Department of Economic Affairs

Green Book for Healthcare Sector

Guide for Practitioner's for PPPs in Primary Healthcare

CONTENTS

GUIDE FOR PRACTITIONERS FOR PRIMARY HEALTH CLINIC

1. INTRODUCTION

Both Central and State governments have identified several important needs and taken initiatives to strengthen the health and medical care services for greater benefit of the people. In this context primary healthcare is the cornerstone of health services- a first port of call to a qualified doctor for the sick. Amongst various needs, greater access to primary health care round the clock for the patients at affordable cost is one of the critical aspects of modern healthcare services.

The primary healthcare in India suffers from issues such as the inability to perform up to the expectation due to (i) non-availability of doctors; (ii) inadequate physical infrastructure and facilities; (iii) insufficient quantities of drugs; (iv) lack of accountability to the public and lack of community participation; (v) lack of set standards for monitoring quality care etc. Thus to improve the health and well-being of the people there is need to leverage resources from private sector to improve the primary healthcare services and increase the coverage of population for primary healthcare services. Already, several states have started implementing projects under Public Private Partnership ("PPP"), for provision of primary healthcare services to its inhabitants, particularly in rural areas.

The key objective of implementing primary healthcare projects on PPP basis would be to provide access to primary healthcare services to vulnerable and targeted sections of society such as economically weaker section patients/below poverty line patients ("**BPL Patients**"). In order to achieve the objectives set out hereinabove, the government ("**Implementing Agency**") proposes to develop/implement greenfield Primary Healthcare Clinic ("**PHC**") which may include development of building and support infrastructure; installation of equipment's; and may provide clinical services, support clinical services and facility management services (such as housekeeping and maintenance, etc.) to inpatients and outpatients of the concerned PHC.

With the intent to provide access to primary healthcare services to BPL Patients, the Implementing Agency proposes to implement PHC in different regions of the state where there are no PHC or the existing PHC is insufficient to serve the entire population of such BPL Patients within the specified area.

- **Capacity of PHC:** PHC is to serve a defined area and population thus the minimum capacity of the PHC will be dependent on feasibility study which would take into account the population density, technical and commercial aspects of a project facility, covering the required services, usage requirements and the type of healthcare to be provided in the PHC. Indian Public Health Standards (IPHS) Guidelines for Primary Healthcare Clinics 2012 may be referred to for basic requirements of primary health care establishment.

- **Services to be provided in Primary Healthcare Clinic:**

  - Clinical Services: The clinical services would cover the following:

    - Medical Care: Under medical care, PHC has to provide OPD services, 24 hours emergency services, referral services and in-patient services for four- six beds.

    - Maternal and child health care including family planning: This may include ante natal care; inter natal care, referral, post natal care and new born care. Also to provide child care and family welfare services, medical termination of pregnancies, management of reproductive tract infection and sexually transferred infections, and adolescent healthcare services etc.

    - Selected surgical procedures: PHC may provide selected surgical facilities the vasectomy, tubectomy (including laparoscopic tubectomy), MTP, hydrocelectomy etc.

  - Support clinical services: The support clinical services would include basic laboratory and diagnostic service, referral services, patient data and report capturing and integration with the existing referral hospital network, etc.

  - Facility management services: The facility management services would include help desk services, housekeeping services, material services (management of goods and supplies), plant services including facility maintenance, repair, and replacement, patient portering, utilities management, etc.

  A Primary healthcare clinic under PPP may provide some of the abovementioned services or all, depending upon the project objective, authority requirements, epidemiological assessment and budgetary outlay. Thus it is imperative that a detailed study is done before deciding upon the services scope of the project.

- **Alternative models for development:**

  - Alternative 1: Development in clusters: Under Alternative 1, the state government may appoint concessionaire for development of multiple PHC's in a region. The PPP projects in primary healthcare clinic can involve the bundling of various projects by state government under one common umbrella and offering the collective package for private sector participation. Firstly at a district level regions where primary healthcare clinic is required are identified (say 20 PHC's). Thereafter,

these are packaged into clusters which typically constitute 3-6 PHC's. Each package is treated as an individual project. The bidders can bid for any or all the packages. The bidders would need to submit single technical proposals for all the packages and separate financial proposals for each package.

- Alternative 2: Development of individual PHC: This alternative involves authority appointing concessionaire for development of single primary healthcare clinic.

- Recommended Approach: The key advantages of alternative 1 over alternative 2 are:

  - Uniformity and Standardization: The clustering of projects under alternative 1 will enable uniformity and standardization of service level across PHC in terms of services. On the other hand under alternative 2 separate services could be provided as per the specific local requirement.

  - Scale of investment and return: As investment and return levels for a single PHC can below, alternative 1 may provide an optimal scale of investment and return to attract private sector investment from established players. Under Alternative 2, the scale of investment and return may remain low to attract established players.

  - Combined Bidding Processes: Alternative 1 would involve a combined bidding process which would be cost efficient, less time consuming and cumbersome while alternative 2 would involve separate bidding process for development of respective primary healthcare clinic.

  - Increasing Affordability: Due to clustering of several projects better economies of scale may be achievable by the private player, under Alternative 1.Thus service prices may be more competitive than under Alternative 2.

  - Better Monitoring: By packaging and adopting a cluster approach the scale would enable appointment of independent monitors to monitor the project in effective manner.

In view of the inherent advantages available under alternative 1 over alternative 2 in respect of uniformity and standardization of service levels, scale of investment and return, combined bidding process, affordability and better monitoring, alternative 1 can be the preferred mode for development of

primary healthcare clinic on PPP mode.

2. SCOPE OF THE PROJECT

- **Components of PHC:** The project scope will vary according to the objectives of the Implementing Agency, however the key components of scope of PHC project can be categorized into following:

    - Design: This includes all designs, drawings, calculations and documents pertaining to the project facilities. The concessionaire would need to prepare the designs for the project facilities in accordance with the standards and specifications prescribed by the Implementing Agency (please refer to para 8.1) and submit the same with the Implementing Agency. The Implementing Agency will review the same and provide comments to the Concessionaire. If the designs are not in conformity, then the concessionaire would need to revise and resubmit the same with the Implementing Agency. Notwithstanding the review and comments of the Implementing Agency, complete responsibility for designs would vest with the concessionaire.

    - Infrastructure: This includes construction of the building and related assets to provide the health care services and allied services. The Implementing Agency should provide a detailed explanation of the infrastructure scope and standards & specifications in the schedule to the concession agreement in terms of the off-site, on-site development, building components, construction responsibilities, testing and commissioning of the structure (please refer to para 8.1). Any sub-contract by the Concessionaire should be granted through open tender process.

    - Equipment's: This includes procurement, installation and testing of the equipment and standards & specifications for the same (please refer to para. 8.2). Any sub-contract by the Concessionaire should be granted through open tender process.

    - Clinical Services: The clinical services to be provided at the PHC would cover outpatient and inpatient medical care; maternal and child health care including family planning; and selected simple surgical procedures etc.

    - Support clinical services: The support clinical services would include basic laboratory and diagnostic service, referral services, patient data and report capturing and integration with the existing referral hospital network. etc.

- Facility management services: The facility management services would include help desk services, housekeeping services, material services (management of goods and supplies), plant services including facility maintenance, repair, and replacement, patient portering, utilities management, etc.

- Other commercial services: The scope should also define if any other commercial services such as cafeteria, restaurant, book shop, florist shop, ATM facility etc. are to be provided by the Concessionaire. The commercial services may be provided at market price and the entire revenue generated from such commercial services may (i) accrue to the concessionaire (i.e. may not be shared with the Implementing Agency) or (ii) may be shared between the concessionaire and the Implementing Agency. In the event such revenues accrue to the concessionaire (i.e. not be shared with the Implementing Agency), the same should be factored in by the bidders while submitting their financial bids.

- **Key issues to be address while defining project scope:** In defining the scope of the project, the concession agreement should clearly bring out the following:

  - Capacity of Primary Healthcare Clinic: The infrastructure requirements of PHC to be as required based on usage requirements for various services envisaged.

  - Segmentation of the capacity: Different categories of patients or distinction between the BPL Patients and any other patients, and reserving the capacity for BPL Patients. Such segmentation should be arrived at by factoring in the feasibility study, annual budget outlay of the Implementing Agency, regional demographics, socio-economic composition and such other relevant factors as may be considered.

  - *Sub-contracting:* Any sub-contract by the Concessionaire should be granted through open tender process in order to maximize competitiveness, to ensure greater transparency and maximizing financial efficiency.

3. TERM OF THE AGREEMENT

- **Factors to be considered while deciding duration:** The concession agreement should specify the duration of the project. The factors to be taken into account while deciding upon the duration of the contract shall include:

  - Based on the scope of the project and services, cost and revenues from

the project, the implementing agency will be required determine the optimal duration for the financial viability of the project.

- The service requirements of the Implementing Agency and the required quality and quantity outputs in the longer term; the expected life of the assets underpinning the service; any possible residual value; and the need for and timing of major refurbishment or asset refreshment programme during the concession agreement.

- The factors such as service requirements, forecast quality and quantity, expected life of assets, construction and maintenance requirements, forecast of the base cost, option to extend the term of the concession.

- The importance of continuity in the delivery of the service, including the degree of transition difficulties and inefficiencies that might be caused by changing/substituting the concessionaire. The affordability of the payments to be made by the Implementing Agency for the project.

- **Recommended Approach:** Given these factors the option for duration of agreement has to be arrived at by the authority which provides best value for money the project. The concession period in general for PHC may range from 7-15 years. Given that the PHC will require comparatively smaller built up area the construction period may be of the order of 0.5years, the rest being the operation period. The entire project assets should transfer to the Implementing Agency at the end of the concession period.

4. PATIENT MIX

- **Options for Patient Mix:** In order to achieve to the key objective set out hereinabove, the Implementing Agency may provide differential benefits to BPL Patients and other patients. Based on the aforesaid, the term 'patient' may be divided into two categories under the concession agreement:

  - BPL Patients: This would include the vulnerable and targeted sections of society who falls under the definition of BPL Patient (as may be defined by the Implementing Agency).

  - *Non BPL patients:* This would include the patients who do not fall under the definition of BPL Patient ("**Private Patients**").

- **Recommended option for Patient Mix:** The concession agreement may provide for such segmentation/ categorisation of patients based on feasibility study, annual budget outlay of the implementing agency, regional demographics, socio-economic composition and such other relevant factors as

may be considered.

- **Key issues to address:** The categorisation of patients requires concession agreement to address following issues:

  - *Mechanism for identification of BPL patients:* Where there is a segmentation of different classes of patients, the concession agreement should clearly specify the institutional mechanism for identification of BPL Patients.

  - *Specifying proportion of healthcare infrastructure for different category of patients:* Where there is a segmentation of different classes of patients, the concession agreement should clearly specify a percentage of capacity or usage level which is to be achieved for BPL Patients for primary healthcare services.

5. PRICING MECHANISM[1]

- **Options for pricing:** The pricing of the services is one of the critical aspects in a PHCPPP as it impacts both the affordability and accessibility of healthcare services. In this context, various options to determine pricing have been outlined below:

  - *For BPL Patients*: The following options may be followed for pricing of services to BPL Patients:

    - Option 1 - Benchmarked to CGHS prices: The concession agreement can specify that the pricing applicable under Central Government Health Scheme ("**CGHS**") to be followed by the concessionaire in pricing the healthcare services. CGHS provides comprehensive health care facilities for Central Government employees, pensioners and their dependents residing in CGHS-covered cities. Generally, two models are adopted for application of CGHS pricing: (a) city pricing at applicable rates, and (b) city pricing at a discounted rate, or where city pricing is not available, CGHS rates applicable for a nearby city are discounted and used.

    - Option 2 - Benchmarked to SGHS prices: The concession

[1] ***Note**: The pricing model adopted should be sensitive to Section 9(ii) of the Clinical Establishment (registration and regulation) Act, 2010 which provides that the clinical establishment shall charge the rates for each type of procedure and services within the range of rates determined and issued by the Central Government from time to time, in consultation with the State Governments.*

agreement can specify that the pricing applicable under the State Government Health Scheme ("**SGHS**") to be followed by the concessionaire in pricing the healthcare services.

- Option 3 – Agreement specified pricing: A detailed pricing structure can be included in the concession agreement, wherein the prices for all services which are to be delivered under the project can be specified in the concession agreement. This approach requires a thorough working out of the services to be delivered and the prices for each of the service. Alternatively, the prices can be benchmarked to a state hospital whereby the healthcare services to users can be provided as per the prevailing prices for such services in a benchmark state hospital.

- *For Private Patients (Non - BPL Patients)*:The following options can be followed for pricing of services to Private Patients:

  - Option 1 - Benchmarked to CGHS prices: The concession agreement can specify that the pricing applicable under CGHS to be followed by the concessionaire in pricing the healthcare services. CGHS provides comprehensive health care facilities for Central Government employees and pensioners and their dependents residing in CGHS-covered cities. Generally, two models are adopted for application of CGHS pricing: (a) city pricing at applicable rates, and (b) city pricing at a discounted rate, or where such city pricing is not available, CGHS rates applicable for a nearby city are discounted and used.

  - Option 2 - Benchmarked to SGHS prices: The concession agreement can specify that the pricing applicable under the SGHS to be followed by the concessionaire in pricing the services.

  - Option 3 – Agreement specified pricing: A detailed pricing structure included in the concession agreement, wherein the prices for all services which are to be delivered under the project can be specified in the concession agreement. This approach requires a thorough working out of the services to be delivered and the prices for each of the service. Alternatively, the prices can be benchmarked to a state hospital whereby the healthcare services to users can be provided as per the prevailing prices for such services in a benchmark state hospital.

- Option 4- Market pricing: The concession agreement may provide freedom to concessionaire to determine and charge the patients market determined prices for services. This approach is suitable where there is adequate competition for healthcare service delivery; else it would lead to a monopoly pricing.

- **Recommendation for pricing standards:** In order to implement the options set out hereinabove, there are two approaches for pricing the services:

  - *Option 1 - Uniform pricing*: Under this approach, there is no differentiation in pricing among different categories of patients (such as BPL Patients and Private Patients), and single price regime should be followed for primary health services provided to BPL Patients and Private Patients.

  - *Option 2 - Mixed Approach*: Under this approach, there is differentiation in pricing among different categories of patients (such as BPL Patients and Private Patients), and different price regime should be followed for health services provided to BPL Patients and Private Patients.

Thus, there can be two kinds of approach for pricing within which there can be two different options specified above (such as specified CGHS pricing for BPL Patients coupled with market pricing for Private Patients or uniform pricing for both). The primary issue associated with mixed pricing approach is that it may lead to discriminatory treatment towards BPL Patients, as the pricing fixed for these patients is typically lower than the pricing fixed for Private Patients. Hence, it is recommended that the uniform pricing approach should be adopted.

- **Key issues to address:** In defining price regime, following issue need to be addressed;

  - *Revision of Prices:* The PPP agreements usually have a long tenure in such cases, so the cost of the service delivery is likely to go up during the concession period. To provide for such eventuality, the concession agreement needs to provide fora mechanism for revision of prices, which can be done in following ways:

    - Market Pricing Regime: Under market pricing regime, there is no need to incorporate price revision or indexation provisions. However, in such cases it is prudent to have an Implementing Agency check point to ensure that the health care services prices do not become arbitrarily high.

    - Specified Pricing Regime: In cases where prices for services

are specified in the concession agreement, the concession agreement should also provide for the revision procedure for such prices. The revision procedure should incorporate the principles for inflation indexation.

- *Non-Inclusion of free services:* In setting up a pricing regime, the Implementing Agency should refrain from obliging the concessionaire from providing free services (no reimbursement to concessionaire for such delivery of services) to BPL Patients, as it may create potential for discrimination by the concessionaire against BPL Patients. A better approach is to price the services for all and develop a payment mechanism for such services which benefits the BPL Patients.

6. USER FEE/PAYMENT FOR THE SERVICES

- **Introduction:** Collection of User Fee and the payment mechanism lies at the heart of the concession agreement and forms the consideration for which parties have entered into the concession agreement.

- **Options for Payment for primary healthcare services:** For payment of healthcare services provided to BPL Patients, the following options can be adopted in the concessionagreement:

  - *Option 1 - Reimbursement by the Implementing Agency for Primary Healthcare services to BPL Patients:* Under this approach, the Implementing Agency would reimburse the concessionaire for the treatment and services provided to the BPL Patients.

Cap on Reimbursement: The objective of the Implementing Agency is to extend affordable primary healthcare benefits to BPL Patients. While pursuing such objective, it is equally important that the total consideration to be paid/ reimbursed by the Implementing Agency for the services given to BPL Patients should be within the budget of such agency. Accordingly, concession agreement may provide for caps on such reimbursement. Typically, there are two approaches within the healthcare sector to sustain the affordability:

- *Budgetary cap on reimbursements*: In this approach, a budgetary cap is fixed by the Implementing Agency in respect of the maximum reimbursements to be made to the concessionaire for services to BPL Patients.

- *Cap on number of BPL patients*: In this approach, a maximum limit is fixed on the total number of patients for whom the Implementing Agency will reimburse the charges. Here the registration based approach can be adopted wherein the BPL

patients within the specified region may be registered with the primary health clinic for availing the services, except for emergency services which may remain available to all and any BPL patients.

The above stated models should be based on a thorough analysis of the Implementing Agency's budget outlay, projected demand for primary health care services, regional demographics and socio-economic assessment. Such budgetary cap should have adequate built in margins, to factor the increase in population. Further, the concession agreement should provide suitable safeguards to go above and beyond the reimbursement caps in case of emergency, natural calamities, epidemics etc.

- *Option 2 - Reimbursement through central/state insurance schemes for treatment of BPL Patients:* Under this approach, central/state insurance provider would reimburse the concessionaire for the treatment provided to the BPL Patients. For e.g. an insurance scheme may specify surgical/non-surgical services in respect of which the entire sum (as set out under such insurance cover) would be paid by the central/state insurance provider. Such payment will cover the payments for the healthcare services. In this case, there would not be any reimbursement from Implementing Agency.

- *Option 3 – Partial reimbursement through Central/State Insurance Scheme and the balance Implementing Agency:* This approach can be used in conjunction with the reimbursement by Implementing Agency i.e. central/state insurance provider, through the government insurance scheme, would reimburse the concessionaire for the treatment provided to the BPL Patients to the extent of insurance cover and shortfall, if any from applicable tariff structure would be reimbursed by the Implementing Agency. For example, an insurance scheme could involve a fixed cover of say Rs. 150,000 (Rupees One Lakh Fifty Thousand only) per family per annum and in case the medical expenditure exceeds the specified limit, such excess shall be reimbursed by the Implementing Agency to the primary health clinic.

For payment of primary healthcare services provided to Private Patients, the concessionaire should directly collect charges from Private Patients for services provided to them.

- **Recommended Option:** Among the above models of reimbursement, reimbursement via government health insurance schemes could work out as the most effective tool for ensuring payment for the health care services. However, this model has limitations as many states do not have state insurance policies. Thus, the optimal option is to provide for reimbursement by the Implementing Agency for the primary health care services in states, where the

state insurance policies are non-existing. This option fulfills the objective of providing accessible and affordable health care to BPL Patients.

7. PAYMENT SAFEGUARDS

- **Options for payment safeguard:** A critical area of concern is that concession agreement defined timelines for payments of service fees may not be adhered to by the authorities. This can lead to the problem of liquidity and reduce the project viability. To resolve this issue, the concession agreement can follow two options:

    - *Option 1 No payment safeguard:* No safeguards are provided to the private partner. However, the concession agreements may provide for penal interest for delay in payment by the Implementing Agency, which is linked to SBI PLR + 2-4% per annum.

    - *Option 2-Payment safeguards:* Typically, two types of payment safeguards are available for protecting the interest of the concessionaire:

        - **Payment reserve account**: The concession agreement can provide for a payment reserve account (PRA), wherein the Implementing Agency has to deposit specified months revenue. In the event of any default or delay in payment by the Implementing Agency, the concessionaire can withdraw such amount from the PRA without notice. The Implementing Agency has to replenish the PRA within specified number of days.

        - **Letter of credit**: The concession agreement can provide that the Implementing Agency provides for an irrevocable and revolving letter of credit equivalent to specified months revenue to the concessionaire, as a security for payment of service fee. In the event of any default or delay in payment by the Implementing Agency, the concessionaire can invoke the letter of credit without notice. The Implementing Agency has to replenish the letter of credit within specified number of days.

- **Recommended option:** Though interest provisions intend to compensate the aggrieved party for the delay in payment, by far this has failed to prove as a standalone safeguard mechanism, and it can lead to dispute over payment of interest. On the other hand, option 2 of providing the payment safeguard such as a payment reserve account or a letter of credit can be an effective safeguard mechanism which can ensure payment discipline on the part of the Implementing Agency and protect the interest of the private player.

8. PERFORMANCE SPECIFICATION

To effectively manage performance and optimise risk transfer, the concession agreement should contain, at a minimum, the following elements:

- **Performance specifications:** Describing the requirement in terms of measurable outcomes rather than by prescriptive or input methods.

- **Measurable performance standards:** To determine whether performance outcomes have been met and define acceptable performance.

- **Performance assessment plan:** Describing how the concessionaire's performance will be measured and assessed against performance standards. (Quality Assurance Plan or Quality Assurance Surveillance Plan).

- **Remedies to poor performance:** Describe procedures that address how to manage performance that does not meet performance standards (please refer to para. 8.7). While not mandatory, incentives should be used, where appropriate, to encourage performance that will exceed performance standards. Remedies and incentives complement each other.

The project scope varies from project to project, based on the scope PPP arrangement in the healthcare sector, specifications would typically fall into the following categories:

8.1 Infrastructure specification

- **Design specification:** The concession agreement should provide the required design specifications. Specifications as far as possible should be in terms of the output required where in the following approach can be taken:

    - Design as per the applicable regulations/frameworks: Where applicable design of the Primary Health Clinic can be required to follow the applicable regulations. The Implementing Agency may take cognizance of the IPHS guidelines in deciding optimal design configuration for primary health clinic.

    - In addition, the concession agreement can provide for output based specifications for the design of the Primary Health Clinic. Where this approach is followed, the concession agreement shall provide for the following to ensure design quality:

        - Technical standards and requirements which are to be achieved, to ensure optimal functioning of the project facility. This

should be achieved not by specifying the design but by describing the output required from the structure and other structural elements as well as and functional integration, for the services to be delivered.

- Design quality plan, wherein the concessionaire should be required to submit its strategy along with timelines for formulation of design, including consultation with stakeholders, experts involved, internal review mechanism and submit the same to the independent monitor and Implementing Agency for review. The concessionaire should carry out revisions in the design quality plan based on the comments of the independent monitor and the Implementing Agency and also demonstrate achievement of the optimal functional integration for the services delivery.

- **Construction performance requirements:** The concessionaire is required to construct the facility on the site provided; the construction performance specifications are also to be provided in the concession agreement. The following framework can be utilized for specifying the performance requirement.

  - Defining the construction scope: The concession agreement should specify all the structural elements and components of the project facility which is to be constructed. This will have close correspondence with the design specifications. The construction scope should clearly bring out the work required to be carried out for different components of the project facility.

  - Construction Standards: In defining the scope of development, the second aspect is to define the standards which have to be adhered to, in creation of different components, including the regulated standards which have to be achieved.

  - Construction Timelines: The concession agreement should clearly specify the timelines for various stages of the construction. Delay in achievement of such timelines should be penalized.

  - Construction Quality Plan: The concessionaire should be required to submit a construction quality plan. Such a plan should be submitted prior to start of the construction and should be approved by the independent monitor. The plan should outline the approach to and adherence to the design, applicable quality standards, time lines and tests. Tests to be conducted at different stages of construction should be elaborated along with the rectification measures required in case of

failure of such test.

8.2 Equipment Specification

In outlining the equipment specification the following framework can be adopted, wherein there is an equipment list. The implementing agency may take cognizance of the IPHS guidelines in arriving at the minimum equipment requirement for the optimal functioning of the clinical and clinical support services at the primary health clinic. This has to be supplemented by the equipment performance monitoring and maintenance plan to be submitted by the concessionaire.

- **Equipment List:** A list may be provided enumerating the equipment's in following format:

Equipment	Reference	Item Description	Further Description	Quantity	Procurement Category
Name of equipment	To Clinical/ Clinical Support/ Facility management service for which equipment would be utilized.	The specification of the equipment	The description of attachment and ancillaries	Number	By the Concessionaire/ Implementing Agency

- **Equipment Performance Monitoring:** These would need to be developed by the Implementing Agency for all equipment's, as described in the equipment list. It would require monitoring the availability and functional status of the equipment as per the following framework.

Equipment	Availability	Functional	Remarks/Suggestions/ Identified Gaps
A	Yes/No	Yes/No	
B	Yes/No	Yes/No	
C	Yes/No	Yes/No	

- **Equipment Maintenance Plan:** As the third aspect of the performance requirement the Concessionaire should be required to submit equipment maintenance plan, where in the concessionaire should list out:

    - The schedule for routine or planned maintenance for each of the equipment.

    - The planned replacement of the equipment depending upon the equipment life

    - Reactive maintenance plan, where in the equipment should be categorised into rank order of importance/criticality for delivery of different health services. Based on this categorisation adequate

timelines for rectification of problems should be mandated in the concession agreement. Non-rectification within the timeline should be regarded as quality failure.

- Where service failure is being monitored and service standards are in place, separate penalty for equipment failure should not be warranted. However, adequate protection should be there for continued non-availability of the mandated number of equipment's. This will constitute a quality failure.

8.3 Performance specification of clinical and clinical support services:

- **Introduction:** The key objective of the Primary Healthcare Clinic project is to provide primary healthcare services to different types of patients. Depending on the project scope, the Primary Healthcare Clinic may have to provide wide range of services to inpatients and outpatients.

  - Clinical Services: The clinical services would cover the following.

    - Medical Care: Under medical care PHC has to provide OPD services, 24 hours emergency services, referral services and in-patient services for four- six beds.

    - Maternal and child health care including family planning: This may include ante natal care; inter natal care, referral, post natal care and new born care. Also to provide child care and family welfare services, medical termination of pregnancies, management of reproductive tract infection and sexually transferred infections, and adolescent healthcare services etc.

    - Selected surgical procedures: PHC may provide selected surgical facilities the vasectomy, tubectomy (including laparoscopic tubectomy), MTP, hydrocelectomy etc.

  - Support clinical services: The support clinical services would include basic laboratory and diagnostic service, referral services, patient data and report capturing and integration with the existing referral hospital network. etc.

- **Service Specification:** It is important that a detailing of the services to be delivered in the project facility is carried out. The concession agreement should bring out the output specification for delivery of the clinical and support clinical services. The framework for performance specification of clinical and clinical support services is provided below:

S.N	Parameter	Detail
1.	Essential Service	Availability of OPD services and its components Availability of IPD services and its components Availability of Emergency Service and its components Availability of Surgical Services and its components Availability Referral services and its components Availability of Laboratory Services and its components Patient Data Management
2.	Minimum hours of operation	The availability of each service in terms of hours and days. Unavailability of any of the essential service and any of its components during mandated hours will constitute service failure.
3.	Patient Management Process	The patient flow process can be worked out from entry into the primary health clinic to exit. Based on this patient flow process service standards can be established for PHC.
4.	Patient Information Management	This section will describe the information and record management for the patient. Ready availability and processing of the patient information will constitute service performance standard.
5.	Information Dissemination	Display of mandated services rates and timings
6.	Staff Requirements	Here the minimum staff required for the optimal performance of PHC may be stated. Inadequate availability of staff would constitute service failure.
7.	Service Standards	For each element of the PHC as discussed above the service standards should be specified along with monitoring frequency. Non-achievement of service standards should comprise a service failure event.
8.	Availability of Standard Operating Procedures (SOP)/Standard Treatment Protocols (STP)/Guidelines etc.	Adherence to standard Operating Procedures (SOP)/Standard Treatment Protocols (STP)/Guidelines etc.
9.	User satisfaction Survey	Provision can be made for quarterly survey of the user satisfaction survey for the services delivered.

8.4 Outcome Indicators for Clinical Performance

- **Introduction:** In addition to the service performance indicators, above the concession agreement may also include outcome based indicators to monitor the outcome of the primary healthcare services.

- **Indicative Framework for Specifying Outcome Indicator:** An ideal outcome indicator would capture the effect of processes on the delivery of relevant and accurate treatment. An example of framework for specifying outcome indicators is shown in table below.

Category	S. No	Indicators
PHC Outcome Indicators	GO1	Number of patients treated
	GO2	In-patient mortality
	GO3	% of patient serviced within service standards
	GO4	% emergency request responded within service standard
	GO5	Number of patients referred to hospitals
	G06	Patient satisfaction

- The implementing agency may take cognizance of the outcome indicators

specified under the IPHS guidelines to arrive at project specific outcome indicators.

- Outcome of care is determined by several factors related to the demography, patient, the illness, and health care. Differences in outcome may be due to case mix and other confounding factors. Standardized data collection and risk adjustment are therefore important for interpreting outcomes data.

- The Concessionaire should be obliged to provide data and reports on the specified outcome indicators on regular basis to the authority. Authority upon any deterioration overtime in any of the indicators may be empowered to take suitable remedial action.

8.5 Performance Indicators with respect to the BPL patients

- The authority may define a composite set of performance indicators to monitor the service delivery to the target vulnerable segment including the BPL patients. Here a twofold approach can be adopted;

    - Separate indices for the specified standards: Under this approach the service performance for the BPL patient can be separately tracked and maintained for the specified service standards, as developed based on the methodology outlined in the section 8.3. Similarly, performance pertaining to BPL patients can be tracked for the outcome indicators as developed based on the methodology indicated in the section 8.4. Such performance monitoring will allow a comparison on the performance standards achieved for the BPL patients with the overall performance on service delivery to patients.

    - BPL patient specific Indicators: The concession agreement may supplement above or as standalone define BPL patient specific indicators for monitoring service delivery to such patients. Such Indicators may include as below;

Category		Indicators
Service Access and Quality Indicators	BAQO1	% of BPL inpatient to total inpatient
	BAQO2	% of BPL outpatient to total outpatient
	BAQO3	% of BPL inpatient to % of BPL outpatient
	BAQ04	Average waiting time for BPL patients at the time of random check
	BAQ05	% Adherence to defined treatment protocol for BPL patients
	BAQ06	BPL complaints rectification rate

8.6 Performance Specification of facility management services

The concession agreement schedule should bring out in detail all the facility management services which are to be performed by the Concessionaire. The facility

management services in a primary healthcare clinic project will comprise of general management services, help desk services, food services, patient, housekeeping services, waste management, pest management, laundry and linen services, material services, plant service, protection services, utilities management, parking services, etc. each service should be specified and monitored based on availability and functional status.

Facility Management Service	Availability	Functional Quality	Remarks/Suggestions/ Identified Gaps
Waste Management	Yes/No	High/Medium/Low	Service Failure/Quality Failure
Pest Management	Yes/No	High/Medium/Low	Service Failure/Quality Failure
Material services	Yes/No	High/Medium/Low	Service Failure/Quality Failure

8.7 Options for Remedies of Poor Performance

The poor performance of the concessionaire has to be disincentivized through concession agreement provisions. The concession agreement should set up a defined performance regime in respect of the service delivery and based on such performance standards service failure event should be defined. The implementation of the remedies for poor performance in monetary terms is as follows:

- **Service failure event deductions:** Service Failure events are service performance failures related to services to be delivered by concessionaire within the facility including clinical, clinical support and facility management services, for example non-availability of services during mandated hour constitutes service failure. Service Failure events can be recorded through random checks by the monitoring agencies and deductions calculated on a monthly basis. Service Failure event deduction can be based on:
    - **Criticality factor**: The relative importance of the service affected by the failure event. The criticality factor can be the Rupees amount per service, detailed in the schedule and is based on significance weighting of zero to five of the service.
    - The severity of the failure event, i.e., the failure event category. The failure event category can be assessed based on the inconvenience, remaining functionality and incapacity of the service delivery resulting from the failure event and in accordance with the output specifications. Percentage deductions range from 10% for category "A" failure event or routine failures to 100% for a category "E" failure event or “unavailable or unused.”
- **Quality failures deductions:** Service performance failures are not related to delivery of services but the quality of such services, where in the services fail

to meet the quality standards outlined in the service specifications; for example the IPD service is available but the cleanliness and sterile environment is not up to specified standards. Herein a service quality failure has occurred which can be recorded and deductions can be calculated as per the specified formula. Such performance failures can be monitored monthly basis through a system of random checks or as in the case of quality satisfaction failures, on periodic basis. A quality failure deduction is based on three factors:

- Relative importance of the service in delivery of which the quality failure occurs. Each service can be given a weighting in proportion to the criticality factor.

- Severity of the quality failure, and the quality failure category, ranging from 1% for a low priority failure to 2% for a high priority failure

- Quality satisfaction failures can be assessed based on a survey of services' users; failure deduction percentage ranges from 0.5% for a minor failure to 2% for a significant failure.

- **Incorporation in payment mechanism:** Both the deductions have to be incorporated in the calculation for payment due for the period in which the failure event occurs. In cases where the concessionaire is not being paid by the Implementing Agency in any form, the penalty will be recovered by the Implementing Agency on a monthly basis.

9. PERFORMANCE MONITORING

- **Introduction:** There must be a mechanism under the concession agreement which enables the Implementing Agency to monitor the concessionaire performance against the performance requirements so that the project can operate effectively. The Implementing Agency should also be able to identify performance problems so that remedies for poor performance can be pursued if necessary. This entails a need for mechanism to ensure monitoring of the project.

- **Levels of Performance Monitoring:** Depending on the project magnitude, the monitoring should occur at five levels:

  a. *Independent Monitor:* The concession agreement must provide for an independent monitor to review the performance against the performance indicators. There may be a need to appoint following independent monitors during the construction phase and the operations phase of the project.

- Independent Engineer: An independent engineer can be appointed for monitoring during the construction phase to inspect, test and monitor the construction works. In the operations phase the independent engineer would be responsible for inspection, verification and testing for building and equipment maintenance requirements.

- Independent Health Consultant: In the operations phase, the independent health consultant will be required to monitor clinical, support clinical services and facility management services as per the required performance standards. Such Consultant should be appointed prior to operations date so that they can be part of testing of equipment's prior to issue of completion certificate.

b. *Concessionaire:* A systematic self-monitoring by the concessionaire through a quality management system, measuring availability and performance of services to the specified performance standards. The concessionaire should report the outcome of such monitoring on a periodic basis (monthly) to the independent monitor.

c. *User Satisfaction Survey:* The ability for users to report failures by way of including the complaint mechanism and user survey provisions.

d. *Accreditation Requirement:* The concession agreement will provide provisions for requirement of accreditation from specific agencies, such as National Accreditation Board for Hospital for primary health clinic.

e. *Disclosure on Website*: The concession agreement will provide that the Primary Health Clinic should update on its website on weekly basis the facilities used by and available for BPL Patients. Further, in order to provide transparency, all reports should be published at the website of the concessionaire for the primary health clinic.

- **Recommended performance monitoring mechanisms:** There is no single best option; the most optimal approach is to have a multi-layered monitoring framework. In the multi-layered framework the key elements will be the Independent Monitor and the user satisfaction survey. Around these elements other options can also be included in the concession agreement. The layered approach to monitoring provisions needs to be in line with the magnitude and scope of the project. This will ensure that where it is possible to have a less onerous system, it will be in the interest of all parties to do so. Equally, where the scope is large and project magnitude demands, a rigorous monitoring system needs to be specified in the concession agreement.