ANNEX B

TERMS OF REFERENCE (TOR)
(Background, Objectives, Scope of Work and Other Supplementary Information)

BACKGROUND

UNICEF will support the Philippine government to bring to scale a comprehensive program for improving the care of premature and small newborns in the Philippines through a national health insurance benefit package. Jointly with PhilHealth and the Department of Health (DOH), the aim is to scale up the coverage of comprehensive, life-saving, evidence-based and equity-focused interventions for premature and small newborns at a national level. Twenty-seven (27) regional government hospitals and their service delivery networks will be contracted by PhilHealth to deliver the new benefit package. Saving Lives at Birth (SL@B) funding is matched 1:1 through funding contributions from both UNICEF Canada and UNICEF Philippines, while further leveraging current DOH investments in newborn care health infrastructure.

The “Z Benefit Package for Premature and Small Babies” was approved by PhilHealth in April 2017. However, bottlenecks in the roll-out and implementation were encountered resulting in lack of utilization of the benefit package to date. DOH and PhilHealth conducted a workshop to address identified bottlenecks in June 2018. Two major bottlenecks identified are the readiness of the hospitals to be contracted to deliver the services and the capacity of PhilHealth to rapidly contract hospitals based on the technical requirements of the new benefit package.

UNICEF Philippines will utilize a systems approach to strengthen both supply and demand sides to accelerate the roll-out of the benefit package. On the supply side, technical assistance will be provided to build up the technical and organizational capacity of 27 hospitals in the Philippines, including their service delivery networks, which can then be contracted by PhilHealth to provide care for premature and small newborns. On the demand side, the project will support PhilHealth regional offices via third party assessors for accreditation, or “contracting” of government health facilities to deliver services. Support for facilitation of hospitals is crucial to achieve high level of contracting rates for the benefit package within the project period.

The PhilHealth Policy requires hospital’s submission of information to track the utilization of the benefit package and to monitor outcomes and benefits. (See Annex 1: Philhealth Patient Registry). Similarly, the results framework of Saving Lives at Birth requires the reporting on a set of indicators. (See Annex 2: Prematurity Benefit Package M&E Results Framework Indicators). Previous observations from EENC monitoring is that hospitals usually have some form of patient registry where data is entered by Pediatric doctors-in-training or by encoders. Some of the data is collected to be submitted to the professional societies: Philippines Society for Newborn Medicine or the Philippines Obstetrics-Gynecology Society. The envisaged changes in the information workflow system are illustrated in ANNEX 3.

This TOR is for a firm that will enable the hospitals to submit the data requirements for the program needs of PhilHealth, DOH and UNICEF as listed above.
OBJECTIVE

The project aims to support the 27 DoH-identified hospitals contracted or being assisted to be “contracted” as a provider of the Z-benefit package for premature and small babies to submit information required for the PhilHealth registry and Saving Lives at Birth results framework, preferably using an open source software exportable as Excel file.

Specific Objectives:

1. Conduct a landscape analysis of the current information system of the identified hospitals specifically on capacity to capture data for PhilHealth and DOH Saving Lives at Birth needs
2. Develop technical design / program for use of identified hospitals to comply with data requirements that is user friendly and minimally disruptive to care provision, and forward compatible with the PhilHealth Z Benefits Information and Tracking System (ZBITS)
3. Develop standards and guidelines for use of the system
4. Orient, train and transfer technology to Philhealth staff and contracted hospitals
5. Provide technical support to contracted hospitals for the first 5 months post installation

SCOPE OF WORK, ACTIVITIES, TASKS, DELIVERABLES AND TIMELINES, PLUS BUDGET PER DELIVERABLE

Scope of work and activities:

1. Review all pertinent documents on the Z-benefit package for premature and small babies
2. Consultation with necessary offices including but not limited to: DOH Family Health Office Director, Newborn Care Program Manager, HCI medical chiefs, Pediatric department chair, records section, PhilHealth officers, PhilHealth central and regional offices AQAS, Health Care Delivery Management Division, BDRD and Information Technology and Management Department through the Information Management Sector, and UNICEF Health & Nutrition Specialist and M&E Specialist
3. Identify data elements and develop technical design for the Z-benefit package for premature and small babies, including calculator function for the Z-benefit package rates, which are open source and forward compatible with ZBITS¹
4. Develop, test and install system² using Agile principles³.
5. Generate reports from the contracted hospitals

¹ Source code licensed under the free and open-source AGPL v3 with UNICEF/DOH/PHILHEALTH as the copyright holder of the AGPL license. All code must be uploaded to an agreed repository in GitHub

² Service Level Requirement: The institution will ensure the availability of support staff from Monday to Friday from 8am-5pm. Once the product is deployed, the support services will be covered by the warranty terms, conditions, and SLA agreements.

³ Comprising of but not limited to the following: Software development process includes regular check-ins to re-assess progress, check priorities and adapt specific implementation details; Publicly visible roadmap and development priorities; Software development project management
6. Orient, train and transfer technology to PhilHealth staff and contracted hospitals

7. Develop standards and guidelines for use of the system, including manual of operations and system technical documentation.

8. Ensure that the system will be compliant with the Data Privacy Act and Universal Health Care Act of the Philippines and applicable industry standard information security framework.

9. Provide technical support to contracted hospitals.

10. Submit final technical report with PowerPoint presentations of highlights and deliverables, including the process documentation report.

Tasks, deliverables and timelines, plus budget per deliverable

<table>
<thead>
<tr>
<th>Tasks to be performed</th>
<th>Deliverables</th>
<th>Work Schedule</th>
<th>Payment Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review pertinent documents, implementation plan consultations</td>
<td>Inception Report</td>
<td>Month 1-2</td>
<td>20%</td>
</tr>
<tr>
<td>Technical design and first version</td>
<td>Progress Report 1 – including sample reports</td>
<td>Month 4 to 5</td>
<td>20%</td>
</tr>
<tr>
<td>Roll-out in 10 hospitals</td>
<td>Progress Report 2</td>
<td>Month 6 to 7</td>
<td>25%</td>
</tr>
<tr>
<td>Roll-out in 17 hospitals</td>
<td>Progress Report 3</td>
<td>Month 8-10</td>
<td>25%</td>
</tr>
<tr>
<td>Continued provision of post-installation support, submission of final report, process documentation, source code, manuals to UNICEF, PhilHealth and DOH</td>
<td>Final report, process documentation, source code manuals</td>
<td>Month 11-14</td>
<td>10%</td>
</tr>
</tbody>
</table>

QUALIFICATIONS, SPECIALIZED EXPERIENCE AND ADDITIONAL COMPETENCIES

- Highly reputable institution specializing in development of health information systems of 8 years or more using open source software development.
- The institution must provide example of a similar or relevant project deployed to a client, specifically through a link or a report.
- The project team should include a health professional with experience and expertise in clinical information related to hospital care of newborns, preferably subject expertise on care in NICU.
and a health professional knowledgeable on accreditation and contracting processes of PhilHealth

- Team members should include qualified ICT and programming experts
- The project team should have ability to conduct process documentation and prepare manuals, guidelines and reports
- Having worked with UNICEF is an advantage

**CONDITIONS OF WORK**

This work is outsourced and does not require office space or use of any UNICEF office equipment and support for logistics, transport, and insurance.

**Implementation Arrangements**

The Institution will be directly supervised by the interagency project management committee for the scale up of the Prematurity Benefit package and care for small newborns composed of DOH, Philhealth, UNICEF and WHO. This committee is tasked to provide input and advice on the approach and methods to be used in the development/designing of the system, provide suggestions for key stakeholders to include in the process and effective approaches for engagement, contribute to priority information to be obtained and reviewed, and make recommendations, as appropriate; and approve project deliverables.

The National Maternal Newborn Health Technical Working Group that will provide strategic guidance and oversight of the interagency project management committee. The TWG will elevate recommendations to the respective Executive Committee levels of the DOH and Philhealth for any necessary policy issuances or other high-management level actions.
Annex 1: PhilHealth Patient registry (Draft)

<table>
<thead>
<tr>
<th>Mother’s Information</th>
<th>Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s Hospital Patient No. (if available)</td>
<td>Severe pre-eclampsia (indicate systolic BP, presence of proteinuria 3+ after 20 weeks AOG and danger signs)</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
</tr>
<tr>
<td>Patient No. (if available)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baby’s Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby’s Hospital Patient No. (if available)</td>
</tr>
<tr>
<td>Patient No. (if available)</td>
</tr>
</tbody>
</table>


ANNEX 2: Prematurity Benefits Package M&E Results Framework Indicators

1. Number of lives saved in the catchment areas of the target 27 hospitals because of reduced cases/appropriate care provided to preterm babies, asphyxia, sepsis and severe infections, congenital anomalies, and RDS. 60% of neonatal deaths in the Philippines are due to complications from these causes. In operational terms, this is Cause Specific Mortality Rate (facility level):
   a. Preterm death rate
   b. Asphyxia death rate
   c. Sepsis and severe infections death rate
   d. Congenital anomalies death rate
2. Average length of hospital stay (number of days) of preterm newborns in the target 27 hospitals
3. Number of premature and small birth newborns that benefited from the prematurity benefit package (benefit package utilization)
4. Target government hospitals that received PhilHealth accreditation ("contracting") enabling them to provide the prematurity health package. The accreditation process and list of requirements are available from PhilHealth.
5. At least two staff from the 27 target hospitals (Pedia and Finance Officers) and at least one PhilHealth liaison officer per hospital oriented on the 'prematurity health package', how the hospital can benefit from it, and on the PhilHealth accreditation requirements (3 facility-based health workers x 27 hospitals)
6. At least one staff from the Accreditation and Quality Assurance Staff of the 17 PhilHealth Regional Offices provided support, i.e., guidance, technical messages, etc., to facilitate accreditation of the target 27 government hospitals for the provision of the prematurity benefit package.
7. Families of preterms and small babies (estimated at 262,000 per year) who availed of the prematurity health package gained financial protection from the claims/reimbursements from PhilHealth
ANNEX 3. ENVISAGED CHANGES IN SYSTEM WORKFLOW

CURRENT SYSTEM

- Fill-up paper form
- Data encoding in Excel
- Submitted as an email attachment

- Fill-up paper form
- Photocopy original form
- Hand-carry/collect

- Fill-up electronic form
- Generate Excel
- Submitted as an email attachment
- DB retained locally
- Backup DB

SCOPE OF TECHNICAL ASSISTANCE

- Data consolidation in Excel (Copy & Paste)
- View and Generate report
- Submitted as an email attachment
- Annual submission

- Compiled during Programme Annual Meeting Review
- Data encoding in Excel
- Submitted as an email attachment

- Data consolidation in Excel (Copy & Paste)
- Submitted as an email attachment
- At least every 6-month submission

- Consolidates Email attachments
- Data consolidation in Excel (Copy & Paste)
- Submitted as an email attachment
ENVISAGED SYSTEM WITH ZBITS IN PLACE

- Fill-up electronic form
- Generate Reports
- DB retained locally
- Consolidates data
- Generate routine reports and data
- Monitor provision of standards of care
- Determine clinical outcomes
- Warehouse data in PhilHealth DB