ECHO founder Dr. Sanjeev Arora, Krista, and others.

We continue to expand our relationships with pediatric associations across East Africa, a model that enables D-Rev to influence policy priorities in the region. Our partnerships include a patient awareness campaign with the Uganda Pediatric Association, sponsorship of a symposium (discussed below) with the Rwanda Pediatric Association, and ongoing conversations about collaborations with pediatric associations in Burundi, Kenya, Tanzania, and Zambia.

D-Rev is sponsoring a newborn health symposium entitled, Newborn Health: Spotlighting Innovations in Design Solutions, in Kigali on March 29, 2019. This event will convene innovators, government officials, and NGO leadership from across East Africa to discuss the role of innovation and design in improving health outcomes. We expect over 100 people to participate in our symposium, with expected results including new collaboration commitments from leaders across the region.

2. Variance against stated project objectives & quantifiable goals (market penetration):

Expanding support in three new regions in Asia: **INCOMPLETE**

Over the course of 2018, our team has supported an expanded footprint in Thailand and Vietnam (as well as Bangladesh) through partnership with Phoenix Medical Systems. We began to focus on Myanmar as well when a local distributor expressed interest in Brilliance. This resulted in our first sale in the country since 2013. We hope to receive feedback from the distributor and learn if future sales are likely.

Without an active dedicated team in South East Asia, sales were not improving according to plan. We engaged Phoenix mid-year in a renewed effort to find, build, and drive new distributor partnerships in Thailand and Vietnam. We believe our work will come to fruition in 2019. We have plans to continue to help Phoenix activate many more South East Asian and Asian markets this year, including Bhutan and Myanmar.

Despite our increased efforts working with Phoenix on priority areas, we have come to conclude that real change will come from having D-Rev staff on the ground in these regions.

Operationalizing key distributors for accelerated 2018 sales:

In new markets, our approach is to source and train new distributors with a commitment to both service and impact reporting. Because many distributors are traditionally disincentivized to offer quality after sales service or to restrict margins for the benefit of customers, D-Rev's search for distributors can be complex. Our strategy in these markets, where neither Phoenix nor D-Rev have historically employed local staff, is to invest in co-marketing, capacity building, and technical assistance alongside distributors in order to give them, and their customers, increased confidence to purchase Brilliance. Distributors gain confidence by knowing that they have an in-person liaison to the manufacturer who will help them solve any issues, and customers gain confidence that warranty and servicing of devices will be addressed efficiently.

We have agreements with distributors in Kenya, Uganda, and Tanzania and will expand our partnerships to include three more East African markets in 2019. We additionally plan to **replicate this distributor support model in Southeast Asia in 2019.**

3. Core Team Members: **NO ADDITIONS**

II. PROJECT ReMotion \$35,000 Investment in Human Capital

1. Quantifiable annual target: Continue to deploy a dedicated staff member to drive sales and impact of the ReMotion knee. **COMPLETE**

Under the Chao Foundation and Transparent Fish Fund grant, sales staff have been able to build upon ReMotion's initial success and increase presence in underserved populations. Specifically, your investment has allowed **Shaelee Huck (managed by Rob Weiss)** to continue her work as a valued, full-time member of the D-Rev ReMotion team leading sales and adoption in Asia, Africa, and Latin America. As a result, sales of the ReMotion knee increased by almost 10% during the grant period.

Shaelee focused on Vietnam and Cambodia as priority areas in South East Asia:

Vietnam

Your investment allowed Shaelee to focus on finding a distributor in Vietnam. Cheol Kim of DK Medica signed on as an exclusive distributor for ReMotion for Vietnam in July of 2018.

We believed that focusing on finding dedicated in-country distributors would be the best way to open new markets in South East Asia. As reported in the interim report, he provided free samples to private and public clinicians between July and October and even synced up with local NGO, Project RENEW, to help influence the government tendering processes. **Despite his efforts, we regret to report that clinicians haven't shown interest to move forward with any purchases.**

To assist Cheol Kim, Shaelee enlisted a volunteer, Trang Duong, from Brown University, to do additional introductions of ReMotion to prosthetists in Vietnam.

The feedback received from both Cheol Kim and Trang Duong was consistent. Prosthetists were **concerned about the weight limit (80kg)** and wanted additional features such as a noise dampener. There was also some concern about the plastic used in ReMotion. In South East Asia,

prosthetists are more accustomed to all metal knees and often use a “reproduction” (knock off) of a leading prosthetics company Ottobock which is readily available.

Cambodia

Shaelee also spent time building relationships with Odom Team (lead Certified Prosthetists) at Exceed Worldwide. Although Exceed Worldwide utilizes their partnership with ICRC to provide most of their prosthetic materials, Odom Team requires ReMotion for his users that are able to pay for a portion of the prosthesis or who have moderate insurance coverage. Odom has experienced positive feedback with the ReMotion knee, allowing many of his ReMotion users to quickly return to their employment.

2. Variance against stated project objectives & quantifiable goals. **NO VARIANCE/ ADDITION**

The ReMotion team decided to add an additional item to their goals this year. Because of difficulties faced in Vietnam, they felt there was an unmet need in the mobility sector for a toolkit on introducing medical devices into new markets. Therefore, they set out to create one. The toolkit is intended to help organizations prepare for objections, barriers, competition and customer service issues that impact product adoption in new markets. This tool kit will include:

- Deciding on high-potential new markets to target
- Understanding new market context
 - The user
 - The competition
 - The real decision-makers
 - The regulations
- Identifying problems or gaps that your product could fill
 - What you can do from afar
 - When you really need someone on the ground
- Identifying influencers and how to make contact with them
- Prototyping your "pitch"
 - Ways around reluctance to try something new
 - Understanding & positioning compared to competitors
 - Advocacy & coalition-building
- Trialing & purchasing arrangements
- After-sales support & partner stewardship

We will disseminate the toolkit to you upon completion (estimated June 1, 2019).

3. Core Team Members: **NO ADDITIONS**

III. REPORTING UPDATE

Please continue to direct email communication to Andrea Coen at acoen@d-rev.org

IV. CONCLUSION

Even with some unforeseen challenges in Vietnam with ReMotion, sales of both our products increased across South East Asia, delivering critical health solutions to amputees and severely jaundiced newborns in the region. Beyond our sales growth, our partnership with Chao Foundation at Transparent Fish Fund has enabled us to obtain several key learnings in South East Asia that will help us to further our reach in 2019. We look forward to applying these lessons learned to continue to improve health outcomes for the under-served, and strengthen D-Rev's influence as a global health solutions leader in the region. We appreciate your continued support in advancing our work to solve critical health issues in South East Asia and around the world.