

ESCO. ASSOCIATION

FEBRUARY 2018

PROJECT OUTLINE



PREPARED AND PRESENTED BY

KATIA STEINFELD
DIRECTOR

ABOUT ESCO. THE CAUSE WE FIGHT FOR



KIDS WITH POOR EYE SIGHT: A MULTIFACTORIAL ISSUE

10% of all schoolchildren need eyeglasses. From 5 to 7 years old visual acuity also has a strong impact on neuro- psycho-social development as well as learning. Studies show that in Brazil children's caretakers rarely perceive a visual impairment. However, to this day no screening policy has been established in schools. Furthermore, even when the child's visual problems are identified several obstacles still stand in the way of obtaining prescription and treatment. For example, hard-working parents' lack of time, inefficient public transportation, year-long waiting at public eye care services and the high cost of eyeglasses.

ABOUT ESCO. VOLUNTEER ORGANIZATION

In 2015 in Rio de Janeiro two medical students, Katia and Guilherme, led a task force to perform vision screening tests at an elementary school for 180 pupils. The ones with low visual acuity were offered free eye exams at the University's clinic but many of the children never made it to their appointment due to the reasons mentioned previously.

In 2016 Katia moved to Switzerland and came up with a more efficient plan to offer free eye exams and glasses directly at the schools. This concept guarantees that every screened child presenting low visual acuity receives his pair of eyeglasses.

With the support of the University of Lausanne the project was selected to participate in the Clinton Foundation Initiative. This 1st endorsement attracted many others and the plan became a reality. In September 2017, 1'000 kids received free screening, eye exams and spectacles at their schools.

Because of this success the Esco. Association was founded in October 2017. It is now certified by the SWIMSA and comprises over 30 members, mostly medical and nursing students, that work to make the initiative thrive.



PROJECT DESCRIPTION

Our work is based on renewed commitments to action. Each commitment defines how many kids to screen in a given time-frame and is completed in 5 steps.

I. Fundraising

Thanks to our experience we can estimate how many action days and pairs of glasses will be needed. From that we calculate the budget and the Swiss team then finds sponsors.

II. Managing volunteer resources

For each 1'000 kids screened we need 50 medical students and 6 doctors. The Brazilian team is in charge of recruiting and organizing training courses.

III. Planning the action

After selecting the schools we then plan the logistics so as not to disturb their daily academic routine. We also inform the parents who then sign consent forms.

IV. Action Week

The volunteers screen all of the pupils identifying those with visual impairment. Doctors then examine the selected children and prescribe treatment. Within a month the eyeglasses are delivered.

V. Documenting and evaluating

We store all the records in our database for internal evaluation, follow-up of the children and medical studies.

OUR GOALS & OBJECTIVES

In the years to come we hope to keep improving our commitments. It is essential that the service we provide reaches a larger population while remaining up-to-date with the latest guidelines.

In 2018-19 we pledge to reach the 5'000 kids screened milestone. With the 1'000 already screened we plan to screen another 2'000 per year. Our objective is also to purchase or own equipment in order to save on rental costs.

By 2020 we would like to have reached 10'000 kids screened and treated.

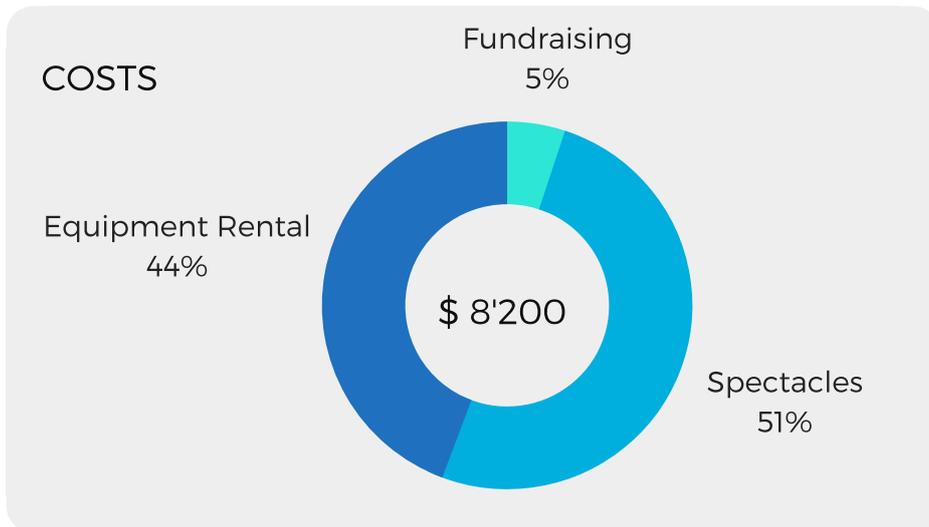


PAST ACHIEVEMENTS

AN OVERVIEW OF OUR WORK IN 2017



AT 2 PUBLIC ELEMENTARY SCHOOLS OF RIO DE JANEIRO BY 60 VOLUNTEER MEDICAL STUDENTS & 6 DOCTORS.



Partners:

The Renovatio NGO, based in Sao Paulo rented us their mobile clinic. Its equipment includes: one auto-refractor, one lensmeter one slit-lamp, one 20D lens, two phoropters, three ophthalmoscopes, two boxes of auxiliary lenses, two optotype projectors and one electrical table. Rental costs comprise of: round-trip fuel, insurance, travel expenses plus salary for three crew members for three days and two nights. OneDollarGlasses and VerBem sold us their low-cost spectacles through Renovatio.

Contributors:

Unil, Clinton Foundation, Vision for All Foundation, M.E.T.I.S. and Association Sud.



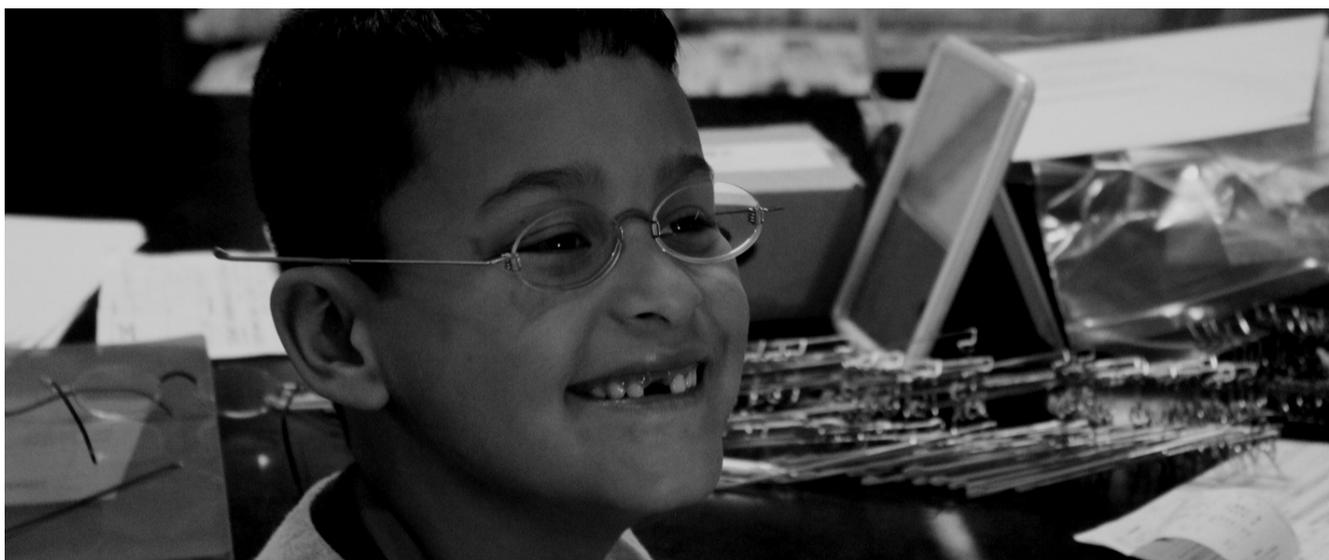
2018 TIMELINE

TASK	START DATE	END DATE
STEP 01 & 02 FUNDRAISING & RECRUITING VOLUNTEERS	JANUARY 2018	AUGUST 2018
STEP 03 & 04 PLANNING & IMPLEMENTING	JUNE 2018	OCTOBER 2018
STEP 05 DOCUMENTING & EVALUATING	OCTOBER 2018	DECEMBER 2018



2019 TIMELINE

TASK	START DATE	END DATE
STEP 01 & 02 FUNDRAISING & RECRUITING VOLUNTEERS	OCTOBER 2018	AUGUST 2019
STEP 03 & 04 PLANNING & IMPLEMENTING	JUNE 2019	SEPTEMBER 2019
STEP 05 DOCUMENTING & EVALUATING	OCTOBER 2019	DECEMBER 2019



BUDGET OVERVIEW

DESCRIPTION	ESTIMATED BUDGET (USD)*
EQUIPMENT 2 SETS OF PORTABLE OPHTHALMOLOGICAL EXAMINATION TOOLS.	\$ 8'500
ACTIONS ROLLS OF PAPER FOR THE AUTO- REFRACTORS' PRINTERS, DILATING EYE-DROPS, OPERATIONAL COSTS.	2 X \$ 500
EYE GLASSES 2X 250 PAIRS OF EYEGASSES, DISTRIBUTED DURING THE 2 PHASES.	2 X \$ 5'500
GRAND TOTAL	\$ 20.500

* PRICES ARE BASED ON EQUIPMENT AVAILABLE IN BRAZIL IN DECEMBER 2017.

DETAILED EQUIPMENT BUDGET

EQUIPMENT	PURCHASE PRICES (USD)
VISUAL ACUITY CHARTS LOGMAR VA CHARTS AND 2 ILLUMINATED CABINETS, WITH OPTOTYPES FOR CHILDREN.	\$ 500
REFRACTION KITS 1 AUTO-REFRACTOR, 1 LENSMETER, 2 BOXES OF TRIAL LENSES AND FRAMES, 2 RETINOSCOPIES,	2X \$ 3'000
EYE HEALT ASSESSMENT 1 SLIT LAMP. 2 OPHTHALMOSCOPIES.	2'000
GRAND TOTAL	\$ 8'500

ADVANTAGES OF PURCHASING VS RENTING THE EQUIPMENT

Renting Renovatio's mobile clinic costs \$ 4'750 for each 2'000 children screened as this involves 6 working days of back-to-back consultations, which means that the bus and its crew must remain in Rio for 8 days. In the future we would like to go beyond 2'000 screenings per year and so the rental costs would only increase. In addition to that, purchasing our own equipment enables us to choose tools that are specifically designed for children and more appropriate in providing standard pediatric eye exams.

EVALUATION PLAN

EACH COMMITMENT TO ACTION IS CAREFULLY EVALUATED BEFORE WE MOVE ON TO THE NEXT OBJECTIVE.



1. Evaluation of success

By quality: in each school, the tests results must be equivalent to those found in literature ($\geq 95\%$). All children selected by screening must receive an eye exam ($\geq 95\%$). All the glasses prescribed must be delivered ($\geq 99\%$). All the kids referred to a clinic must attend ($\geq 95\%$).

By quantity: the quality must be satisfying in all of the schools ($\geq 99\%$) and the number of kids screened must meet the commitment's baseline ($\geq 99\%$).

2. Relevance

The children receiving new glasses shouldn't already own appropriate glasses at the time of the action ($\geq 90\%$).

WE SHALL ASSESS THE COMMITMENTS SUCCESS, RELEVANCE AND IMPACT.

3. Impact

The number of new volunteers from different universities should double at each commitment. Reports must be sent to all partner organizations and at least one scientific paper using the anonymized data must be published or presented at a medical conference.

TEAM MEMBERS



KATIA STEINFELD
PRESIDENT (CH)



GUILHERME HORTA
FIELD COORDINATOR (BR)



LUANA ZEIDAN
VICE-PRESIDENT (CH)

Esco is a Lausanne based non-profit association. Its committee is composed of a director, treasurer, secretary, communications manager and event planning manager. The committee is elected by the members which are mostly medical and nursing students from all over Switzerland. Their responsibilities include planning the short and long-term goals, organizing events to raise awareness on pediatric eye-care, fundraising and evaluating the results. Once a year, Swiss members of Esco travel to Brazil to join forces with our volunteers on the field. This not only increases the local workforce, but also promotes a culture of international collaboration to attain health development goals.

Our team in Brazil is in charge of approving the commitment to action, selecting the schools in which they will take place, coordinating the logistics with the schools' directors, recruiting and training volunteers as well as responding to any of the schools' or parents' questions that might arise after the action is completed. To build the workforce the team relies on Ophthalmology Interest Groups in several medical universities of Rio de Janeiro. Together they plan conferences and training sessions for students and recruit doctors to do the eye exams. Once a commitment is completed the results are shared among the Brazilian and Swiss teams to improve future processes. Furthermore, both teams collaborate to write and publish scientific papers regarding the findings.

SUSTAINABILITY PLAN



Our financial sustainability plan involves partnering with start-ups in the ophthalmology technology area that also share our interest in democratizing eye care. Esco is currently working with the CornealX group to build a software for the diagnosis of corneal diseases and a Augmented Reality vision screening game. We hope that in the future the profits from selling such instruments can finance Esco while also contributing to the advance of science in our field. Furthermore our organization relies on a self-renewing pool of volunteers linked to medical universities which gives us the advantage of having a cost-free and sustainable work-force.

In addition to that our actions are designed to be reproduced by other Ophthalmology Interest Groups of medical schools across Brazil. When our methodology spreads, the initiative will reach a much larger population with relatively little organizational and infrastructural investments and Esco will become an umbrella organization. Lastly, the yearly papers we publish are an important contribution to medical knowledge on pediatric ophthalmology. Our data provides statistical proof that vision screening and eye exams at schools are necessary. We believe that making such conclusions known will help push towards adequate public policy.

PARTNERSHIPS & COLLABORATIONS



Several partners are crucial to our operation. Experienced advisers at Unil and at the Vision for All Foundation help us plan and manage our organization as well as sponsor it. The Swimsa group promotes our association in all of Switzerland and is also a sponsor. The CGIU endorsement gives us the possibility to network with a variety of important specialists and NGOs in this field. To build a stronger workforce we also team up with social organizations like M.E.T.I.S. in Switzerland and Ophthalmology Interest Groups in Brazil. In 2017 the commitment was fulfilled thanks to the Renovatio NGO, VerBem and One Dollar Glasses.

WE COLLABORATE WITH UNIVERSITIES, FOUNDATIONS, NGOS AND MEDICAL STUDENTS' ASSOCIATIONS IN SWITZERLAND AND IN BRAZIL.

PARTNERSHIPS & COLLABORATIONS

