

ANNEX II: TERMS OF REFERENCE

Consultancy to develop online training course on the CARPHA Guidelines on the Management of Diabetes in Primary Care in the Caribbean

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1. BACKGROUND INFORMATION

1.1. Partner country

The principal beneficiaries are the twenty-six (26) CARPHA Member States: Anguilla, Antigua & Barbuda, Aruba, Bahamas, Barbados, Bermuda, Belize, Bonaire, St. Eustatius, Saba, British Virgin Islands, Cayman Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Maarten, St. Vincent & the Grenadines, Suriname, Trinidad & Tobago, and Turks & Caicos Islands.

1.2. Contracting authority

Caribbean Public Health Agency (CARPHA)

1.3. Country background

Diabetes is a non-communicable disease, and one of the leading causes of death and disability among CARPHA Member States. The non-Latin Caribbean (except Haiti) has the highest rate of raised blood glucose in the Region of the Americas and accounts for 11.9% of the population.

Adherence to treatment for diabetes throughout the Region is poor and is associated with many complications such as, cardiovascular disease, chronic renal failure, amputations, and blindness. Health-care costs for diabetes and its complications can quickly drain household resources, driving families into poverty. The exorbitant costs of diabetes including often lengthy and expensive treatment and loss of breadwinners, are forcing millions of people into poverty annually, stifling development.

However, at least 80% of Type 2 Diabetes can be prevented through adoption of healthy lifestyles practices such as not smoking, being physically active, eating a healthy diet and maintaining a healthy body weight. For persons living with diabetes, it can be effectively controlled with drug therapy and lifestyle management, such as nutrition and exercise prescription.

1.4. Current situation in the sector

Member States (MS) have committed to reduce premature mortality due to diabetes by 25% by 2025 (a World Health Organisation Global NCD target) and by a third by 2030 (Sustainable Development Goal); and halt the rise in obesity, a major risk factor for diabetes by 2025; however, Member States are not on track to meeting these targets. In 2007, the CARICOM Heads of Government *Declaration of Port of Spain: Uniting to stop the epidemic of NCDs* committed to a target of 80% of people living with NCDs receiving quality care and having access to preventive education based on regional guidelines.

Improving effectiveness and quality of care through standardising evidenced-based clinical guidelines is critical for ensuring that patients with diabetes have enhanced chances for experiencing the desired outcomes of treatment and care. In 2019, CARPHA launched an updated version of its guidelines for diabetes management, the *CARPHA Guidelines on the Management of Diabetes in Primary Care in the Caribbean*. This newest version of the CARPHA guidelines has been extensively modified from its previous format and uses a modular approach which includes **five modules**:

Module 1: EVIDENCE-BASED TREATMENT PROTOCOLS

Targets primary care physicians, nurse-practitioners and any other health care provider who is directly involved in the medical management of diabetes. This module aims to give updated algorithms on care, incorporating the most recent recommendations in the care of diabetes.

Module 2: GUIDING LIFESTYLE CHANGES

Intended for all persons on the health team, who provide care and lifestyle-counselling to persons living with diabetes (PWD). It is specifically geared toward physicians, dietitians, nutritionists, nurses, community aides and home-help. This module covers all aspects of lifestyle management that directly impact target outcomes, including diet, physical activity, weight management and mental health are addressed in this module.

Module 3: GUIDANCE FOR PERSONS WITH DIABETES (PWD) AND CAREGIVERS

Aims to inform to persons living with diabetes (PWD) and all persons involved in their care, with or without a medical or health care background. This module should be particularly useful to community nurses, home-help, community aides, and other community caregivers, especially those involved in caring for PWD in their homes and can serve as a directory of topics relevant to caregivers. It addresses topics such as foot care, self-monitoring of blood glucose, identification and management of low blood glucose (hypoglycaemia) and high blood glucose (hyperglycaemia).

Module 4: ACCESS TO ESSENTIAL MEDICATION

Targets physicians, nurses, pharmacists and personnel involved in ensuring the efficiency of health system procurement mechanisms. It provides information on the various classes of medicine available for care of diabetes, issues related to their availability, as well as the risks, benefits and cautions that should be considered in their use.

The **target** users may vary based on context, existing health systems and national priorities in CARPHA Member States, and recommendations made in each of the modules may require adaptation for implementation at country level. Ultimately, the revised guidelines seek to support the efforts of Ministries of Health to strengthen and standardise the management of diabetes in primary care and improve outcomes in care of diabetes regionally.

1.5. Related programmes and other donor activities

This activity and related work are being undertaken by the CARPHA through a project funded by the Agence Française de Développement (AFD, or French Development Agency in English), to support the promotion, dissemination and implementation of the *CARPHA Guidelines on the Management of Diabetes in Primary Care in the Caribbean*.

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1. Overall objective

The overall objective of the project of which this contract will be a part is:

To improve Caribbean public health programmes that influence morbidity and mortality and improve the resilience of populations facing climate changes.

The specific objective of the relevant project component is:

To implement evidence based clinical guidelines for diabetes to support implementation of the chronic care model.

2.2. Purpose

The purpose of this contract is as follows:

*To develop a training course on the **CARPHA Guidelines on the Management of Diabetes in Primary Care** for the relevant health care professionals in CARPHA Member States using an online self-paced learning modality and implemented on the CARPHA Moodle-based Learning Management System (LMS).*

2.3. Results to be achieved by the contractor

Result 1: Inception Report, including a detailed Work Plan, timelines for the proposed project activities and the methodology for the activities, developed and submitted for the approval from the Project Manager.

Result 2: Curriculum and content for the online self-paced learning five (5) modules on the Guidelines on the Management of Diabetes in Primary Care in the Caribbean developed.

Result 3: Alpha Level Module of online course developed and demonstrated and Interim report submitted for the approval of the Project Manager.

Result 4: Beta Modules of the online course validated and Report on findings including itemized list of revisions submitted for the approval of the Project Manager.

Result 5: Online course updated based on approved revisions following the validation of Beta Modules and submitted for approval.

Result 6: Approved online course on the CARPHA Learning Management System.

Result 7: Draft Final Report submitted in accordance with the reporting requirements in section 7 of these Terms of Reference.

Result 8: Final Report submitted and approved in accordance with the reporting requirements in section 7 of these Terms of Reference.

3. ASSUMPTIONS & RISKS

3.1. Assumptions underlying the project

The assumptions associated with this contract are:

- Availability of experts with the necessary technical expertise to carry out the project.

3.2. Risks

The risks associated with this contract are:

- Unavailability of experts to provide input into content
- COVID-19 Pandemic or other natural disaster delays

4. SCOPE OF THE WORK

4.1. General

4.1.1. Description of the assignment

- (a) The Contractor shall complete all tasks necessary to develop an online self-paced course on the *CARPHA Guidelines on the Management of Diabetes in Primary Care in the Caribbean* including:
 - Instructionally design modules based on existing guideline content and interviews with the CAPRHA subject matter expert(s);
 - Designing and developing a functional prototype of the online learning modules for review and validation.
 - Completing development of the self-paced and interactive learning modules;
 - Integrating the learning modules into the CARPHA Moodle online learning platform
- (b) All work must be completed as per the CARPHA's technical specifications, including compliance with the specified platform (Moodle).
- (c) Content should be designed and developed in a manner to support use in limited bandwidth settings. Video and audio elements should be used sparingly, based on sound instructional need, to facilitate access to learning content by Member States.
- (d) Development must be done in such a way as to fully integrate with the learning management system. This integration should include setting completion requirements, tracking use, maintaining progress, etc. The LMS is SCORM 1.2 compliant and learning content must be delivered in a SCORM 1.2 package. SCORM-compliant content must include a fully structured manifest file identifying all assets used in the learning content.
- (e) While not legally obligated to do so, CARPHA has issued guidance that all web-accessible products should conform to the W3C Priority 1 Web Content Accessibility Guidelines. All learning products must be developed with these guidelines in mind. Priority concerns are screen readability and keyboard navigation, but additional requirements may arise depending on the target audience. Developers are asked to make every effort to accommodate these guidelines.
- (f) Any requirements that could have a significant impact on the project costs and/or timelines should be identified in the response to this TOR and should be clearly understood by all parties prior to beginning development. Questions should be addressed to the Project Manager and Procurement Manager.
- (g) As CARPHA is always interested in delivering products of the highest quality, the vendor is requested to present any suggestions or comments on how to improve the course design as well as the presentation of content through dynamic tools, interactive concept maps, functionality and/or aesthetic touches.
- (h) CARPHA will own copyright for all materials developed or included in the online learning programme. All source materials for the developed products must be delivered to the project sponsor upon completion of the project.

4.1.2 The immediate project work-plan requirements are as follows:

- a) Provide a primary point of contact for this project and, if different, a point of contact to respond to technical and instructional design issues as they arise.
- b) Work may not start until the CARPHA contract has been issued and signed.
- c) Within 5 business days of receipt of the learning module content, the vendor should be prepared to present the CARPHA with any questions about the content or requirements necessary to ensure successful development.
- d) The vendor should establish an online project management page where CARPHA may monitor progress and view work under development.

- e) Within 10 business days of from the submission of inception report, the vendor should be prepared to hold a project status meeting to allow CARPHA to assess their initial progress and to make any corrections necessary to allow for further successful development.
- f) The vendor should designate a project representative to attend weekly progress meetings with CARPHA through the period covered by this TOR.
- g) The vendor should meet all contractually obligated communication requirements as outlined in their contract with CARPHA.
- h) Technical corrections required due to vendor inaccuracy or programming miscalculation will be the responsibility of the vendor.

4.1.2. Geographical area to be covered

CARPHA Member States

4.1.3. Target groups

Health professionals of CARPHA Member States, particularly medical practitioners, nurses, dieticians /nutritionists, pharmacists and other health professionals.

4.2. Specific work

Result 1: Inception Report, including a detailed Work Plan, timelines for the proposed project activities and the methodology for the activities, developed and submitted for the approval from the Project Manager.

- 1.1. Engage in initial briefings with the relevant CARPHA personnel to discuss the scope of the work to be undertaken, the approach and any other issues pertaining to the Project upon the commencement of the Consultancy.
- 1.2. Prepare and submit for the approval of the Project Manager, an Inception Report which includes the timelines for the specific project activities and the methodology for the implementation of the activities, risks identified as well as strategies to mitigate these risks. The report should also include the following technical details based on the specific work as defined in Section 4.1.

Result 2: Curriculum and content for the online course on the Guidelines on the Management of Diabetes in Primary Care in the Caribbean developed.

- 2.1 Conduct a desk review of similar initiatives regionally and internationally, and consider any applicable lessons learnt.
- 2.2 Conduct content analysis including a detailed review of the five modules of the Guidelines on the Management of Diabetes in Primary Care in the Caribbean.
- 2.3 Conduct target audience analysis to identify:
 - What are the most appropriate learning methods for delivering a course online?
 - How can you ensure that learning objectives are met through online methods?
 - How do target audience prefer to learn?
- 2.4 Work with the CARPHA project team to understand existing content and to instructionally design the content into storyboards to meet the agreed learning objectives for the five modules of the *CARPHA Guidelines on the Management of Diabetes in Primary Care in the Caribbean*. Collaborate with CARPHA subject matter experts to manage content reviews.

2.5 Each module of the training is expected to take no more than 240 minutes to complete, which should be further broken down into topics of no more than 30 minutes each. It is expected that the entire Course Content will be designed in keeping with the Guidelines modular structure. The estimated contact time for each module is:

- Module 1: 240 mins
- Module 2: 240 mins
- Module 3: 120 mins
- Module 4: 180 mins
- Module 5: 180 mins

2.5.1 Training should also direct the learners to the Links for additional reading resources.

2.5.2 A case study with closed-ended questions will be part of the overall training module.

2.5.3 Assessment questions “check-for-understanding” should be embedded in each module.

2.5.4 The Contractor should be aware of the culture contexts of the learners.

2.5.5 Images and references should be culturally appropriate.

Result 3: Alpha Level Module of online course developed and demonstrated and Interim report submitted for the approval of the Project Manager

3.1 In consultation with CARPHA subject matter experts, the Contractor should present three (3) distinct sample user interface designs for the module(s), each to include an example of a welcome/main menu screen and a page of sample content. These designs should include:

- o Color palettes
- o Header and footer sections
- o Navigational and menu buttons
- o Follow CARPHA OLC branding guidelines.

CARPHA will work with the Contractor to refine the designs and select a final interface.

3.2 Demonstrate Alpha Level Modules to Project team

3.3 Create and provide Project Team with an itemized list of revisions based on the Review

3.4 Update online training module based on feedback from Project Team

3.5 Prepare Interim report on process to include all the steps in development up to post review and demonstration of Alpha Level Module.

Result 4: Beta Modules of the online course validated and Report on findings including itemized list of revisions submitted for the approval of the Project Manager.

4.1 Validate the selected design in collaboration with CARPHA project team, including but not limited to:

- o Overall design plan and architecture.
- o Consistency in look-and-feel.
- o Common and clear navigation strategy.
- o Interactive exercises.

- Required visuals – flow charts/decision trees/sketches/interactive image maps/videos, etc.
- 4.2 Create and provide Project Team with an itemized list of approved revisions based on the validation and documentation of the validation process steps.

Result 5 Online course updated based on approved revisions following the validation of Beta Modules and submitted for approval.

- 5.1 Update online learning interactive course-based on itemised list of approved revisions.
- 5.2 Demonstrate updated system to Project team and other stakeholders and incorporate final agreed changes.
- 5.3 Provide Project team with a step-by-step documentation of the changes made.

Result 6: Approved online course on the CARPHA Learning Management System.

- 6.1 Final demonstration of online learning platform for CARPHA Project team approval.
- 6.2 Provide detailed curriculum content and user manual for the online platform.

Result 7: Draft Final Report submitted in accordance with the reporting requirements in section 7 of these Terms of Reference.

Result 8: Final Report submitted for approval in accordance with the reporting requirements in section 7 of these Terms of Reference

4.3. Project management

4.3.1. Responsible body

The Surveillance, Disease Prevention and Control Division of CARPHA will be responsible for the management and coordination of the Project.

4.3.2. Management structure

Project management organisation will consist of the following structures:

- The Project Manager will be the Head, Chronic Disease and Injury Department, supported by the Manager, Information Technology. The Project Manager will have operational oversight for the consultancy and will also be responsible for the day-to-day supervision of project activities. They will serve as the technical lead and will provide technical advice as well as comments on the deliverables of the Contractor.
- The CARPHA Executive Management Team, led by the Executive Director, will retain strategic oversight and direction of the consultancy. They shall be responsible for the final decisions on the deliverables of the Contractor. They may consult with the CARPHA Executive Board and the international development partner, AFD, prior to decision-making.
- Key CARPHA personnel, including but not limited to the Senior Technical Officer, NCDs, the Senior Technical Officer, Nutrition, FELTP Coordinator and the Programme Coordinator, will be consulted from time to time, and may review reports and deliverables of the Contractor and provide recommendations to the Project Manager.

4.3.3. Facilities to be provided by the contracting authority and/or other parties

CARPHA will facilitate coordination, logistics and project administrative and contract administrative support. More specifically, CARPHA shall:

- i. Introduce the Contractor to the Project Management team and relevant Technical Officers.
- ii. Provide the Contractor with the relevant content and specifications required to complete the development of the course content and online course.
- iii. Review and approve content for online course.
- iv. Review of the Alpha Level Module, the Beta Level Module and approve final model.
- v. Assume responsibility for all the logistical and administrative arrangements for the demonstration of the course versions.

5. LOGISTICS AND TIMING

5.1. Location

The operational base for the project is the Port of Spain, Trinidad & Tobago campus of CARPHA. However, the Contractor will not be required to travel to CARPHA to execute the project.

5.2. Start date & period of implementation of tasks

The intended start date is **August 2021** and the period of implementation of the contract is an estimated 5 months from this date. The proposed timeline for deliverables below may be open to discussion based on identified risks and challenges, with the agreement of all relevant parties.

6. REQUIREMENTS

6.1. Staff

Note that civil servants and other staff of the public administration of the partner country, or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

6.1.1. Key experts

All experts who have a crucial role in implementing the contract are referred to as key experts. Key experts must submit CVs, a signed *Statement of Integrity, Eligibility and Social and Environmental Responsibility* (as required by CARPHA's funding partner, AFD).

The profile of the key expert for this contract is as follows:

Key expert 1: Team leader – Instructional Design

Qualifications and skills

Must possess at a minimum a Master's degree in Instructional Design or equivalent.

General professional experience

- (a) At least five (5) years' work experience in the healthcare industry or in tertiary education.
- (b) At least three (3) years' in experience in instructional design and development, adult learning theory, technical writing.
- (c) At least three (3) years of experience conducting target audience analysis.
- (d) Must have excellent oral and written communication skills.
- (e) Analytic and conceptual ability.

- (f) Ability to work independently and remotely, as well as in a team environment
- (g) Strong project management ability and excellent communication skills

Specific professional experience

- (a) At least five (5) years' work experience in designing training for online clinical training or similar course for health professionals.
- (b) Demonstrated experience producing high-quality instructional materials in fast-paced, deadline-oriented environment.
- (c) Experience working with and designing and developing for eLearning Management Systems (LMS), including SCORM packaging, testing and uploading courses.
- (d) Demonstrated experience and working knowledge of common e-Learning development and performance support software including Articulate Storyline, Adobe Captivate, Articulate Studio, Articulate Storyline, Moodle, Flash, HTML/Javascript, SurveyMonkey or similar technology.
- (e) Experience developing online learning in low-bandwidth environments and have knowledge of delivering online learning in developing countries, particularly in the Caribbean Region.

Key expert 2: - Content Design

Qualifications and skills

- Must possess at a minimum an advanced degree MD or MBBS.
- Master degree such as MPH, MEd, or relevant field, will be an asset.

General professional experience

- (a) At least five (5) years' clinical experience preferably in the Caribbean region.
- (b) At least five (5) years' undergraduate and/or postgraduate teaching experience.
- (c) Must have excellent oral and written communication skills

Specific

- (a) Minimum of 3+ years of experience in the design and development of continuing medical or clinical education activities for healthcare professionals, preferably including technology-enabled online learning.
- (b) Specialist training and qualification in Internal Medicine or Family Medicine and diabetes.
- (c) Awareness of public health issues related to the management of diabetes in the Caribbean along with the socio-cultural contexts in Caribbean states and territories will be an asset

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

6.1.2. Other experts, support staff & backstopping

CVs for experts other than the key experts should not be submitted in the tender but the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles. The

Contractor shall select and hire other experts as required according to the needs. The selection procedures used by the Contractor to select these other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience.

The costs for backstopping and support staff, as needed, are considered to be included in the tenderer's financial offer.

6.2. Office accommodation

Office accommodation and equipment for each expert working on the contract is to be provided by the Contractor.

6.3. Facilities to be provided by the contractor

The Contractor shall ensure that experts are adequately supported and equipped. In particular there must be sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion. The contractor is responsible for obtaining all supplies needed to complete the project.

The Contractor shall comply with, and ensure that any subcontractor complies with, international environmental and labour standards, consistent with applicable law and regulations in the country of implementation of the contract, including fundamental conventions of the International Labour Organisation (ILO) and international environmental treaties. (From AFD Financing Agreement)

6.4. Equipment

No equipment is to be purchased on behalf of the contracting authority / partner country as part of this service contract or transferred to the contracting authority / partner country at the end of this contract. Any equipment related to this contract which is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

7. REPORTS

7.1. Reporting requirements

The contractor will submit the following reports in English in one Microsoft Word and one pdf version:

- **Inception Report** of maximum 12 pages to be produced after **two (2) weeks** from the start of implementation. In the report the contractor shall describe e.g. initial findings, progress in collecting data, any difficulties encountered or expected in addition to the work programme and staff travel. The contractor should proceed with his/her work unless the contracting authority sends comments on the inception report.

The contractor should proceed with his/her work unless the contracting authority sends comments on the inception report.

- **Interim Report** of maximum 6 pages to be submitted at **periodic intervals of thirty (30) days or at key milestones (as per the agreed workplan)** following the submission of the Inception report during the design and development stage. In the report, the Contractor shall describe progress made in the development of the content and the online learning course and, following a detailed demonstration and visual explanation of the products to the Contracting Authority, describe the modifications to be made based on the feedback communicated by the Project Manager, as well as progress made in making the modifications and plans to complete the modifications.

- **Draft final report** of maximum 12 pages (main text, excluding annexes). This report shall be submitted no later than **one (1) month** before the end of the period of implementation of tasks. The report shall be a comprehensive report detailing all work conducted including requested modifications, the findings of the desk review and other relevant research, the challenges encountered, and actions taken to address challenges
- **Final report** with the same specifications as the draft final report, incorporating any comments received from the parties on the draft report. The deadline for sending the final report is **fifteen (15) working days** after receipt of comments on the draft final report. The report shall contain an indicative description of the expected timelines and costs for maintenance of functionality of the online course for the following 24 months. The final report must be provided along with the corresponding invoice and application technical documentation. The detailed analyses underpinning the recommendations will be presented in annexes to the main report. The final report must be provided along with the corresponding invoice.

7.2. Submission and approval of reports

The reports and deliverables referred to above must be submitted to the Project Manager identified in the contract. The project manager is responsible for communicating approval status to the Contractor.

8. MONITORING AND EVALUATION

8.1. Definition of indicators

- Approved version of online self-paced learning platform for the CARPHA Diabetes Clinical Guidelines on Moodle platforms; and,
- Contractor is in compliance with the schedule for the submission of reports and deliverables as outlined in Section 7.1

8.2. Special requirements

There are no special requirements.