

Terms of Reference

Advisory services on Project 6113: Implementation of Robotic Surgery for Paediatric Patients

1. Introduction

Background on Funding Partner

Fondation Botnar is a Swiss-based foundation established in 2003 whose core purpose is improving the health and wellbeing of children and young people in growing secondary cities around the world. We do this by investing in sustainable solutions, learning with, connecting and catalysing diverse partners.

At Fondation Botnar, we recognize the value of learning in effectively driving towards systemic change, and are committed to cultivating and nurturing learning both within and outside of the organization.

Background on Implementing Partner (“Grantee”)

Victor Babes University of Medicine and Pharmacy is a public university located in the western part of Romania, in the city of Timisoara. The “Louis Turcanu” hospital in Timisoara services a large population of children in the West of Romania.

Project description

The project contributes to setting up a paediatric robotic surgery programme in Eastern Europe, with the objectives:

- * To optimize and standardize the protocol for a wider number of robotic surgical procedures in children
- * To assess the cost of procedures that are performed with alternative methods laparoscopically and open surgery
- * To evaluate approaches to reduce the break-even point of robotic surgery
- * To set up a training centre and become a centre of competence of regional importance

The direct benefits of the project come from reducing the invasiveness and increasing the precision of surgical interventions, as well as from being able to tackle conditions that cannot currently be addressed.

Indirect benefits are related to the results of the optimizing the cost for the robotic surgery, to the widening the spectrum of the surgical procedures and to the creation of a training centre.

Fondation Botnar’s major contribution to the project is the donation of a DA Vinci Robot (model Xi

3D-HD 4-arms) and an initial set of 50 surgery accessories to the “Victor Babes” University of Medicine and Pharmacy Timisoara, Romania, for use in the “Louis Turcanu” Emergency Children’s Hospital in Timisoara, Romania a hospital owned by the city.

Current state of project implementation

Two agreements were signed, (1) between Fondation Botnar and SofMedica for the purchase and delivery of the robot, and (2) between Fondation Botnar and “Victor Babes” University of Medicine and Pharmacy Timisoara, for project implementation. Under agreement 2, the University is expected to cover the costs for related medical accessories for a five-year period, as well as parts of the research costs.

In December 2017, the robot was delivered to the “Louis Turcanu” Emergency Children’s Hospital in Timisoara; official handover documents were signed between SofMedica and University Victor Babes. The project was officially launched in January 2018 with the participation of a Fondation Botnar representative. Fondation Botnar considers the robot to have been legally donated to the “Victor Babes” University of Medicine and Pharmacy Timisoara, Romania, whereas the University does not recognize the donation, claiming the necessity to have a donation contract authenticated by a public notary.

In parallel, two teams of two surgeons and two first assistants each were trained. In February 2018, they performed the first surgical interventions on four children in Timisoara. An economic study was carried out and shared in two publications.

Due to legal issues around the ownership of the robot, the University has failed to provide the agreed funding for medical accessories (costing some €1,000 per intervention). As of 2020, the initial stock of 50 accessories, as well as 20 additional accessories provided by a charity, have been used up and use of the robot has been suspended, putting the project to a halt.

Different options have been put forward to resolve the issue, including among others the transfer of the robot to a new building of the “Louis Turcanu” Emergency Children’s Hospital in Timisoara, R currently under construction, with possible support from a person recruited by Fondation Botnar to provide management backstopping for a start-up phase and to a develop a program and plan to bring the pediatric surgery robotic initiative to a stable sustainable level.

If no satisfactory solution can be found, Fondation Botnar could transfer the robot to another potential hospital or try to resell the robot to its producers.

2. Purpose

The main purpose of the exercise is to advise Fondation Botnar and its partners on a viable way forward so that the project can yield the intended research benefits and contribute to improving the health of children and youth in low-income countries of Eastern Europe.

Key Questions

1. What is the relevance of the project in the wider research landscape of artificial intelligence and robotics in medical treatment in low-income countries in Europe?
2. What are the specific issues that have prevented the Foundation's donation to the University to be fully recognised?
3. What concrete steps need to be taken to ensure the donated robot is locally owned and can be used as intended? What alternative approaches can be taken, and what are the advantages and shortcomings of each option? This should include reflexion on the following questions, among others:
 - What are the opportunities and conditions for an effective transfer of the Robot to the "Louis Turcanu" Emergency Children's Hospital in Timisoara or to other suitable institutions? How can hurdles be overcome?
 - Would a backstopping solution – i.e. support by a specialist funded by Fondation Botnar to manage the transfer and use of the robot – bring added value? What would need to be in the backstopping person's job description?
4. How can the research project inform policies and practice to improve young people's well-being in low income countries? What steps have been undertaken, what else must be done (potentially involving other actors)? This could include reflexion on the following questions, among others:
 - How can an economically sustainable programme be developed, including the securing of a continuous supply of safe medical accessories? What concrete steps can be undertaken, by whom, under what conditions?
 - How can a clinical and research programme be developed to position the centre as a competence centre?
 - How can peer-to-peer dialogue with a potential partner in the private sector be developed?

During the inception phase, the consultant can review and develop additional questions as necessary, in consultation with Fondation Botnar and the implementing partner.

3. Approach

This exercise combines evaluative elements with concrete advice to the organisations involved. It is an external exercise that expects the consultant or consulting team to assess the situation and its implications independently while gaining information from and consulting with all stakeholders involved in the project.

An important part of the assignment will be to retrace the steps that have led to the current situation in detail, seeking inputs from all stakeholders who have been involved in the project.

The exercise is expected to foster participation at key moments, seeking the implementation team's advice and support (i) during the inception phase, when crafting the instruments to carry out this exercise, (ii) during the data analysis phase, and (iii) in developing recommendations.

Role of the External Consultant

Fondation Botnar is committed to partnering closely with grantees to enhance learning directly related to implementation and the follow-on phases of the program, be it with or without Fondation Botnar support. The External Consultant implementing the contract must be able to situate themselves as a partner with the recipient organization for maximum transparency and utility of the findings for program improvement.

The consultant or consulting team is expected to work in tandem with the Project Lead based in Switzerland to understand the research process and its prospective use. The contracting consultant is expected to collaborate closely with the implementor to:

- A) Reach a shared understanding of the objectives and questions of the exercise, and develop the approach and process accordingly
- B) consult regularly with the project team to boost both the validity of findings and the relevance of results and recommendations,
- C) recommend adjustments to the project as needed so as to effectively inform future steps
- D) facilitate a validation workshop or consultation (online) so as to discuss initial findings and recommendations with the implementor and Fondation Botnar.

4. Practical issues

Scope and Field Visits

The exercise is expected to start by January 2021 (possibly earlier) and intervene over a 2-3-month period, possibly including a visit to the project site, depending on current travel restrictions and risks linked to COVID-19.

Ethical Considerations

The consultant is expected to comply with evaluation ethics, as set out in the OECD/DAC Quality Standards for Development Evaluation (<http://www.oecd.org/dac/evaluation/qualitystandards.pdf>) throughout the process.

Proposed Timeline

The exercise will start upon execution of the consultancy contract and conclude no later than April 2021. The Final Report including the respective slide deck should be submitted no later than April 2021.

Work Packages/Action	Responsible	Time/deadline
Selection of consultant	Fondation Botnar/Grantee	November/Dec. 2020
Kick-off/inception meeting	Consultant	December 2020
Submission of inception report	Consultant	January 2021
Evaluation research, including validation workshop	Consultant/Grantee	January-February 2021
Submission of draft report	Consultant	February 2021
Feedback on draft report	Fondation Botnar/Grantee	March 2021
Closing workshop	Consultant	March 2021
Submission of Final Report	Consultant	April 2021

Inception and dissemination consultations

At a minimum, the consultant will plan and facilitate two consultation events/moments in consultation with the implementor. The minimum set of activities are specified as follows:

- * Inception meeting or workshop (on-line or in a hybrid format) with representatives of Fondation Botnar and of the implementing organisation
- * Validation workshop (on-line or in a hybrid format) with the implementing organisation, to verify and deepen findings, reflect on future steps and gather inputs for recommendations.

Deliverables

- * Inception report of 5-15 pages (plus annexes) including:
 - Understanding of purpose and scope (– i.e. what is in and out of scope)
 - Proposed adjustments to objectives and questions as appropriate
 - Data collection and analysis plan(s)
 - Tentative work-plan and schedule for the overall process, specifying involved stakeholders' roles and moments for communication between the specific stakeholders
 - Draft instruments for data collection and analysis
- * Draft outline of the report including detailed recommendations (anticipating 1-2 rounds of feedback)
- * Full draft report of up to 20 pages including a three-page executive summary
- * Closing Workshop
 - Discuss Learnings
 - Reflect on the evaluation process
- * Final report (after one round of feedback) accompanied by a short briefing slide deck

5. Consultant Requirements

The consultant or consulting team should meet the following requirements:

Evaluation and advisory competencies

- * Evaluation in intercultural contexts
- * Experience in organisational development or management consulting

Contextual experience

- * Experience with (evaluating) international cooperation projects, preferable in Romania
- * Knowledge of the legal issues related to international projects involving donations of hardware
- * Excellent written and spoken English
- * Familiarity with the research and European/ Romanian funding opportunities in the medical field
- * Experience in conducting interviews, group discussions and workshops, including via online platforms

References

Applicants are invited to include hyperlinks to examples of evaluations that are broadly representative of the consultant's or the consulting team's capability vis-à-vis this call.

6. Expression of Interest and Deadline

The expression of interest should be no longer than **5 pages** consisting of:

- * Introduction of the consultant or consulting team Including relevant experience and skills
- * Outline of the proposed methodological approach
- * Rough day-rate

An annex can include further documentation such as CVs, reports and publications or other relevant documentation.

Interested experts are requested to send their expression of interest by 23 November 2020 at 11 am Central European Standard Time. Applications in pdf format can be electronically submitted to m.raab@posteo.de cc. dsuhr@fondationbotnar.org and grants@fondationbotnar.org