

## TERMS OF REFERENCE

**Project Title: Procurement of Consulting Services for the Conduct of Economic Evaluation (EE) for Rapid-acting Insulin Analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., neutral protamine Hagedorn (NPH) or long-acting insulins (LAIs))**

**Type of Service:** Negotiated Procurement (Agency-to-Agency or Scientific Services)

**Funding Source:** GAA - Health Technology Assessment

### I. Background

Pursuant to the Universal Health Care (UHC) Act, all health technologies that the government will implement and cover shall undergo health technology assessment (HTA). This aims to ensure the rational utilization of various health technologies that will be funded by the government.

In this regard, a collaborative approach in HTA through the commissioning of independent academic and research teams via the HTA Research Network as stipulated in Administrative Order 2020-0041 will streamline the work on evidence reviews, and accelerate the delivery of much-needed advice by decision-makers and health policy makers.

According to the HTA Methods Guide (MG), health technologies which are superior compared to the comparator shall proceed to economic assessment which consist of the Cost Effectiveness Analysis (CEA), Budget Impact Analysis (BIA) and Household Financial Impact (HFI) analysis. Meanwhile, health technologies which are non-inferior to its comparator will also undergo BIA and HFI analysis, but the economic evaluation method will be Cost Minimization Analysis (CMA) .

This project is therefore being undertaken to facilitate the conduct of an economic assessment that will generate evidence that will form part of the HTA of **Rapid-acting Insulin Analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., NPH or LAIs)**. This is coming from a previous clinical assessment undertaken showing superior clinical benefit of RAAs compared with regular insulin, hence proceeding to economic assessment.

This specific Terms of Reference (TOR) is for the contracting of external assessment of the economic assessment of the above mentioned topic. The external assessment group (EAG) to be selected shall conduct the economic assessment based on the guidelines stated in this TOR which is based on the Philippine HTA Methods Guides.

## II. Objectives

### A. General Objective

To conduct the economic assessment of **rapid-acting insulin analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., NPH or LAIs)**, that will be used by the HTA Council in developing its recommendation on coverage decision for DOH and PhilHealth

### B. Specific Objectives

Specific Objective	Activity	Outputs
To analyze the value for money of <b>rapid-acting insulin analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., NPH or LAIs)</b>	Cost-effectiveness/ Cost utility analysis (CUA)	Economic Assessment Reports ( <i>Midterm Report; Initial Economic Assessment Report; Final Economic Assessment Report</i> )  Presentation/s to the HTA Council
To analyze the budget impact of <b>rapid-acting insulin analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., NPH or LAIs)</b>	Budget impact analysis	
To analyze the household financial impact of <b>rapid-acting insulin analogs (insulin aspart, insulin lispro, insulin glulisine) compared with regular insulin among Type 1 Diabetes Mellitus (T1DM) patients on basal insulins (i.e., NPH or LAIs)</b>	Cost of illness study	

### III. Scope of Work

1. Implement the research project as per the developed and approved (with technical and ethical clearances, if applicable) research proposals;
2. Conduct necessary literature review and expert consultations on the economic evaluation modelling (choice of model and assumptions; input parameters (e.g., effectiveness/efficacy of RAAs versus Regular Human Insulins (RHIs) in terms of nocturnal hypoglycemia).
3. Submit the outputs of the project according to the prescribed timelines below and following the forms or templates as prescribed in this TOR incorporating the HTA Process Guide and Methods Guide

Phase	Output(s)	Timeline
<b>Pre-implementation</b>	<ol style="list-style-type: none"> <li>1. Pre-implementation meeting before inception report submission</li> <li>2. Inception report which will include the following:               <ul style="list-style-type: none"> <li>- Initial scoping of existing economic evaluations</li> <li>- Methodological Plan (based on the findings of the initial scoping of existing economic evaluations)</li> <li>- Detailed budget proposal</li> <li>- Detailed and Feasible Work Plan</li> </ul> </li> </ol>	<p><b><u>Month 1:</u></b>  <i>Within 5 working days after signing of the Memorandum of Agreement</i></p> <p><i>Within 5 working days after the pre-implementation meeting</i></p>
<b>Economic Assessment (Initial phase)</b>	<p>Midterm Economic Assessment Report including:</p> <ul style="list-style-type: none"> <li>- Consulted model to be used for the economic evaluation and BIA</li> <li>- Consulted input parameters</li> </ul>	<p><b><u>Months 2 to 3:</u></b>  <i>Within 40 working days after inception report approval</i></p>

<p><b>Economic Assessment (Finalization phase)</b></p>	<p>1. Initial Final Report prior to the presentation meetings</p> <p>2. Meetings to present findings:</p> <ul style="list-style-type: none"> <li>- EAG presentation of findings to the HTAC Subcommittee</li>   <li>- HTAC Subcommittee Presentation to the Core Committee where the EAG can be invited as resource persons</li> </ul>	<p><b>Months 4 to 7:</b>  <i>Within 6 months after the approval of the inception report</i></p> <p><i>Note to HTAC: Following the current HTA Methods Guide, conducting CEA/ CUA may range from 6 to 10 months depending on the need for primary data collection. The duration set in this TOR assumes that primary data collection might not be needed or in case it is needed, the EAG can do it in a faster manner since they are supposedly dedicated for this project.</i></p> <p><b>Month 8:</b>  <i>Within 10 working days after the HTA Philippines sent the comments on the initial Final Report</i></p> <p><i>Note: There may be more than one EAG presentation to the HTAC Subcommittee, depending on whether the comments are addressed by the EAG. There may be comments at the Subcommittee-level that will need revisions in the assessment report, in preparation of their presentation to the Core level</i></p> <p><b>Month 9:</b>  <i>Within 10 working days after the HTAC Subcommittee generates its recommendation based on the assessment</i></p>
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	3. Final Economic Assessment Report	<b>Month 9:</b> <i>Within 5 working days after the HTAC Core Committee finalizes its recommendation after the appeals period/ stakeholder consultation of the recommendation</i>
Closing of the project	Final Financial Report	<b>Month 10:</b> <i>Within 20 working days after the release of the last tranche</i>

*Note: Timelines may vary as all the outputs are subject to review of the HTA Philippines which may require revisions in order to comply with the HTA Methods Guides.*

4. Provide regular updates to the HTA Division following the prescribed timelines on the status of the assessment
5. Submit the final HTAC-approved technical report one month before end of project and final financial report one month after end of the project
6. Communicate results through reports and oral presentations to the HTA Council and Division;
7. By the end of the contract, ensure submission of all deliverables according to the specifications indicated in Section VI.B.

#### **IV. Expected Outputs or Deliverables**

- Inception report
  - Scoping of existing economic evaluation and available relevant data (e.g., QALY data)
  - For the proposed methodology, refer to the PH HTA MG 2nd Ed ([page 33, Chapter 2, Section 2.2.4.2.1.1.](#)) for the detailed guidance on the reference case and methods:

Economic assessment for HTA comprise of:

- Economic evaluation (EE)
  - *In the HTA MG, Cost Minimization Analysis (CMA) is applied for health technologies which will show equivalent or not significantly different (non-inferior) clinical outcomes vs the comparator; while Cost-Effectiveness Analysis (CEA) shall be applied for HTs that will show significant added benefits (superior) in the review of clinical efficacy and safety, as appraised by the HTA Council and Division. Based on the clinical assessment for this topic, Rapid-acting Insulin Analogs (RAAs) showed*

*superior efficacy/ effectiveness compared to regular insulin for T1DM patients on on basal insulins (i.e., NPH or LAIs) hence, the recommended methodology would be CEA/CUA.*

- *The specific approach, whether to adopt, adapt of perform a de novo economic evaluation shall be based on the findings of the scoping of existing economic evaluations*
- 5-year Budget Impact analysis (BIA)
- Household financial impact (HFI) analysis
- Midterm report:
  - EE and BIA: Present the model to be used for the economic modelling, including the input parameters which had undergone stakeholder consultation
  - HFI analysis: Present stakeholder-consulted cost items and cost values to be included in the analysis
- Initial Economic Assessment Report
  - Refer to the HTA MG [Annex 11](#) for the outline of reports for EA, BIA, HFI analysis
- Final Economic Assessment report including oral presentation to HTAC
  - Refer to the HTA MG [Annex 11](#) for the outline of reports for EA, BIA, HFI analysis

## **V. Project Duration**

These Terms of Reference shall take effect upon signing by both Parties hereto and shall remain effective for ten (10) months upon signing of the Memorandum of Agreement. All deliverables shall be submitted within *10 months* from the date of the signed Memorandum of Agreement.

## **VI. Implementation Agreement**

### **A. Contact persons:**

All communications and reports must be addressed to:

**ANNE JULIENNE GENUINO-MARFORI, RPh, MSc**  
Chief Health Program Officer  
Health Technology Assessment Division  
Department of Science and Technology  
DOST Central Office, Bicutan, Taguig City

B. Reporting Obligations, notices and approval process including minimum or essential reports' contents

Deliverable	Technical and formatting requirements
Inception Report	<p><i>Outline of the Inception report</i></p> <ol style="list-style-type: none"> <li>1. Title</li> <li>2. Protocol information</li> <li>3. Background</li> <li>4. Research question</li> <li>5. Findings from the Scoping of Existing economic evaluations</li> <li>6. Methodological Plan for Economic Assessment in assessing:               <ol style="list-style-type: none"> <li>a. cost-effectiveness</li> <li>b. budget impact</li> <li>c. household financial impact</li> </ol> </li> <li>7. References</li> <li>8. Annexes</li> <li>9. Declarations</li> <li>10. Timelines</li> </ol>
Midterm Report	<p><i>Outline</i></p> <ol style="list-style-type: none"> <li>1. Cover page (Research Title; Name and Signature, Designation and Affiliation of Research Lead; Date of Submission)</li> <li>2. Background (<i>same cleared content from Inception Report phase</i>)</li> <li>3. Research question</li> <li>4. Findings from the Scoping of Existing economic evaluations (<i>same cleared content from Inception Report phase</i>)</li> <li>5. Methodological Plan for Economic Assessment:               <ol style="list-style-type: none"> <li>a. EE and BIA                   <ol style="list-style-type: none"> <li>i. Model development                       <ol style="list-style-type: none"> <li>1. Proposed Model for consultation</li> <li>2. Expert consultation Feedback</li> <li>3. Revised Model after the expert consultation</li> </ol> </li> <li>ii. Input parameter setting                       <ol style="list-style-type: none"> <li>1. Input parameters for consultation</li> <li>2. Expert consultation Feedback</li> </ol> </li> </ol> </li> </ol> </li> </ol>

	<ol style="list-style-type: none"> <li>3. Final input parameters after the expert consultation</li> </ol> <ol style="list-style-type: none"> <li>b. HFI Analysis <ol style="list-style-type: none"> <li>i. Cost items and values for consultation</li> <li>ii. Expert consultation Feedback</li> <li>iii. Cost items and values after expert consultation</li> </ol> </li> </ol>	
<p>Initial Economic Assessment Report</p> <p><i>Note: The Initial and Final Assessment Report follows the same template content. The key difference is that the Initial Assessment Report is the first version of the report, prior to the presentation meetings to the HTA Council. Meanwhile, the Final Assessment Report already incorporates the comments of the HTA Council, as well as possible comments from stakeholders (found by the HTA Council to be meritorious) during the public consultation of the HTA Council recommendation on the health technology which presents the EAG report as evidence.</i></p>	<p><u>Outline of initial research report (refer to <a href="#">Annex 11 of HTA Methods Guide</a>):</u></p> <ol style="list-style-type: none"> <li>1. Executive Summary</li> <li>2. Health problem and clinical management options (<i>Note: HTA PH to share the Clinical Assessment Report for reference</i>)</li> <li>3. Description, technical characteristics, and use of the health technologies</li> <li>4. Methodology <ol style="list-style-type: none"> <li>a. CEA/CUA</li> <li>b. Budget Impact Analysis</li> <li>c. Household Financial Impact Analysis</li> </ol> </li> <li>5. Results <ol style="list-style-type: none"> <li>a. CEA/CUA</li> <li>b. Budget Impact Analysis</li> <li>c. Household Financial Impact Analysis</li> </ol> </li> <li>6. Discussion and Conclusion</li> <li>7. Relevant attachments (should include, but not necessarily be limited to, those listed below) <ol style="list-style-type: none"> <li>a. CV of all Research Team members</li> <li>b. Informed Consent Forms</li> <li>c. Technical Clearance of Research Proposal</li> <li>d. Ethics Clearance</li> <li>e. Data Collection Tools</li> <li>f. Datasets</li> <li>g. Protocol including search strategy and methods</li> <li>h. Data sources and reference for the economic evaluation</li> <li>i. FGD questionnaire</li> </ol> </li> </ol>	
<p>Final Economic Assessment Report</p>	<p><u>Outline of the final research report (refer to <a href="#">Annex 11 of HTA Methods Guide</a>):</u></p> <ol style="list-style-type: none"> <li>1. Executive Summary</li> <li>2. Health problem and clinical management options</li> <li>3. Description, technical characteristics, and use of the health technologies</li> </ol>	



4. Methodology on economic evaluation
  - a. CEA/CUA
  - b. Budget Impact Analysis
  - c. Household Financial Impact Analysis
5. Results
  - a. CEA/CUA
  - b. Budget Impact Analysis
  - c. Household Financial Impact Analysis
6. Discussion and Conclusion
7. Relevant attachments (should include, but not necessarily be limited to, those listed below)
  - a. CV of all Research Team members
  - b. Informed Consent Forms
  - c. Technical Clearance of Research Proposal
  - d. Ethics Clearance
  - e. Data Collection Tools
  - f. Datasets
  - g. Protocol including search strategy and methods
  - h. Data sources and reference for the economic evaluation
  - i. FGD questionnaire

For details on the components of an HTA report, you may refer to the second edition of the Philippine HTA Methods Guide.

#### VII. Proposed Terms of Payment by Major Outputs:

Release	% of Fund	Requirements
1st	15%	<ul style="list-style-type: none"> <li>● Signed and Notarized Memorandum of Agreement</li> </ul>
2nd	40%	<ul style="list-style-type: none"> <li>● Approved Full proposal</li> <li>● Approved Inception report</li> </ul>
3rd	35%	<ul style="list-style-type: none"> <li>● Approved Midterm Report</li> </ul>
4th	10%	<ul style="list-style-type: none"> <li>● Approved Final Economic Assessment Report</li> </ul>

Project outputs should be submitted to the HTA Division. The audited financial report of the total project cost shall be submitted within one (1) month after the release of the last tranche.