Selection process #::::::::

TERMS OF REFERENCE

Review of practical experiences to inform the design of digital interventions to address NCDs in LAC

Country: Regional
[[Project Number]

Funding TC: RG-T4600

[Web link to approved document]

TC Name: Evidence on digital health interventions to tackle non-communicable diseases

1. Background and Justification

1.1. Non-communicable diseases (NCDs) represent a key health challenge in the region. More than three-quarters (77%) of the total disease burden in Latin America and the Caribbean (LAC) is due to NCDs. About one-third (35%) of deaths in the region could have been prevented with access to quality and timely healthcare. Moreover, four out of five of these preventable deaths are attributed to NCDs, with cardiovascular diseases and diabetes playing a significant role among these (GBD Collaborative Network, 2020). The economic cost of NCD is substantial due to high health expenditures, foregone earnings and premature mortality and disability. The WHO estimates that between 2011 and 2031, NCDs will cost the world economy US$30 trillion (Bloom et al, 2011). In LAC, cardiovascular diseases and diabetes alone could cause between 2015 and 2030 an economic loss equivalent to US$2170 in GDP per capita in 2015.

1.2. While effective treatment exists to prevent and manage NCDs, there are substantial gaps in detecting, preventing and treating these conditions in LAC. For example, about a third of cases of diabetes and hypertension are undiagnosed and only about half of persons with hypertension receive treatment. More importantly, between 50 and 70 percent of persons with these conditions are not effectively managed, as their blood pressure or glucose levels are not under control (PAHO, 2022; NCD-RisC, 2021).

1.3. Health systems in the region face substantial challenges to address these gaps including limited fiscal space, insufficient human resources, heavy reliance on costly specialist care, lack of continuity of care, limited tools to promote self-care and self-management, and inequitable access to health care services. These challenges were heightened by the pandemic, as essential health services were severely disrupted, disproportionally affecting patients with NCDs and the poorest, underscoring the need to make service delivery more adaptable and resilient (Bernal et al 2023).

1.4. There is untapped potential of digital health interventions for NCDs. Such interventions can help address key challenges posed by NCDs and improve the quality, efficiency, and equity of healthcare (Bagolle et al. 2022; Bernal et al 2022). The reach and equity of health services can be expanded with the use of telemedicine to reduce geographical barriers and to provide care for patients with mobility issues. Digital applications can support patients seeking to address risk factors, such as lack of physical activity and

overweight, and provide tools to manage their condition such as reminders, digital coaching, education, and progress tracking. Electronic health records (EHR) can improve care coordination by facilitating information exchange among multiple providers and creating the foundations for data analytics and population health management to proactively provide health care services based on the needs and risks of patients. While the potential is large, most of the evidence on these interventions comes from higher income countries, and there is a need to adapt, implement, and test the effectiveness at scale of these solutions in the LAC context. This project seeks to provide a better understanding of how digital health solutions can be designed and adapted for the LAC context based on the literature and practical experiences.

2. Objectives

2.1. The overall goal of this project is to provide an overview of digital health interventions that could be implemented in the LAC context to perform population health management of persons with chronic conditions and to provide patient support for self-management to reduce risk factors. This overview will provide key inputs to inform the design of evidence-based digital health solutions for the LAC context.

3. Scope of Services

3.1. The consulting services will include curating an overview of digital health solutions to address NCDS that can inform the design of digital interventions in the LAC context based on literature review, interviews with experts, and review of practical experiences.

4. Key Activities

4.1. The following key activities are expected to be undertaken:

1. Conduct a literature review, expert consultation, and review of practical experiences of existing tools for population health management of persons with NCDs (like diabetes and cardiovascular disease) including tools related to risk-based screening, follow-up and complications prevention and management.

2. Perform an assessment of the data requirements for risk-based screening, follow-up, and complication prevention and management for diabetes and cardiovascular disease.

3. Conduct a literature review, expert consultation, and review of practical experiences of digital interventions for reducing risk factors for NCDs and their main functionalities and traits. The emphasis of this review is to focus on those digital interventions for self-management that have demonstrated efficacy in reducing risk factors.

4. Identify the key functionalities and traits of effective digital applications for self-management to reduce risk factors such as digital reminders, remote support by health

personnel, peer encouragement, daily information, use of wearable devices, among others.

5. Analyze, the cost, scalability and potential impact of key functionalities and traits of effective digital health interventions to address risk factors.

6. Write a technical note summarizing the findings from the work conducted.

5. Expected Outcome and Deliverables

5.1. The expected outcomes from this work are (a) a report summarizing the findings from digital health interventions for risk-based population health management; (b) a report summarizing the findings of digital health interventions for self-management in the reduction of risk factors; and (c) a technical note summarizing the results.

6. Project Schedule and Milestones

6.1. The execution period and deliverables/milestones are as specified in the below table.

Deliverable	Timeline
1. Workplan	March 2025
2. Report summarizing the findings from digital health interventions for risk-based population health management	May 2025
3. Report summarizing the findings of digital health interventions for self-management in the reduction of risk factors	July 2025
4. Technical note summarizing the findings	November 2025

7. Reporting Requirements

7.1. Project reports must be written in English or Spanish and sent in an electronic file, as required by the IDB, with evidence of progress in the activities defined in the work plan approved at the beginning of the project.

7.2. The contracted part must digitally attach all the materials (documents, instruments, databases, etc.) used or produced for the development of the consultancy.

8. Acceptance Criteria

8.1. After delivery, products will be verified by the IDB team. Suggestions will be sent back to the contracted firm who should take no longer than 15 days to deliver a modified version back to the IDB team. All final products must be approved by the IDB team.

9. Supervision and Reporting

9.1. This work will be coordinated by Pedro Bernal, Senior Health Economist (SCL/SPH), who will supervise and approve the reports and products delivered. The consulting firm should coordinate a kickoff meeting and monthly meetings to share progress and receive feedback.

10. Schedule of Payments

10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

10.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

10.3. Payment schedule:

Deliverable	% of total contract amount
1. Workplan	10%
2. Report summarizing the findings from digital health interventions for risk-based population health management	30%
3. Report summarizing the findings of digital health interventions for self-management in the reduction of risk factors	30%
5. Technical note summarizing the findings	30%

Selection process #::::::::

TERMS OF REFERENCE

Impact evaluation of digital health interventions for risk-based population health management and patient self-management for the reduction of risk factors.

Country: Regional
[[Project Number]

Funding TC: RG-T4600

[Web link to approved document]

TC Name: Evidence on digital health interventions to tackle non-communicable diseases

1. Background and Justification

1.1. Non-communicable diseases (NCDs) represent a key health challenge in the region. More than three-quarters (77%) of the total disease burden in Latin America and the Caribbean (LAC) is due to NCDs. About one-third (35%) of deaths in the region could have been prevented with access to quality and timely healthcare. Moreover, four out of five of these preventable deaths are attributed to NCDs, with cardiovascular diseases and diabetes playing a significant role among these (GBD Collaborative Network, 2020). The economic cost of NCD is substantial due to high health expenditures, foregone earnings and premature mortality and disability. The WHO estimates that between 2011 and 2031, NCDs will cost the world economy US$30 trillion (Bloom et al, 2011). In LAC, cardiovascular diseases and diabetes alone could cause between 2015 and 2030 an economic loss equivalent to US$2170 in GDP per capita in 2015.

1.2. While effective treatment exists to prevent and manage NCDs, there are substantial gaps in detecting, preventing and treating these conditions in LAC. For example, about a third of cases of diabetes and hypertension are undiagnosed and only about half of persons with hypertension receive treatment. More importantly, between 50 and 70 percent of persons with these conditions are not effectively managed, as their blood pressure or glucose levels are not under control (PAHO, 2022; NCD-RisC, 2021).

1.3. Health systems in the region face substantial challenges to address these gaps including limited fiscal space, insufficient human resources, heavy reliance on costly specialist care, lack of continuity of care, limited tools to promote self-care and self-management, and inequitable access to health care services. These challenges were heightened by the pandemic, as essential health services were severely disrupted, disproportionally affecting patients with NCDs and the poorest, underscoring the need to make service delivery more adaptable and resilient (Bernal et al 2023).

1.4. There is untapped potential of digital health interventions for NCDs. Such interventions can help address key challenges posed by NCDs and improve the quality, efficiency, and equity of healthcare (Bagolle et al. 2022; Bernal et al 2022). The reach and equity of health services can be expanded with the use of telemedicine to reduce geographical barriers and to provide care for patients with mobility issues. Digital applications can support patients seeking to address risk factors, such as lack of physical activity and

overweight, and provide tools to manage their condition such as reminders, digital coaching, education, and progress tracking. Electronic health records (EHR) can improve care coordination by facilitating information exchange among multiple providers and creating the foundations for data analytics and population health management to proactively provide health care services based on the needs and risks of patients. While the potential is large, most of the evidence on these interventions comes from higher income countries, and there is a need to adapt, implement, and test the effectiveness at scale of these solutions in the LAC context. This project seeks to generate rigorous evidence on the effectiveness of digital health interventions for risk-based population health management and self-management of patients for risk reduction to address the needs of patients with NCDs in LAC.

2. Objectives

2.1. The overall goal of this project is to conduct two impact evaluations to estimate the effect of (i) digital health interventions for risk-based population health management for NCDs on the take-up of health services, and (ii) the effect of digital health interventions to support patient self-management on the reduction of risk factors for NCDs.

3. Scope of Services

3.1. The consulting services will include designing study protocols for the impact evaluations, conducting data collection, developing key monitoring indicators of the intervention, analyzing the results of the impact evaluations, and summarizing the results of the intervention.

4. Key Activities

4.1. The following key activities are expected to be undertaken:

7. Design a study protocol to estimate the effect of digital health interventions for risk-based population health management including identification strategy, key outcomes, data sources, monitoring strategy and power calculations. The study protocol should also include any relevant indicators to assess how the intervention was implemented.
8. Analyze the data for the impact evaluation to assess the implementation and the effectiveness of digital health interventions for risk-based population health management on take-up of key services.
9. Design a study protocol of an adaptative trail to test the effect of key design traits of digital health interventions to support patient self-management for risk reduction, including identification strategy, key outcomes, data sources, monitoring strategy and power calculations. The study protocol should also include any relevant indicators to assess how the intervention was implemented.
10. Analyze the data for the impact evaluation to assess the implementation and the effectiveness of digital health interventions to support patient self-management for risk reduction.

11. Design and conduct any data collection required for the impact evaluations.
12. Write reports and academic style papers summarizing the results of the impact evaluations.

5. Expected Outcome and Deliverables

5.1. The expected outcomes for each of the two impact evaluations to be conducted are: (a) a study protocol; (b) baseline data collection report; (c) a report with the results of the impact evaluation; and (d) an academic style paper summarizing the findings of the evaluation.

6. Project Schedule and Milestones

6.1. The execution period and deliverables/milestones are as specified in the below table.

Deliverable	Timeline
1. Workplan	August 2025
A. impact evaluation of digital tools for risk-based population health management	
A1. Study protocol	December 2025
A2. Baseline data collection report	March 2026
A3. Impact evaluation report	May 2027
A4. Academic style paper	September 2027
B. impact evaluation of digital tools to support patient self-management for risk reduction	
B1. Study protocol	December 2025
B2. Baseline data collection report	March 2026
B3. Impact evaluation report	May 2027
B4. Academic style paper	September 2027

7. Reporting Requirements

7.1. Project reports must be written in English or Spanish and sent in an electronic file, as required by the IDB, with evidence of progress in the activities defined in the work plan approved at the beginning of the project.

7.2. The contracted part must digitally attach all the materials (documents, instruments, databases, etc.) used or produced for the development of the consultancy.

8. Acceptance Criteria

8.1. After delivery, products will be verified by the IDB team. Suggestions will be sent back to the contracted firm who should take no longer than 15 days to deliver a modified version back to the IDB team. All final products must be approved by the IDB team.

9. Supervision and Reporting

9.1. This work will be coordinated by Pedro Bernal, Senior Health Economist (SCL/SPH), who will supervise and approve the reports and products delivered. The consulting firm should coordinate a kickoff meeting and monthly meetings to share progress and receive feedback.

10. Schedule of Payments

10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

10.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

10.3. Payment schedule (see project schedule and milestones for the description of each deliverable

Deliverable	% of total contract amount
1. Workplan	10%
2. Deliverable A1	10%
3. Deliverable A2	15%
4. Deliverable A3	10%
5. Deliverable A4	10%
6. Deliverable B1	10%
7. Deliverable B2	15%
8. Deliverable B3	10%
9. Deliverable B4	10%

Selection process #::::::::

TERMS OF REFERENCE

Study of the quality of telehealth visits for non-communicable diseases

Country: Regional
[[Project Number]

Funding TC: RG-T4600

[Web link to approved document]

TC Name: Evidence on digital health interventions to tackle non-communicable diseases

1. Background and Justification

1.1. Non-communicable diseases (NCDs) represent a key health challenge in the region. More than three-quarters (77%) of the total disease burden in Latin America and the Caribbean (LAC) is due to NCDs. About one-third (35%) of deaths in the region could have been prevented with access to quality and timely healthcare. Moreover, four out of five of these preventable deaths are attributed to NCDs, with cardiovascular diseases and diabetes playing a significant role among these (GBD Collaborative Network, 2020). The economic cost of NCD is substantial due to high health expenditures, foregone earnings and premature mortality and disability. The WHO estimates that between 2011 and 2031, NCDs will cost the world economy US$30 trillion (Bloom et al, 2011). In LAC, cardiovascular diseases and diabetes alone could cause between 2015 and 2030 an economic loss equivalent to US$2170 in GDP per capita in 2015.

1.2. While effective treatment exists to prevent and manage NCDs, there are substantial gaps in detecting, preventing and treating these conditions in LAC. For example, about a third of cases of diabetes and hypertension are undiagnosed and only about half of persons with hypertension receive treatment. More importantly, between 50 and 70 percent of persons with these conditions are not effectively managed, as their blood pressure or glucose levels are not under control (PAHO, 2022; NCD-RisC, 2021).

1.3. Health systems in the region face substantial challenges to address these gaps including limited fiscal space, insufficient human resources, heavy reliance on costly specialist care, lack of continuity of care, limited tools to promote self-care and self-management, and inequitable access to health care services. These challenges were heightened by the pandemic, as essential health services were severely disrupted, disproportionally affecting patients with NCDs and the poorest, underscoring the need to make service delivery more adaptable and resilient (Bernal et al 2023).

1.4. There is untapped potential of digital health interventions for NCDs. Such interventions can help address key challenges posed by NCDs and improve the quality, efficiency, and equity of healthcare (Bagolle et al. 2022; Bernal et al 2022). The reach and equity of health services can be expanded with the use of telemedicine to reduce geographical barriers and to provide care for patients with mobility issues. Digital applications can support patients seeking to address risk factors, such as lack of physical activity and overweight, and provide tools to manage their condition such as reminders, digital

coaching, education, and progress tracking. Electronic health records (EHR) can improve care coordination by facilitating information exchange among multiple providers and creating the foundations for data analytics and population health management to proactively provide health care services based on the needs and risks of patients. While the potential is large, most of the evidence on these interventions comes from higher income countries, and there is a need to adapt, implement, and test the effectiveness at scale of these solutions in the LAC context.

1.5. Phone or video consultations have received an important boost during the COVID-19 pandemic, and many countries are continuing or are considering continuing to offer these services going forward. Teleconsultations are an attractive policy instrument: they could help reduce barriers to access especially for remote populations, help triage patients to reduce unnecessary hospital visits, improve the resilience of health service delivery, and may be relatively low cost compared to in-person care. However, there is currently no evidence on the quality of teleconsultations in LAC or how teleconsultations compare to in-person care, which tends to be of low quality (OECD, 2021). This project seeks to conduct an audit study of teleconsultations and in-person care to understand the quality of telemedicine for NCDs and how does it compare to in-person care.

2. Objectives

2.1. The overall goal of this project is to first conduct a review of approaches for using telehealth for NCDs and for which populations (vulnerable groups, persons with disabilities among others) with a focus in LAC and low- and middle-income countries and second to conduct an audit study to assess the quality of telehealth for persons with NCDs relative to in-person care.

3. Scope of Services

3.1. The consulting services will include curating an overview of approaches for using telehealth for NCDs and for which populations (vulnerable groups, persons with disabilities among others) based on literature review, interviews with experts, and review of practical experiences, review of approaches for using standardized patients in audit studies for NCDs in telehealth, and conduct an audit study of telehealth for NCDs to assess the quality of care relative to in-person care.

4. Key Activities

The following key activities are expected to be undertaken:

4.1. Conduct a review of approaches for using standardized patients for NCDs in telehealth.
4.2. Conduct a review of approaches for using telehealth for NCDs and for which populations (vulnerable groups, persons with disabilities among others) based on literature review, interviews with experts, and review of practical experiences.
4.3. Design of the protocol of a quality audit study to compare quality of care for patients with

NCDs in relevant dimensions identified in the review of current uses of telehealth in NCDs.

4.4. Conduct any necessary data collection for the study.

4.5. Perform the quality audit study.

4.6. Write a report and academic style paper summarizing the results.

5. Expected Outcome and Deliverables

5.1. The expected outcomes from this work are (a) review of approaches for using standardized patients for NCDs in telehealth, (b) review of approaches of using telehealth for NCDs, (c) study protocol of the quality audit study, (d) data collection, and (e) report of the results of the quality audit study.

6. Project Schedule and Milestones

6.1. The execution period and deliverables/milestones are as specified in the below table.

Deliverable	Timeline
1. Workplan	March 2025
2. Report with review of approaches for using standardized patients for NCDs in telehealth	June 2025
3. Report with review of approaches of using telehealth for NCDs	October 2025
4. Study Protocol for the quality audit study	January 2026
5. Report and academic style paper with the results of the quality study	June 2027

7. Reporting Requirements

7.1. Project reports must be written in English or Spanish and sent in an electronic file, as required by the IDB, with evidence of progress in the activities defined in the work plan approved at the beginning of the project.

7.2. The contracted part must digitally attach all the materials (documents, instruments, databases, etc.) used or produced for the development of the consultancy.

8. Acceptance Criteria

8.1. After delivery, products will be verified by the IDB team. Suggestions will be sent back to the contracted firm who should take no longer than 15 days to deliver a modified version back to the IDB team. All final products must be approved by the IDB team.

9. Supervision and Reporting

9.1. This work will be coordinated by Pedro Bernal, Senior Health Economist (SCL/SPH), who will supervise and approve the reports and products delivered. The consulting firm should coordinate a kickoff meeting and monthly meetings to share progress and receive feedback.

10. Schedule of Payments

10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

10.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

10.3. Payment schedule:

Deliverable	% of total contract amount
1. Workplan	10%
2. Report with review of approaches for using standardized patients for NCDs in telehealth	20%
3. Report with review of approaches of using telehealth for NCDs	20%
4. Study Protocol for the quality audit study	20%
5. Report and academic style paper with the results of the quality study	30%

Research assistant for evidence on digital health interventions to tackle non-communicable diseases

Location

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position

We are looking for a consultant to provide research assistance on several projects related to the knowledge agenda of the Social Protection in Health (SPH) division on the effect of digital health interventions to tackle non-communicable diseases. The consultant will provide support cleaning and analyzing administrative and survey data on health services, performing econometric analysis, performing literature reviews, monitoring and supervising several impact evaluation studies, and other research related activities.

The Social Sector (SCL) is a multidisciplinary team convinced that investing in people is the way to improve lives and overcome the development challenges in Latin America and the Caribbean. Jointly with the countries in the region, the Social Sector formulates public policy solutions to reduce poverty and improve the delivery of education, work, social protection, and health services. The objective is to advance a more productive region, with equal opportunities for men and women, and greater inclusion of the most vulnerable groups.

The Social Protection and Health Division (SPH) is tasked with the preparation and supervision of IDB operations in borrowing member countries in the areas of social protection (safety nets and transfers and services for social inclusion which include: early childhood development, youth programs, care services for dependency, among others), health (health capital investment strategies, health networks strengthening, health system financing, organization and performance, etc.) and nutrition.

What you'll do:

- Program for the assembly of analysis data sets of administrative data and survey data on use of health services.
- Perform descriptive, econometric, and statistical analysis of analysis data of administrative and survey data.
- Prepare tables, graphs and illustrations summarizing key findings for reports and papers stemming from the data analysis.
- Prepare texts, including literature reviews, interpretation of results and providing any required input for reports and academic publications.
- Provide close monitoring and supervision to impact evaluation studies to be performed in several countries.

Deliverables and Payments Timeline:

Click or tap here to enter text.

The consultant will provide 10 reports detailing the work done and the payment schedule will be based on those reports according to the following table.

Deliverable	% of total contract amount
1. Report 1	10%
2. Report 2	10%
3. Report 3	10%
4. Report 4	10%
5. Report 5	10%
6. Report 6	10%
7. Report 7	10%
8. Report 8	10%
9. Report 9	10%
10. Report 10	10%

What you'll need

- **Education:** A minimum of Bachelor degree in economics, public policy or equivalent. Master degree preferred.
- **Experience:** At least two years of relevant research assistant experience.
- **Languages:** Proficiency in English and one of the other Bank official languages (Spanish, French or Portuguese) is required.

Key skills:

- Learn continuously
- Collaborate and share knowledge
- Communicate and influence
- Innovate and try new things

Requirements:

- **Citizenship:** You are a citizen of one of our 48-member countries.
- **Consanguinity**: You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.
- **COVID-19 considerations:** the health and safety of our employees are our number one priority. As a condition of employment, IDB/IDB Invest requires all new hires to be fully vaccinated against COVID-19.

Type of contract and duration:

- **Type of contract:** Products and External Services Consultant (PEC), Retainer
- **Length of contract:** 150 days in a period of 36 months

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A **competitive compensation** package.
- A flexible way of working. You will be evaluated by deliverable.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.

About the IDB Group

The IDB Group, composed of the Inter-American Development Bank (IDB), IDB Invest, and the IDB Lab offers flexible financing solutions to its member countries to finance economic and social development through lending and grants to public and private entities in Latin America and the Caribbean.

About IDB

We work to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, we help improve health and education and advance infrastructure. Our aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today we are the leading source of development financing for Latin America and the Caribbean. We provide loans, grants, and technical assistance; and we conduct extensive research. We maintain a strong commitment to achieving measurable results and the highest standards of integrity, transparency, and accountability.

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