

PROJECT STATUS REPORT (PSR)

07/01/2022 - 12/31/2022 - PSR-09375

PROJECT SUMMARY

Operation number

PN-T1303

Suboperation number

ATN/IM-19400-PN

Project Name

Leveraging ICT solutions for preventive strategies in Aging population in Latin America and the Caribbean

Team Leader

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Executing Agency

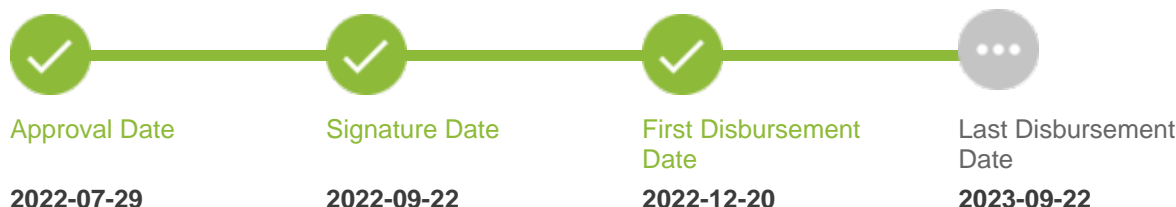
Fondazione Politecnico Di Milano

Purpose

To design and implement a small pilot to test the applicability and effectiveness of innovative health technologies to foster prevention and healthy behaviors among elderly population in Panamá



Project cycle



PSR SCORE



- 0 - 1 Red Flag
- 1 - 2 Yellow Flag
- 2 - 4 Green Flag

LEARNINGS

1. Risk and Lessons

1.1. Risk

1.1.1. What do you think is the biggest risk that threatens the achievement of the project objectives?

The main risk threatening the achievement of the project lies in the technology availability/reliability and affordability. To grant the success of the project, which aims to introduce affordable and reliable non-intrusive devices to maintain the healthy status in the ageing population, certified medical devices and integrated into the cloud systems are needed. The price of the device may be high and undermine the feasibility of the action. Furthermore, the market availability is still limited to certain geographical zones: OMRON HeartGuide is available only in the USA, Huawei Watch D is available only in Europe, both still unavailable in Panama. The backup solution, available in Panama, is the Withings smart bracelet, but this is a lower precision solutions as it don't implements a direct blood pressure measurement, but as results of other combined parameters (less accurate) To mitigate these risks, a detailed analysis, of the context has been carried out and reported in the component 1 report about the health challenges, technological infrastructures & existing pilots in Panama. (D1.2 Report on welfare systems in the region) Furthermore, the medical devices available that match the clinical/technical & budget objectives are under lab testing in Milan to verify compliance with the project scope. The scientific team is in contact with producers, in the case of Omron, and is trying to contact Huawei to fully leverage market-ready technology, reduce risks and evaluate further collaboration.

1.2. Greatest Achievement or Failure

1.2.1. What has been the greatest achievement or failure in the last semester that affected the implementation of the project?

The greatest achievement is the study protocol approval and gives the opportunity to start the study trials on the fields with real users. The choice of the device is still pending: the Huawei solution has been successfully tested for data reliability and battery duration, while the integration in a cloud platform for data retrievability is ongoing. The Omron solution is still waiting acceptance because the device is still on the way to researchers.

1.3. Findings and Lessons

1.3.1. What are the most useful findings and lessons from this project that when taken into consideration could improve the execution and results of existing projects and the design of similar projects in the future? A finding describes an action, circumstance or decision that was critical in determining the positive or negative evolution of the project (for example, switching from the development of a blockchain platform to a web-based shared database reduced the cost and time devoted to implementing the traceability capabilities required by the project). A lesson is a concrete, actionable proposal based on a finding that, in similar circumstances, would facilitate problem solving, risk mitigation, and the achievement of results (for example, Develop guidelines and criteria to identify candidates that could benefit from the implementation of a blockchain platform, and assess during the design if the selected project satisfies the criteria before committing to develop one).

The most useful finding are: F.1) a specific protocol for device testing and acceptance from the technical point of view; F.2) exploitation of some NESTORE methodologies, in particular the part of the protocol describing the technology acceptance and system usability questionnaires and related interpretation criteria; F.3) the structure of the healthcare systems in LAC so to better target the service proposition. The biggest lessons learnt are: L.1) the difficulty in interoperate different medical devices even if they are intended for telemedicine services: only

proprietary platform of privacy issues can prevent their deployment unto the real world application L.2) the differences across countries about the service provider of innovative healthcare solutions, and the intermediate actors filling the gap between NHS and patient

2. Scalability and replicability

2.1. Scalability Plan

2.1.1. Now that the Project is in the execution phase, have you developed any concrete plan or action that will allow it to reach a greater number of users/clients/beneficiaries (or broader environmental or resilience to climate change and natural disasters impacts) in the future?

The scalability and replicability are at the basis of the proposal, in fact, the project is designed to perform preliminary piloting activities with a small number of involved users, to evaluate usability and acceptance first, but intends to scale up to a large study in future. The aim of introducing new digital technologies to ageing better and sustain the independent everyday life of the elderly is in response to the actual and big challenge of the increasing ageing of the population. The actual trend, which shows an increased demand for healthcare services by the ageing population from the user perspective and, on the other hand, an increasing reduction of resource availability in the national healthcare systems, is expected to be unsustainable in future. Digital health technologies play a role in supporting and promoting healthy lifestyles to empower the elderly and improve their quality of life. Furthermore, digital health technologies may support remote monitoring/intervention and reduce the healthcare system pressure. Scalability is also witnessed by the exploitation of some outcomes of the EU project NESTORE that this project aims at translating into a viable clinical practice.

2.2. Costs and Partners to Scale

2.2.1. Now that the project is in the execution phase, do you know how much it costs to offer your product / service per user / client / beneficiary? Is this a factor that could affect reaching a greater number of users / clients / beneficiaries in the future? Has any public or private institution requested this information from you, looking for scaling or replicating the model / product / service?

The availability of medically certified devices is extremely recent, up to now only two solutions have been made available but they are needed in a clinical setting. With the actual cost of devices, the overall expense for the preventive solution is reasonable and affordable in a clinical perspective and more than justifiable if considering the long-term savings and the increased quality of life perceived by the users. The new digital services foreseen in the NHS could support the large scalability. The main issue is a strategic choice at policy making level, for an economic investment in technologies have a medium term breakeven. Private services could be set up, but a real impact could be achieved on large scale only by a governmental action at regional/national level.

2.3. Facilitating or Hindering Factors

2.3.1. Has any of these factors affected the number of users/clients/beneficiaries (more/fewer) reached by the project compared to what was originally planned (or environmental or resilience to climate change and natural disasters impacts)?

[Coordination with third parties, Ease of transferring the solution to a different context (different city/country/etc.), Proposed solution responds to key/persistent/priority problem, Evidence of advantages of the solution for partners/allies/key market players, Market size that could be reached]

Others, Which?

Facilitating: Proposed solution responds to key/persistent/priority problem (Medical Device availability) Evidence of advantages of the solution for partners/allies/key market players (Social, clinical and organizational, leveraging on NESTORE experience) Market size that could be reached (Aging population societal challenge) Hindering: Coordination with third parties (difficult in reaching out the producers/suppliers) Ease of transferring the solution to a different context (different city/country/etc.) (devices not available worldwide)

2.4. Scalability Scope

2.4.1. How feasible it is that the organization could reach a number of users/clients/beneficiaries 5, 10 or 100 times the number originally planned in the project design, five years after the project ends?

[It could reach more than 100 times the number of users/clients/beneficiaries originally planned in the project design five years after its closure.]

2.4.2. How likely is the organization to reach that number five years after the project ends?

[Probable (more than 50% but less than 90% chance)]

2.5. IDB Group business relation

2.5.1. Has a business relation been created with another part of the IDB Group different from IDB Lab?

non applicable

2.6. Replicability Partners

2.6.1. Are you aware of any other entity at a national or international level that has copied / replicated completely or partially the business model of the project? Did you collaborate in the process with that entity?

[No]

2.7. Replicability Scope

2.7.1. Number of users / clients / beneficiaries reached by entities that have fully or partially replicated / copied the business model / products / services implemented with the support of the project?

[N/A]

2.7.2. Have you experienced, in the last year, significant expansion (50% or more) of the reach of the business model of the project beyond what was expected in the original project design (due to increasing of the organizational size, operational scope or geographic spread)?

[No]

2.7.3. Number of users / clients / beneficiaries reached as of the end of the year?

[N/A]

2.8. Sustainability

2.8.1. How do you think the project will continue once the IDB Lab financing ends? Examples: it has identified external financing sources to continue operating, it has reached the breakeven point through the sale of services and products, it has obtained the support of public institutions or the private sector, it will adjust the business model to remain viable (via franchises, etc.)

The project could move further after a bottom-up push towards continuity (patient could strongly ask for the continuation of the monitoring/coaching service). A A2B2C model (Public Admin 2 Hospital 2 Patient) business model can be foreseen.

3. Implementation

3.1. Facilitating or Hindering Factors

3.1.1. What specific aspects have (positively or negatively) affected the implementation of the project the most?

[Coordination with third parties, Advantages or disadvantages of technology]

Others, Which?

Hindering Coordination with third parties (difficult in reaching out the producers/suppliers)
Advantages or disadvantages of technology (data cloud infrastructure availability) Leveraging on very new innovative technology

3.1.2. Explain in detail how these factors that you identified have made the implementation of the project easier or more difficult

The availability of the device in the selected area/market slowed down the testing phase and the final decision about the technology to be adopted

3.2. Novel Technologies Factors

3.2.1. If the project makes use of novel technologies or methodologies, what factors have facilitated or hindered the implementation of the technological solution initially proposed by the project?

[Previous experience of the executing agency / client with the technology, Availability of suppliers / consultants, Data availability, Interest from other companies / government in the technology, Telecommunications network coverage]

Others, Which?

Facilitating: Previous experience of the executing agency / client with the technology (leveraging on NESTORE project) Interest from other companies / government in the technology (aging population societal challenge) Hindering: Availability of suppliers / consultants (difficult in reaching out the producers/suppliers) Data availability (data cloud infrastructure availability) Telecommunications network coverage (to reach out the potential beneficiaries)

4. Development Outcomes (Quantitative)

4.0 Has your project contributed to any of the following indicators in the last 12 months (last year)?

[4.6. Not contribute]

5. Development Outcomes (Qualitative)

5.1. Target population identified in the design

Is the target population that was identified in the design being reached by the project? Select the target population actually reached by the project that was originally identified in the project design.

[Senior adults]

5.2. Population served NOT identified in the project design

5.2.1. Select if there are Groups that were NOT originally identified in the project design but are being reached in the execution phase?

[None]

5.3. Facilitating or Hindering Factors

5.3.1. Factors that have affected (facilitated or hindered) reaching these groups, or the resilience/environmental impacts, in the numbers/dimensions that the project had originally planned.

[Other]

Others

Availability of the technology on the market

5.3.2. Explain in detail how these factors that you have identified have affected the ability of the project to reach the groups (achieve resilience/environmental impacts) in the numbers/dimensions originally expected

Non applicable at this stage

INDICATORS



 Overachieved  Achieved  Pending  In process  Overdue

C1: Component 1: Needs and readiness analysis (Month 1 – Month 3)

Weight: 20%

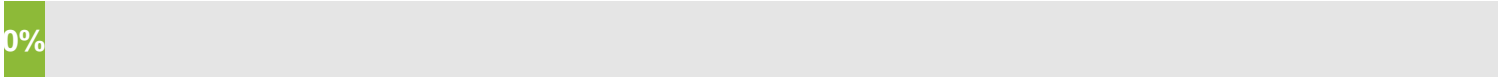
Qualification: Satisfactory



0%			
Indicators	Planned	Achieved	Status

I1	Number of reports completed on Welfare systems in the region to verify the hypothesis	1 (2022-12-22)	
I2	Number of clinical protocols completed	1 (2023-03-22)	

C2: Component 2: Small-scale pilot and preparation of an extended action plan

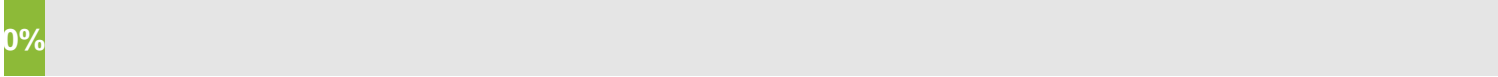
Weight: 60% Qualification: Satisfactory




Indicators	Planned	Achieved	Status
I1	Number of solutions that are piloted	1 (2023-03-22)	
I2	Number of participants with more than 60 years old that were recruited to participate in the small-scale pilots*	10 (2023-05-22)	

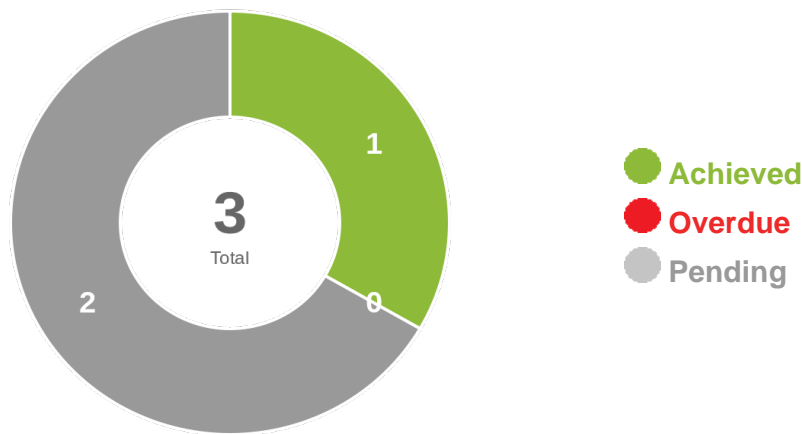
C3: Component 3: Dissemination and coordination (Month 1 - Month 12)



Weight: 20% Qualification: Satisfactory



Indicators	Planned	Achieved	Status
I1	Number of members of the Silver Economy online community	100 (2023-09-22)	

MILESTONES



Milestones	Achieved Value	Due Date	Achieved Date	Status
*Condiciones Previas / Prior Conditions	1	2023-03-22	2022-12-21	
*Small scale pilot ready for execution	1	2023-03-20		
*End of Piloting	1	2023-07-20		