# Service contract to roll out Acute Respiratory Infection Diagnostic Aids (ARIDA) Field Studies

UNICEF Nepal Country Office (NCO)

**Duty Station:**

## 1. BACKGROUND AND JUSTIFICATION

Pneumonia is the leading infectious cause of death among children under 5 years of age globally. Many pneumonia deaths result from late care seeking and inappropriate treatment due to misdiagnosis of symptoms. Diagnosis remains largely presumptive or is made by counting the respiratory rate (RR) in children with cough or difficulty breathing, to assess whether the RR is higher than what is considered normal. However, counting RR is difficult, even for trained health workers. Misclassification of an observed rate is common, which often leads to incorrect diagnosis and consequently inappropriate treatment.

The United Nations Children's Fund's (UNICEF's) Acute Respiratory Infection Diagnostic Aids (ARIDA) project, an initiative led by UNICEF Supply Division with technical assistance from UNICEF NYHQ and implementation support by UNICF Nepal, aims to introduce automated RR counting aids for use by frontline health workers in resource limited community settings and health facilities. These RR counting aids aim to offer improved accuracy, effectiveness and acceptability compared to current practices for counting and classifying RR to detect fast breathing pneumonia.

The ARIDA research study aims to provide evidence for the most appropriate and suitable ARIDA products for scale up in low resource settings, environmental extremes common in regions of UNICEF interest, the hands of frontline health workers and appropriate age groups. Ethiopia has been selected as the first trial site. ARIDA Field Trial protocols have been developed and now the team is looking to begin planning for implementation the next country – Nepal.

The goal of the studies is to inform demand side of the market to enable programs to make decisions on procurement and scale up of ARIDA and to inform supply side of the market to provide feedback to manufacturers for 2nd generation devices.

The proposed implementing partner (IP) will coordinate with UNICEF Supply Division (SD), UNICEF Program Division (PD), UNICEF Nepal Country Office (NCO) to improve policy and programmatic readiness for the proposed study.

## 2. OBJECTIVES AND METHODOLOGY

In line with the study protocol (Annex 1), the main goal is to understand if female community health volunteers (FCHVs) and health facility workers (HWs) using an Acute Respiratory Infection Diagnostic Aid (ARIDA) or MK2 Acute Respiratory Infection (ARI) timer can adhere to Integrated Management of New born and Childhood Illness (IMNCI) algorithms, and to understand FCHV and HWs perceptions on the benefits of and barriers to using the ARIDA/MK2 ARI timer.

**Specific objective 1**

To determine if FCHVs/HWs using an ARIDA/MK2 ARI timer adhere to IMNCI algorithms and correctly assess and classify children under-five with cough and/or difficult breathing.

**Specific objective 2**

To document the user experience of ARIDA in a sick child consultation.

**Specific objective 3**

To explore the acceptability of the ARIDA to FCHVs, health facility workers and caregivers.

**Methodology:**

The study team is expected to conduct field testing of the ARI devices for counting of respiratory rate (RR) among under five children. Please refer to protocol (Annex 1) for detailed methodology.

## 3. SCOPE OF WORK

Implementing partner will carry out the specifics and conduct the field study (FT) evaluations of the Philips ChARM device, MK2 ARI and Masimo Rad G, as detailed in the protocols (Annex 1*)*.

The details of the anticipated activities for each device evaluation – one field study for ChARM, one for MK2 ARI and one field study for Masimo Rad G are defined at Annex 8: Activity details. Deliverables are also clearly defined in Section 6 below a Responsibility Matrix (RACI) has been developed to define roles and responsibilities during the project, see Annex 2.

## 4. DURATION

The study will run for about 9 months, with a start date early May . The duration of working days for a team of professionals will be a total of approximately 36 weeks. Number of working days for each team member will vary per their relevance to the expected tasks The consultancy firm may engage required multiple teams to complete the survey within the agreed timeframe.

## 5. WORKING LOCATIONS:

The contracted institution/firm will work remotely but will work closely with UNICEF Nepal and national partners as needed to support implementation.

The proposed location for the study are:

| S.N. | Study on | Proposed location |
|---|---|---|
| **1.** | Philips ChARM | Province 6* |
| **2.** | ARI Timer | Province 6* |
| **3.** | Masimo Rad G | Province 2** |

* Jumla, ** Saptari

## 6. DELIVERABLES:

Deliverables should be tangible and with a defined period for submission.

Inception Report covering methods, work plan, and other required details to conduct deliverables elaborated as below:

Philips ChARM field trial, deliverables 3.1-3.5

- 3.1: Human resource records for national research team delivered and list of participating healthcare workers documented. End week 15, 2018.
- 3.2: - Pre-testing report delivered. End week 17, 2018.
- 3.3: Research site set up report delivered for Philips ChARM Field Study. End week 19, 2018.
- 3.4: Report confirming completion of training and data collection for the adherence and acceptability evaluations and delivery of weekly status updates for Philips ChARM Field Study. End week 33, 2018.
- 3.5: Final learnings report and presentation delivered for Philips ChARM Field Study. End week 35, 2018.

Masimo Rad G field trial, deliverables 3.6-3.10

- 3.6: Human resource records for national research team delivered and list of participating healthcare workers documented for Masimo Rad G Field Study. End week 24.
- 3.7: Translated study materials and pre-testing report delivered for Masimo Rad G Field Study. End week 25.
- 3.8: Research site set up report delivered Masimo Rad G Field Study. End week 25.
- 3.9: Report confirming completion of training and data collection for the adherence and acceptability evaluations and delivery of weekly status updates for Masimo Rad G Field Study. End week 43.
- 3.10: Final Learnings report and presentation delivered for Masimo Rad G Field Study. End week 45.

MK2 field trial, deliverables 3.11-3.15

- 3.11: Human resource records for national research team delivered and list of participating healthcare workers documented for MK2 ARI Field study. End week 15, 2018.
- 3.12: Translated study materials and pre-testing report delivered for MK2 ARI Field Study. End week 17, 2018.
- 3.13: Research site set up report delivered MK2 ARI Field study. End week 19, 2018.
- 3.14: Report confirming completion of training and data collection for the adherence and acceptability evaluations and delivery of weekly status updates for MK2 ARI Field Study. End week 33, 2018.
- 3.15: Final learnings report and presentation delivered for MK2 ARI Field study. End week 35, 2018.3.16: Final single consolidated report incorporating the findings and discussions on all three trials in Nepal.

## 7. QUALITY ASSURANCE

This field trial study will be managed by the Health section at the UNICEF Nepal office under the technical guidance and leadership from MOHP and technical and financial support from UNICEF Supply Division. To improve quality of care for pneumonia management at community and facility level, a few activities on- need base health worker's training and demand generation to improve care seeking behaviour for ARI case might be considered as the part of the ARIDA field studies.

A technical reference group will be formed, consisting of MOHP/DOHS and UNICEF (Supply Division, HQs, Regional office, Nepal CO), and subject matter experts from Academia (to be selected by MoHP/DGHS and UNICEF together), Members of the reference group will be engaged and consulted at key milestones of the research process such as review of the TORs, inception report, and draft study reports.

Selection of the research agency will be made through an open and competitive bidding process as per UN rules. Review of technical proposals will be done by at least three members of the reference group mentioned above.

The research team will report to Health Specialist (Child Health) at UNICEF Nepal Country Office who will serve as the key contact point. Quality Assurance of the field studies will be done by UNICEF Nepal Country Office with support from its field offices. Malaria Consortium will also provide technical support through a technical reference group.

## 8. PROPOSED PAYMENT SCHEDULE

Payments to be based on the following outputs to deliverables as delivered, certified upon review by UNICEF Nepal.

| S.N. | Key Deliverables | Percentage | Remarks |
|---|---|---|---|
| 1. | Inception report (for all three deliverables) | 30% | upon the receipt of inception report |
| 2 | Philips ChARM and ARI Timer training completion report for acceptability evaluation | 30% | |
| 2. | Preliminary Philips ChARM and ARI Timer survey report | 30% | |
| 4. | Final consolidated report and power point presentation of all the trials in Nepal | 10 % | |

## 9. CONTRACT SUPERVISION

The contracted institution/firm will be supervised by Child Health Specialist, UNICEF Nepal Country Office. The service provider is responsible for their own working conditions and to ensure continuity of service and quality support as needed for timely implementation.

## 10. QUALIFICATIONS AND EXPERIENCE REQUIRED

The minimum requirement for the firm is to have expertise meeting the following requirements on assigned personnel to this contract:

1. At least 5 years of experience in conducting similar surveys – particularly in the areas of clinical trials and operational research on integrated management of neonatal and childhood illness (IMNCI), strong skills in statistics and data analysis,
2. Experience in conducting qualitative surveys in the areas Child Health and IMNCI,
3. Experience in supervising field work of multipurpose surveys and similar survey,

4. Right mix of professionals with education background (advanced university degrees) in disciplines relevant to (i) Planning, Monitoring, Evaluation, (ii) Public Health, (iii) social sciences, (iv) statistics or any other relevant disciplines,
5. The senior team members should have more than 5 years progressively responsible professional work experience in child health program management, and/or advisory support both development and humanitarian contexts,
6. High professional expertise in statistical and epidemiological analysis using latest version of statistical software/packages,
7. Good understanding of UNICEF Child Health program strategies, and
8. Strong analytical skills with the ability to write in a clear and practical manner.

**The survey team should comprise of a gender balanced and culturally diverse team of technical experts with expertise in quantitative and qualitative methods of data collection.**

Organization interested to applying for the study must be legally registered and must have extensive experience in conducting clinical field trials in the health sector in Nepal. It is expected that the references are provided to demonstrate its experience over the last 5 years.

The agency should comprise of a strong team of researchers and technical experts with adequate qualifications.

**The Team Leader should have the following minimum requirements:**

- Master's Degree in public health or health related fields
- At least 5 years of professional experience in the field of clinical research
- A strong expertise with the use of qualitative and quantitative research methods,
- Documented experience in leading study teams
- Substantive knowledge on child health and community based interventions in Nepal
- Excellent oral and written communication skills in English
- Previous working experience with the UN or external development agencies is an asset

For all other team members, it is the responsibility of the selected implementing agency to provide a strong team that can successfully meet all requirements of the TOR. The composition of the team, CV's of proposed team members and roles and responsibilities should be clearly articulated in the technical response to this RFP.

**Due to the intensive nature of the study, the experts are ideally expected to work through-out the contract period.**

## 11. APPLICATION AND EVALUATION PROCESS

Each proposal will be assessed first on its technical merits and subsequently on its price. In making the final decision, UNICEF considers both technical and financial aspects. The Evaluation Team first reviews the technical aspects of the offer, through paper review of the proposal along

with a short in- person presentation from the agencies. The agencies will be informed by UNICEF regarding the date, time and venue for the presentation. The presentation should be limited to 15 slides and only contain information from the technical proposal. Technical evaluation will be followed by review of financial offers of the technically compliant vendors. The proposal obtaining the highest overall score after adding the scores for the technical and financial proposals together, that offers the best value for money will be recommended for award of the contract.

The **Technical Proposal** should include but not be limited to the following:

- **Supply of services**
  Approach to services requirement detailing how to meet or exceed UNICEF requirements for this assignment
- **Company Profile**
  Ensure to include information related to the experience of the company as required and outlined in item 10 of this document.
- **References**
  Details of similar assignments undertaken in last *three* years, including the following information:
  - Title of Project
  - Year and duration of project
  - Scope of Project
  - Outcome of Project
  - Reference / Contact persons
- **Work Plan**
  Proposed work plan showing detailed sequence and timeline for each activity and man days of each proposed team member
- **Team Composition**
  Title and role of each team member
- **CV's**
  CV of staff responsible for the implementation of IVR services
  Ensure to include information related to the qualifications and experience of each proposed team member as required and outlined in item 10 of this document.
- Any project dependencies or assumptions

The **Financial Proposal** should include but not be limited to the following:

Bidders are expected to submit a lump sum financial proposal to complete the entire assignment based on the terms of reference. The lump sum should be broken down to show the detail for the following:

- **Service cost:** This should include the cost related to project planning and coordination operational cost.
- **Travel Costs**
  All travel costs should be included as a lump sum fixed cost.

For all travel costs, UNICEF will pay as per the lump sum fixed costs provided in the proposal.
A breakdown of the lump sum travel costs should be provided in the financial proposal.

- Any other costs (if any) Indicate nature and breakdown
- **Copy of the company registration**
- **Recent Financial Audit Report**
  Report should have been carried out in the past 2 years and be certified by a reputable audit organization.

Bidders are required to estimate travel costs in the Financial Proposal. Please note that i) travel costs shall be calculated based on economy class fare regardless of the length of travel and ii) costs for accommodation, meals and incidentals shall not exceed the applicable daily subsistence allowance (DSA) rates, as propagated by the International Civil Service Commission (ICSC). Details can be found at http://icsc.un.org

## 12. EVALUATION WEIGHTING CRITERIA

Cumulative Analysis will be used to evaluate and award proposals. The evaluation criteria associated with this TOR is split between technical and financial as follows:

| | |
|---|---|
| 70 | % Technical (Paper evaluation 50% and presentation 20%) |
| 30 | % Financial |
| 100 | % |
| Total | |

The attached Annex 7 provides a detailed breakdown of the evaluation criteria.

## ATTACHED:

**Annex 1: Draft Protocol**

**Annex 2: Responsibility Matrix**

**Annex 3: Site Supply List**

**Annex 4: Nepal Project Plan ChARM**

**Annex 5: Nepal Project Plan Rad G**

**Annex 6: Nepal Project Plan MK2**

**Annex 7: Breakdown of evaluation criteria**