

Draft

Bid Invitation Notice for “Public –Not for Profit Partnerships” in the Operation and Maintenance of Primary Health Centres and Sub Centres

Date of Issue of Invitation of Bids _____

Last Date for Submission of Bid: 3 P.M. on _____

1. Introduction

- 1.1 India has made rapid progress in the past few decades in the Public Health System as reflected improvements in key parameters such as Infant, Child and Maternal Mortality Rates, Total Fertility Rate, and Crude Death Rates. There has been improvement in expanding access and coverage in much of the country. This has largely been achieved by strengthened public health systems over the years, and substantially accelerated by the National Health Mission (NHM). NHM support was largely targeted towards improving primary health care and some components of secondary care- i.e strengthening service delivery at district and sub district levels.
- 1.2 Despite these improvements, comprehensive primary health care in India is yet to be made fully universal. Access to primary health care remains uneven across the length and breadth of the country. The wide variations in capacity, governance and institutional structures and state investments in health have determined the extent to which the NHM support has improved health care particularly for the vulnerable, marginalized and those living in underserved areas such as remote rural geographies and urban slums.
- 1.3 Inadequate primary health care is reflected in the escalating demand for secondary and tertiary care services resulting in overcrowding of facilities at these levels leading to high costs and poor health care. There is enough evidence to demonstrate that quality primary health care mitigates costs and suffering.
- 1.4 With a view to further improving the quality of the primary health care in terms of clinical care and outreach services, **GOVERNMENT OF <STATE>**, considers it desirable to hand over the functions and responsibilities of operating and maintaining a few selected Primary Health Centres (PHCs) combined with its Sub Centres (SCs) in selected areas to a concessionaire who would be allowed to maintain and operate such facilities in accordance with the terms and conditions laid down in this Service Level Agreement. Government hopes that this would bring about considerable improvement in provision of competent clinical care and community outreach services including public health functions in these areas in the State.
- 1.5 Government views the arrangements as Public Private Partnership in the Public Health System in India. Such a partnership is seen as a step towards strengthening the Public Health System and as a measure towards facilitating and building the capacity of the state to manage such facilities by demonstrating models for comprehensive PHC, with emphasis on active community engagement.

1.6 The partnership will be initially for a period of five years subject to review and confirmation of the arrangement after one year. Annual performance reviews shall be undertaken. At the end of the fifth year, renewal of the partnership will be considered on the basis of the evaluation conducted by an external agency..

1.5 Such partnership should not be seen as a measure of the government, abdicating its responsibility to provide public health services, but rather as a transitional measure towards facilitating the state to be able to manage such facilities after the term of the partnership ceases. Under some circumstances- Left Wing Extremism (LWE) affected areas, remote areas, a longer term partnership over several years could be necessary, but even here ultimately the state must equip itself to provide such services

1.6 The spirit of such a Public Private Partnership is essentially to share risks and rewards in such a manner so that comprehensive primary health care can be provided to those who need these services. Government recognizes that such partnerships with organizations that have competence and credibility offers the governments avenues to leverage the knowledge and expertise of such organizations to improve management and delivery of comprehensive primary health care services.

1.7 Government expects that the concession granted will not be treated as a business venture and will not be used to make profits. Recognizing that a reasonable surplus of income over expenditure annually, will be desirable for sustainability of the PPP arrangement, it will be desirable that such surplus generated by the facilities should be utilized solely for further improvements in the services provided by the facilities. Such surplus would be generated through the 10% assigned as overhead over the fixed component and 50% as part of the variable component allocated to the concessionaire .

1.8 Bidders may note that this is an invitation for bids solely comprising of technical bid without an accompanying financial bid.

2. Definitions

(a) Concession: Concession is the permission accorded by the Government to operate and maintain one or more “facilities” for a definite period.

(b) Concessionaire: The term “Concessionaire” means the legal person or entity which is awarded the concession to carry out the functions in terms of the Service level agreement in the facilities.

- (c) Facilities: Facilities would mean a set of one Primary Health Centre and Sub Centres attached to it.
- (d) Service level agreement : Service Level Agreement would in its scope and meaning would also be treated as a concession contract. A concession contract is a contract between the contracting authority and the concessionaire that sets forth the terms and conditions for maintaining and operating the facilities.

3. SERVICE DESCRIPTION AND RESPONSIBILITIES

3.1 The basic unit of service delivery would be the Primary Health Center and all sub centers affiliated to it. The services should include the comprehensive primary health care package encompassing all outreach, including behavioural change through health education and health promotion, clinical and public health services. The conditions listed for preventive, promotive or curative action are be broadly categorised into the following groups:

- (i) Care in pregnancy and child-birth. (the latter would be provided in specific facilities based on the state context).
- (ii) Neonatal and infant health care services and nutrition
- (iii) Childhood and adolescent health care services including immunization.
- (iv) Family planning, Contraceptive services and Other Reproductive Health Care services
- (v) Management of Common Communicable Diseases and General Out-patient care for acute simple illnesses and minor ailments
- (vi) Management of Communicable diseases: National Health Programmes
- (vii) Screening, and Management of Non-Communicable diseases including promotion of healthy life style
- (viii) Screening and Basic management of Mental health ailments
- (ix) Care for Common Ophthalmic and ENT problems
- (x) Basic Dental health care
- (xi) Geriatric and palliative health care services
- (xii)** Trauma Care (that can be managed at this level) and Emergency Medical services

3.2 List of Services to be provided at the PHC and Sub Centre level are given at Annexure A to this Notice. This is an indicative list and not an exhaustive list

4. Bid Invitation

4.1 Government of <State> invites bids from organizations eligible under Clause _____ of this notice to operate and maintain the following Primary Health Centres(PHC) and the Sub Centres(SCs) attached to the PHCs. The PHCs to be covered include:

(a) PHCs in blocks with low performance indicators i.e., low coverage on immunization, OPD, and poor coverage of Village Health and Nutrition Days

(b) PHCs with high vacancies in MO/Staff nurses for over two years

c) In urban slums – organizations which have the infrastructure to provide primary health care where government infrastructure does not exist.

Sl No	District	Name of the Primary Health Centre	Sub Centres attached to the PHC

4.2 One PHC and Sub Centres attached to it will together be termed as “Facilities”. Bidders are invited to bid for more than one “Facilities”. Government reserves the right to decide on the number of facilities for which concession to operate and maintain will be awarded to any bidder.

4.3 Successful bidders who are granted the concession will be required to complete the formalities enjoined in this Notice and will have to sign the Service level agreement for each of the facilities. A draft Service level agreement is attached to this Notice.

4.4 Bidders are encouraged to study the draft Service level agreement and other conditions carefully.

5. Eligibility

5.1 The following Organizations are eligible to apply:

- (a) Registered Society with provision of health services, health care, primary health care, or any other health related services in its memorandum of association;
- (b) Trust formed to solely provide health services, health care, primary health care or any other health related services;
- (c) Medical colleges including private medical colleges;
- (d) Hospitals run under the aegis of Public Sector and Government Companies and Institutions;
- (e) Section 8 Companies under the Companies Act 2013 (erstwhile Sector 25 Companies under Companies Act 1956) with provision of healthcare as one of the businesses in the memorandum of association.

5.2 To be eligible to apply, an organization must be in existence for at least 5 years as on 31 December 2015. Organizations established after 31 December 2010 are not eligible to apply.

5.4 One person Companies are not eligible to apply.

5.5 The Organizations must produce demonstrable and verifiable evidence of providing clinical, outreach and public health services at the primary healthcare level for a minimum period of five years continuously.

5.6 The Organization must have must have medical (MBBS), paramedical and community health staff on the rolls for more than three years in the last five years.

5.7 The Organization must have an annual expenditure /turnover of at least Rs 25 lakhs per annum for the last five financial years preceding the current year.

5.8 The Organization must be willing to sign the service level agreement.

6. Bid Proposal

6.1 The Organizations fulfilling the above conditions may submit the following information/ documents along with a covering letter on its letterhead (Page 1) indicating clearly the facilities that they would seek concession to operate and maintain.

- (i) Name, Address, Registration details of the Organization (Information) (Page 2);

- (ii) Copy of the Registration Certificate or equivalent certificate (Document 1);
- (iii) Copy of the Memorandum of Association or equivalent document (Document 2);
- (ii) Names of the Office Bearers along with their addresses for the last five years (in case of Trusts and Registered Societies) / Names of the key Personnel along with their addresses for Other Organizations for the last five years / Names of the key personnel for the last five years (Information)(Page 3-7);
- (iv) Annual Reports of last three years (Documents 3-5) (In case of hospitals run by the PSUs, annual reports of the PSUs; (Organizations not preparing annual reports should provide legitimate reasons for not preparing the same.)
- (v) Copy of the resolution of the competent authority in the Organization authorizing the signatory to respond to this invitation (Document 6);
- (vi) Annual Financial Statements duly audited with audit report attached for the last 5 years preceding the current year (Documents 7-11)
- (vii) A document containing the vision, mission and organizational structure of the Organization (Document 12);
- (viii) A document containing details of the activities undertaken by the Organization during the last five years (Document 13);
- (ix) A document containing the details, which inter alia must include the names, addresses and educational qualifications, of key personnel employed by the Organization during the last five years including those employed at the time of submission of this bid (Document 14).
- (x) A short document containing a maximum of ten achievements of the Organization during its lifetime clearly indicating outputs and outcome (Document 15).
- (xi) A short document containing descriptions of activities of the Organization in the primary health care system in any parts of India emphasizing (a) geographical area (b) outputs (c) manpower dedicated to projects (d) outcome (Document 16).
- (xii) A document containing the IT capacity of the Organization indicating capacities in terms of (a) hardware (b) application software (c) usage (Document 17).
- (xiii) Income Tax and Other Tax registration certificates (Document 18).
- (xiv) An undertaking that the Organization is willing to sign the service level agreement. (Document 19).

(xv) A certificate that no criminal/civil case is pending against the Organization or any of its office bearers in any Court (Document 20).

(xvi) A document containing details of any past criminal or civil case against the Organization or any of the Office bearers. A NIL certificate will be required. (Document 21).

(xvii) A certificate that the bidder has never been “blacklisted”/ debarred from participating in any tendering process by any State Government/ Central Government institutions. The bidder may provide details of circumstances of the cases.

6.3 The bid proposals will have to be accompanied by Earnest Money Deposits submitted separately. Registered Societies and Trusts will have to pay an EMD of Rs 10,000 (Rupees Ten Thousand only) in the form of a Demand Draft or Banker’s Cheque. Others will have to pay an EMD of Rs 100,000 in the form of a Demand Draft or Banker’s Cheque. The EMD will be refunded after selection of the successful bidder. No interest will be paid on the EMD.

6.4 Bid proposals not accompanied by EMD will not be opened. EMD of the bidder will be forfeited if it is discovered that the bidder has submitted false or forged or incorrect or misleading documents or information.

6.4 All these information and documents must be submitted with clear indication of the Page Number/ Document Number as per above. In case the document contains more than one page, it should be properly bound and identified with clear heading on the first page. All pages must be signed by the authorized signatory.

6.5 The bid proposals shall be valid for a minimum of 180 days. Government may should the circumstances so require request the bidders to extend the validity beyond 180 days.

7. Financial Bid

7.1 No financial bid is required to be submitted. The proposed financial arrangements may be seen in the draft service level agreement.

8. Methodology of selection

8.1 The State Government will form a technical committee of experts with 5 members comprising both internal and external experts. The number of external experts will be at least two. The internal and external experts will provide a signed certificate that they are not and were not associated during the last 10 years, either directly or indirectly, with any of the organizations that will be considered by the Committee for last ten years.

8.2 A list of the key criteria that could be used to appraise and rank proposals is attached at Annexure 2. States could add additional criteria, but would retain the key criteria. Each criterion would be assigned a weightage to be decided by the technical committee, since this

could vary between states and depends on the context. The technical committee must meet once before the opening of bids to review the criteria and assign weightage based on which the proposals would be ranked. The bids will not be opened unless the criteria and weightage for ranking the proposals have been finalized.

8.2 The technical bids will be opened on a pre-decided date, venue and time that will be communicated to all bidders at least 10 days in advance. The bidders will be allowed to be present during the opening of the bids.

8.3 All technical proposals will be placed before the technical committee. The committee will rank the proposals based on the criteria decided beforehand by awarding score for each criteria. The first three ranked proposals would be shortlisted for field appraisal.

8.4 The technical committee will also devise scoring system for field appraisal.

8.4 A team to be formed by the State Government will undertake field appraisal of the bidders within 45 days of the date of finalization of ranking. It is desirable that at least one member of the technical committee would be an observer for the field appraisal process. The report of the appraisal team will be placed before the Committee.

8.5 Final ranking of the bidders will be done by the technical committee by adding rank scores and field appraisal scores.

8.6 The bidder with the highest score will be ranked No 1 and will be offered the concession.

9. Post Selection Procedures

9.1 The State Government will conduct the required enquiries about the Organization selected.

9.2 After approval of the competent authority in the State Government, the Organization will be informed in writing of its selection for the concession. This will be the letter of award of the concession.

9.3 Within 15 days of the issue of the letter of award of the concession, the Organization will be required to inform the State Government in writing of its acceptance or otherwise of the award failing which, the Government will be free to offer the concession to the 2nd rank holder.

9.4 The Organization on acceptance must provide the State Government a bank guarantee for Rs 200,000 (Rs Two lakhs only) from a nationalised bank valid for a period of minimum six years.

9.5 On completion of these formalities, the State Government will inform the Organization the date of signing the service level agreement.

10. Other Conditions

10.1 The State Government at its discretion may hold a pre-bid meeting.

10.2 Once the bid is submitted, no additions/ alterations will be allowed or entertained.

10.3 If any bidder submits additional documents after the last date of submission of bid is over, such documents will not be considered and will not be placed before the technical committee.

10.4 Any effort of any bidder to bring in extraneous influence on the selection process will lead to summary rejection of the bid.

Annexure A: List of services to be provided

Health Condition: Numbers / 1000/yr	Care in the Community/Household visits/Community level meetings/School health Delivered by ASHA/AWW/School teacher	Care at the Sub Center outreach sessions Delivered by ANM/Mid level service provider	Care at the first referral site- PHC
1. Care In Pregnancy-Maternal Health. 20 to 30/1000 population	Early diagnosis of pregnancy, Counselling, support throughout pregnancy and delivery and motivation for institutional delivery, Nutritional information, Hygiene, Nutrition, Enabling Take Home Rations (THR) for pregnant woman through Anganwadi Worker, Identifying high risk births, facilitating referrals, helping birth planning, post partum complication identification/support	Early registration, Regular Ante-natal check-ups; includes Screening for Hypertension, Diabetes, Anaemia, Immunization for mother - TT, Iron-folic Acid & Calcium Supplementation , MCH cards, Identification of High Risk Pregnancy and referral Antenatal High Risk Cases. Post Natal Cases High Risk, Abortions, Normal Vaginal Delivery in specified delivery sites where Mid level provider or ANM is trained as a Skilled Birth Attendant	Stabilization Antenatal in High Risk Cases. Post Natal Cases High Risk, Normal Vaginal Delivery, Complicated Deliveries Ante-Partum & Post-Partum Haemorrhage, Eclampsia, Puerperal Sepsis,
2 Neonatal and Infant Health (0 to 1 years of age) 20/1000 population	:6 house hold visits in neo-natal period for improved newborn care practices, identification and care of low birth weight/preterm newborn (with referral as required) , counselling and support for early Breast Feeding, improved weaning Practices, Identification of Birth Asphyxia, sepsis, . Identification of congenital anomalies and appropriate referral Family/community education of Prevention of infections -ARI/Diarrhoea- identification and initiation of treatment- ORS/	Complete Immunization, Vitamin A Supplementation, Monitoring and assisting VHND : Care of Common illnesses of new born, AGE with mild dehydration, pneumonia case management, Treat, stabilize and refer sever cases. Where deliveries take place: asphyxia management, newborn screening;	Birth Asphyxia, severe ARI, Diarrhoea management, treat,
3 Child health,	Growth Monitoring, Prevention	Detection & Treatment	Management of

	Health Condition: Numbers / 1000/yr	Care in the Community/Household visits/Community level meetings/School health Delivered by ASHA/AWW/School teacher	Care at the Sub Center outreach sessions Delivered by ANM/Mid level service provider	Care at the first referral site- PHC
	Adolescent health 234 children/1-10 Years of age 143adol./11-18 years of age	through IYCF counselling, access to food supplementation- all linked to ICDS Detection of SAM, referral and follow up care for SAM. Prevention of Anaemia, use of iodised salt; de-worming Prevention of diarrhoea, prompt and appropriate treatment of diarrhoea/ARI, referral where needed. Pre-school and School Child: Biannual Screening, School Health Records, Eye care, De-worming; Adolescent Health services: peer counselling, life skills education, personal hygiene,	of Anaemia and other deficiencies in children and adolescents Early detection of growth abnormalities, delays in development and disability Prompt Management of ARI and fever, Skin Infection, acute Diarrhoeas, Adolescent health-counselling, referral as per need	SAM children, severe anaemia, or persistent malnutrition, Severe Diarrhoea, & ARI management, Diagnosis and follow up plan for disability and delays in development
4	Reproductive health and Contraceptive Services 170 eligible couples-	Preventive education for early marriage, Identifying eligible couples, and motivating for Family Planning- delaying first child, spacing between two children, Access to spacing methods- OCP, ECP, condoms. Education and mobilizing for action against gender based violence Knowledge of and referral for RTI/STI, recognition of gender based violence	Counselling for Family Planning. Access to all spacing methods including IUCD Medical abortion RTI treatment- Syndromic First aid for GBV- link to referral centre and legal support centre.	IUCD, Vasectomy, Tubectomy, RTI/STI diagnosis and treatment, Manual vacuum aspiration, Hormonal & menstrual disorders tract infections and
5	Management of Chronic Communicable Diseases- Approx. 6 to 20 cases. – plus 1000	Tuberculosis; HIV, leprosy, Malaria, Kala-Azar, Filariasis, Other vector borne disease- prevention, identification, use of RDT/prompt treatment initiation, vector control measures examination, follow up medication compliance- Prevention – mass drug administration in filariasis, immunization for Jap B, RDK testing and treatment for	Tuberculosis; HIV, leprosy, Malaria, Kala-Azar, Filariasis, Other vector borne disease Diagnosis treatment plan, follow up diagnostics, RDK + Lab testing and treatment for all vector borne disease	Confirmation of diagnosis, Management of Complications, Treatment Plan

	Health Condition: Numbers / 1000/yr	Care in the Community/Household visits/Community level meetings/School health Delivered by ASHA/AWW/School teacher	Care at the Sub Center outreach sessions Delivered by ANM/Mid level service provider	Care at the first referral site- PHC
		malaria		
6	Management of Common Communicable Diseases & Basic OPD care- (acute simple illness)	Symptomatic care for fevers, URIs, LRIs, diarrhoeas, Skin infections/Abscesses- identify/refer Symptomatic care for aches and pains	Diagnosis and management of common fevers, ARIs and diarrhoeas, and skin infections. (scabies, abscess) Management of common aches, joint pains, common skin conditions, (rash/urticaria) Indigestions, gastritis Acute febrile illness,	Diagnosis and Management of all fevers, gastroenteritis and skin infections,
7	Management of Common Non-Communicable Diseases	1. Hypertension- Screening, Primary and Secondary Prevention 2. Diabetes mellitus – Screening , Primary and Secondary Prevention 3. Silicosis, Fluorosis – Preventive action, early case identification, 4. Chronic Obstructive Pulmonary disease (COPD), and Asthma: Early detection, prevention- primary and secondary, 6. Epilepsy- early case identification, Mobilize +35 age group for NCDs for screening at Village Level	Hypertension- Medication, enable specialist consultation, Follow up measurements, Diabetes mellitus – Medication, follow up diagnostics, enable specialist consultation early referral for complications Cancers - Cervical, Breast, Oral- Screening, early referral. Silicosis, Fluorosis – follow up care Chronic Obstructive Pulmonary disease (COPD), and Asthma- Medication, follow up care	Hypertension- Medical management Diabetes mellitus – Medical management including complications Diagnosis, part of treatment and follow up- Cervical, Breast, Oral- Silicosis, Fluorosis – diagnosis, Chronic Obstructive Pulmonary disease (COPD), and Asthma- diagnosis, treatment plan Epilepsy- diagnosis, treatment plan

	Health Condition: Numbers / 1000/yr	Care in the Community/Household visits/Community level meetings/School health Delivered by ASHA/AWW/School teacher	Care at the Sub Center outreach sessions Delivered by ANM/Mid level service provider	Care at the first referral site- PHC
			Epilepsy- Medication, early referral for complications	
8	Management of Mental Illness	Screening for mental illness- using screening questionnaires/tools Community education and Preventive measures against Tobacco use and Substance Abuse, Identification of people for De-Addiction Centres,	Detection and referral of mental illness, follow up medication, counselling/support Confirmation and referral for de-addiction Management of Violence related concerns	Diagnosis and Treatment Plan for mental illness.
9	Dental Care	Education on Oral Hygiene & Substance Abuse, in community and schools- dental fluorosis- recognition	Dental hygiene - Screening for gingivitis, dental caries, oral cancers Treatment for glossitis, candidiasis (look for underlying disease), fever blisters, aphthous ulcers;	Tooth abscess, dental caries, scaling, extraction,
10	Eye Care/ENT care	School : Screening for blindness and refractive errors, Community screening for congenital disorders and referral, Counselling and support for care seeking for blindness, other eye disorders -first aid for nosebleeds, screening for congenital deafness, recognizing acute suppurative otitis media, other common ENT conditions, referral	Eye care in newborn, Screening for visual acuity, cataract and for Refractive Errors, Identification & Treatment of common eye problems- conjunctivitis; spring catarrh, xerophthalmia, first aid for injuries, referral Management of common colds, ASOM, injuries, pharyngitis, laryngitis, rhinitis, URI, sinusitis	Cataract Blindness, Glaucoma, Trachoma,

	Health Condition: Numbers / 1000/yr	Care in the Community/Household visits/Community level meetings/School health Delivered by ASHA/AWW/School teacher	Care at the Sub Center outreach sessions Delivered by ANM/Mid level service provider	Care at the first referral site- PHC
11	Geriatric Care	Support to family in palliative care	Management of common geriatric ailments; counselling, supportive treatment, Pain Management and Provision of palliative care with support of ASHA	Referral care, diagnosis and treatment plans
12	Emergency Medicine	First Aid and First responder training for school teachers, Anganwadi workers and ASHAs.	Snake bites, scorpion stings, insect bites, dog bites Stabilization care in poisonings, trauma of any cause Minor injury, abscess management	Treatment of poisoning, management of simple fractures, basic surgery and surgical emergencies.

Annexure B: Criteria for screening and ranking proposals

All eligibility conditions detailed in the Bid document must be met. For technical screening the reviewer will assess the bid against the five major criteria listed below. Each of the five criteria is allocated twenty points. Within each criteria there are suggestions for additional weightage which states can modify based on their specific contextual challenges.

1. Organization's work in inaccessible areas (Twenty points):

Experience of five years or more,

- working in remote, rural areas
- high priority districts/blocks or urban slums (if agency is being selected for urban PHC).
- Left Wing extremism affected districts
- Areas where there are no facilities for primary health care within a half hour walking distance
- Working with vulnerable populations such as SC/ST, Minorities, Homeless, Migrants
- Experience in establishing a referral network for secondary care - Experience in using public sector facilities for referrals would be preferred.
- Experience in making available basic drugs and diagnostics/linkages for such services that are sensitive to poor and marginalized groups.

2. Range of Services provided: (Twenty Points)

- Experience in providing comprehensive primary health care services **would be preferred over single, vertical interventions**- such as eye care, or TB control alone, or HIV/AIDS alone.
- Experience of providing reproductive and child health services
- Experience in service delivery for marginalized populations through the use of Mobile Medical Units, or innovative combinations of clinic and referral services
- Evidence of robust monitoring and information systems for data collection and feedback.

3. Outreach/Community Based services: (Twenty Points)

- Experience in community based health education and promotion would be preferred over those agencies that have clinical care experience alone.
- Experience of providing community level outreach services- through camps or clinics,
- Experience in building or strengthening community collectives (village committees, Self Help Groups - SHGs, Panchayati Raj Institutions- PRIs) for health related interventions

4. Staffing: (Twenty Points)

- Has appropriate number of staff with an optimum skill mix to deliver primary health care services for at least three years

- Has demonstrated ability to undertake skill based training
- All staff have received regular, in service training.
- Agencies who demonstrate a core staff of an optimum number of medical officers (allopathy and AYUSH), Staff nurses and ANMs in position for over three years would be given added weightage.

5. Undertaking community level public health interventions: (Twenty Points)

- Experience of undertaking water and sanitation activities and vector borne control interventions,
- For those that do not have this experience, demonstration of partnership with such agencies to provide such services in their intervention areas.