

# Public Health Foundation of India

**Center for Chronic Conditions and Injuries**

Capacity Building Programs for Healthcare Professionals

## Implementation Guide

**2018**



**PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA**

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## INTRODUCTION

Public Health Foundation of India (PHFI), established in 2006 is a not-for-profit, public private initiative that has collaboratively evolved through consultations with multiple constituencies including Indian and International academia, state and central governments, multi & bi-lateral agencies and civil society groups. PHFI is a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of public health.

Structured as an independent foundation, PHFI adopts a broad, integrative approach to public health, tailoring its endeavours to Indian conditions and bearing relevance to countries facing similar challenges and concerns. PHFI focuses on broad dimensions of public health that encompass promotive, preventive and therapeutic services, many of which are frequently lost sight of, in policy planning as well as in popular understanding. PHFI recognizes the fact that meeting the shortfall of health professionals is imperative to a sustained and holistic response to the public health concerns of the country which in turn requires health care to be addressed not only from the scientific perspective of what works, but also from the social perspective of who needs it the most.

The mandate of PHFI is to build a 'Healthier India' and we do this by working in 3 core mission areas: a) developing the public health workforce and setting standards, b) advancing public health research and technology, c) strengthening knowledge application and evidence-informed public health practice and policy.

PHFI achieves this through an integrated set of activities in education, training, research, health system support, advocacy and communications and policy development. PHFI runs multiple capacity building initiatives in management of chronic conditions for Primary Care Physicians (PCPs) under leadership of Prof K Srinath Reddy, President, PHFI and under guidance of Prof D. Prabhakaran, Vice President - Research and Policy, PHFI and Director, Centre for Control of Chronic Conditions. The aim of these initiatives is to build the knowledge and skills of primary care physicians in Evidence based management of chronic conditions.

PHFI has built a cadre of more than 20,000 trained primary care physicians/general practitioners through these initiatives over the last eight years. The various recognitions that this model has achieved over the years include industry awards like

- BMJ India award 2014 for excellence in Medical education 2014 as finalist
- PHD Chambers award for excellence in Skill development 2015
- ASSOCHAM award for BEST NGO in Skill development in 2016-17
- Platinum Award in 11<sup>th</sup> QCI - D.L. Shah Quality Award 2017

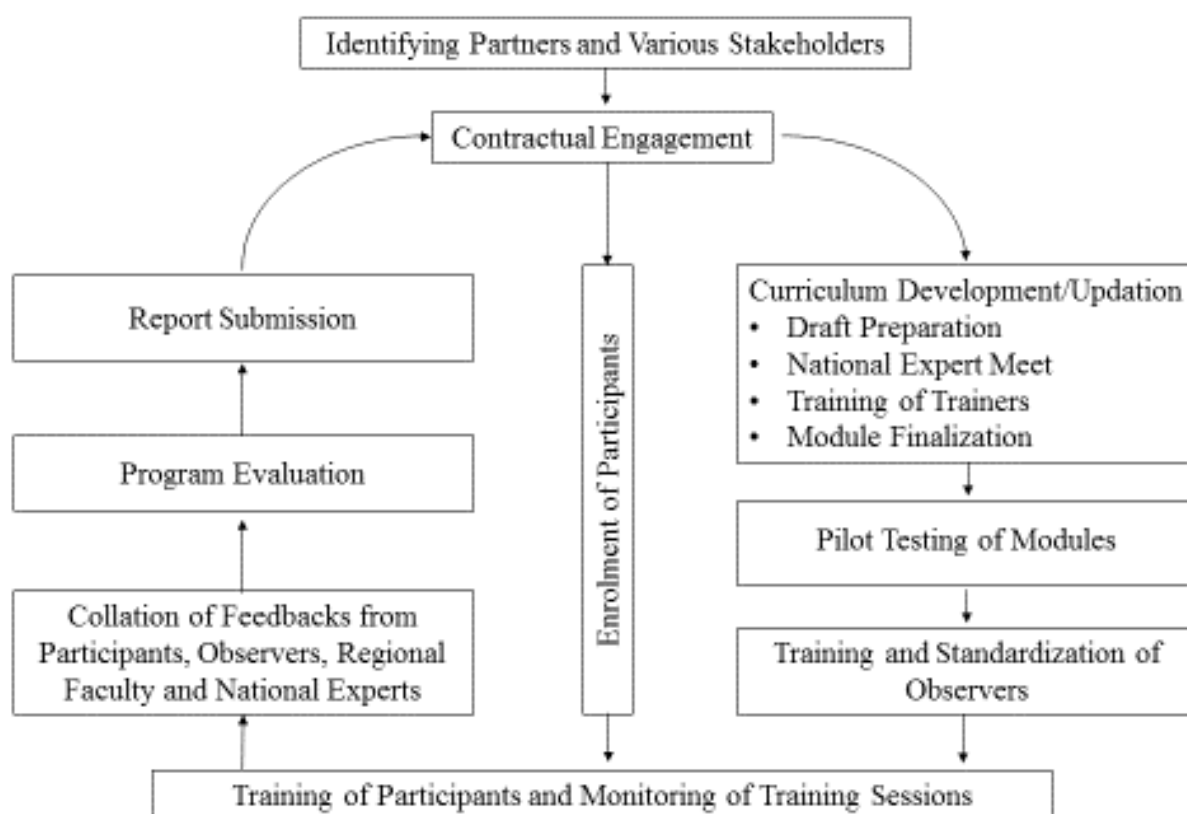
IDF (International Diabetes federation) recognition of 2 courses (CCEBDM, CCGDM), AOTA (Asia Oceania Thyroid Association) recognition for 10 years for Certificate Course in management of Thyroid disorders (CCMTD), SAFES (South Asian Federation of Endocrine Societies) endorsement, International Primary Care Respiratory Group (IPCRG) endorsement for Certificate Course in Management of COPD & Asthma (CCCA) for 5 years, various State Government acceptance under NRHM/NHM (National Health Mission).

These capacity building initiatives are contact based sessions conducted once a month, across various centres in the country with the help of Endocrinologists / Diabetologists / Gynaecologist / Ophthalmologists /Cardiologists/ Pulmonologists who act as faculty. PHFI has strong a monitoring and evaluation mechanism for ensuring the quality of these programs. Now many other countries have also adopted this model for training of their primary care physicians.



## IDENTIFICATION OF PARTNERS

A partnership can be defined as a collaborative relationship between organizations. The purpose of this relationship is to work towards shared goals through a division of labour that all parties agree upon. Identification of suitable partners with similar vision is critical for setting up the project. For successful implementation of any program there has to be clear roles & responsibilities agreed by all partners in a form of agreement. The difficult job is not to identify good partners, but to formalise the agreements (*PHFI has ready draft templates of such agreements, can be shared on request*).



*Fig: Schematic diagram*

### Academic partner(s)

Academic partner(s) are the back bone of the initiative. Apart from preparing and providing the academic curriculum and guidance, the academic partner also provide their acceptance and branding/endorsement to the course. This helps participants to have better connect with the capacity building initiatives adopted by specific country/Organisation.

### Knowledge / Technical partner

Knowledge or Technical partner(s) are responsible for providing their valuable inputs on the draft curriculum prepared by academic partner(s). This process helps in minimizing the bias (if any), which is further discussed by expert panel for final revision. The knowledge/ technical partner(s) also provide their acceptance and branding to the course.

## Funding partner

A funding partner is any organisation/ institution/ company that provide funds as educational grant for implementation of these country-wide capacity building initiatives. The funding partner doesn't have any role in curriculum design and formulation, identification of faculty, national experts etc. The funding partner is acknowledged everywhere except the final certificates to participants. The agreement clearly mentions the disclaimer of not having any commercial interest and no roles in program implementation.

## THE PROGRAM SECRETARIAT

Program secretariat is one of the core components for successful implementation of capacity building initiatives. A Program secretariat is formed based on the scale of program and roles and responsibilities required for implementation. The program secretariat coordinates all the program management activities and is comprised of a mix of technical people for project management, monitoring & evaluation and administration. Below are the few probable positions with their roles and responsibilities. Their numbers is dependent on the scale of the programme and number of centres.

The secretariat comprises of:

1. Program Manager
2. Senior Coordinator (Program and M&E)
3. Assistant Program Coordinator
4. Assistant M&E coordinator
5. Data / Technical Assistant

## Roles and Responsibilities

### Program Manager

- Coordinate the collaborative educational training program with donor and partners
- Liaison with National experts and Faculties working with PHFI and partners for delivering the program
- Responsible for ensuring overall coordination of the field operation for the implementation for planned strategies of the project.
- In addition, He/ She will report to the Project PI on day to- day activities and coordinate the planning and conduct of workshops/meetings related to the project.

### Sr. Coordinator (Program and M&E)

- To supervise, monitor and guide the assistant program coordinator and assistant M&E coordinator working in the Project Secretariat, ensure the project deliverables on timely and corrective measures, if required.
- To develop the detailed protocols, operation manual, reporting formats and schedules for the implementation of the project.
- Develop a frame work including time frames, reporting/monitoring formats, flow charts and activities to keep track of all the critical points for monitoring and evaluation.
- Responsible for enrolling internal and external monitors, plan and organize monitor's briefing meeting under advice from Principal Investigator.

### **Assistant Program Coordinator**

- Responsible for management and coordination of all the components of capacity building initiative conducted in the framework of an inter- disciplinary multi partner collaboration across the country
- Organize and manage resources intensive National and Regional Level Meetings; this involves human resource & logistic issues and prepare and disseminate an advanced program implementation program including critical key activities and milestones.
- Expected to conduct spot and random checks and monitoring field visits for quality assurance
- Contribute to writing documentation papers and report performs with efficiency
- Developing a reporting mechanism for bringing critical and high financial priority issues to the program director/ key person.

### **Assistant M& E Coordinator**

- Prepare and disseminate advance monitoring schedule of internal and external monitoring visits to Centres and make sure that monitors receive all necessary information during their visits.
- Conduct spot and random checks and monitoring field visits for quality assurance
- Develop reporting mechanism for bringing critical and high priority issues to the notice of Project Manager, sponsors, and/or the monitors.
- Assist in developing a frame work including time frames, reporting/monitoring formats, flow charts and activities to keep track of all the critical points for monitoring and evaluation.
- Serve as associate focal point for the program secretariat for communication with renowned National Experts and Faculty, training centres and partner institutes.

### **Data/Technical Assistant**

- Prepare templates, data entry and prepare the reports and returns
- Undertake data entry, editing, cleaning, analysis and letter and report writing
- Responsible for maintaining the office files & record keeping system, enters, edits, and retrieves data.
- Process forms and manage various activities such as expenditure claims deposit forms, courier distribution logs, mandate cost reports.
- Coordinate and prepare for meetings and special events by assisting the team members.
- Maintain documentation of the field activities, e filing and preparation of progress reports
- Maintains supplies by checking stocks to determine inventory levels, anticipating requirements, placing and expediting orders, verify receipt, stocking items, delivering supplies to work station.
- Coordinate with the team for accomplishment of relevant program activities toward achieving expected results in accordance with program objectives.
- Maintain both electronic and paper filing system for storing and retrieving information on timely manner
- Design protocols for the data safety, security and regular backup

## **IDENTIFICATION OF FACULTY AND EXPERT PANEL**

### **National Expert Panel**

After placement and selection of secretariat, a panel of National Experts is identified in consensus with academic partner/technical partner/knowledge partner. The panel of National Experts to be formed for the respective courses are of given specialty (Endocrinologist/Cardiologist/Pulmonologist

/Obstetricians & Gynecologist/Diabetologists/ Ophthalmologist, etc). This panel acts as an advisory body for course content, curriculum review & contextualization of the course modalities.

As a national expert, the panel is expected to:

- Participate in review and finalization of the course content, the curriculum and the effective course delivery methods
- Attend National Expert Consultation Meet to review and finalize the curriculum
- Participate & conduct trainings for the selected Faculty at the briefing sessions in Faculty Meet
- Monitor and evaluate certain number of technical sessions at the designated centers (wherever feasible) throughout the course duration

## Faculty

The faculty selected for the course are eminent Endocrinologist/Cardiologist /Pulmonologist /Obstetricians & Gynecologist/ Diabetologists/ Ophthalmologists depending upon the course requirement. Faculty are selected for the purpose of smooth delivery of the monthly contact session across India. For each centre, one or two eminent faculty are nominated depending upon the need of the course.

**As a faculty, they are responsible to:**

- Participate in the orientation/ review meetings conducted by the National Faculty, Academic partners
- Assist in enrollment of candidate i.e. the primary care physicians
- Ensure smooth and good quality conduct of the required monthly contact sessions and exit-examination at their training site as per pre-defined guidelines and standards, which are shared prior to organizing these monthly contact sessions.
- Impart standardized curriculum to selected primary care physicians through all course modules.
- Arrange for all training aids and other requirements for imparting good training to primary care physicians.
- Conduct periodic learning and performance appraisals of the participating primary care physicians.
- Maintain all the relevant records and submit periodic academic and financial reports
- Facilitate the monitoring and evaluation activities

## ADVOCACY INITIATIVES

With the onset of the program, various advocacy initiatives instituted for advocating the course so that its reach can be increased to large group of participants. The various modes of advocacy are as follows

- I. Advocacy materials/tools
- II. Course websites
- III. Advertisement in Journals
- IV. Advocacy in Conferences
- V. Media Relations/ Press Conferences

## **i. Advocacy materials/tools**

Various advocacy materials or tools developed by PHFI Secretariat for each programs are as follows:

- **Course Brochures-** Every course has its unique course brochure which includes the details about the respective programs, its objectives, course structure and duration, course fee, modules details, stakeholders and partners' details, National Expert Panel, Secretariat
- **Course Flyers & Posters** – These are used for the advocacy of the courses for the enrolment of participants by using various platforms including conferences, mass-mailer.
- **Activity Reports** – It includes National Expert Meet Report, Faculty Meet Report, Observer Orientation Meet Report, End Line Evaluation Report and Monthly & Annual Monitoring Report, any publications for the advocacy of the course.
- **E-Mails-** Secretariat sends mails about the course and enrolment at regular intervals to the network of previous and ongoing batch participants and to the faculty.
- **SMS-** It is used for enrolment, session date and venue information, conference information to the participants.

## **ii. Course websites**

During the course, an interactive website is designed which illustrates the complete details of the course including National Expert Panel, Centres and Program Secretariat. All the informative material and course modules are available on the website for the participants and the faculty. The website is used as a medium to update the participants on major upcoming conferences.

The list of Certificate Programs with websites are as follows-

1. Certificate Course in Evidence Based Diabetes Management (CCEBDM)-  
[www.ccebdm.org](http://www.ccebdm.org)
2. Certificate Course in Gestational Diabetes Mellitus (CCGDM) - [www.ccgdm.org](http://www.ccgdm.org)
3. Advanced Certificate Course in Prevention and Management of Diabetes & Cardiovascular Disease (ACMDC) - [www.acmdc.org.in](http://www.acmdc.org.in)
4. Certificate Course in Management of Thyroid Disorders (CCMTD) - [www.ccmttd.org](http://www.ccmttd.org)
5. Certificate Course in Evidence Based Management of Diabetic Retinopathy (CCDR)-  
[www.ccdr.org.in](http://www.ccdr.org.in)
6. Certificate Course in Management of Hypertension (CCMH) - [www.ccmh.org.in](http://www.ccmh.org.in)
7. Certificate Course in COPD & Asthma (CCCA) - [www.ccca.org.in](http://www.ccca.org.in)
8. Certificate Course in Women's Health (CCWH) - [www.ccwh.org.in](http://www.ccwh.org.in)
9. Certificate Course in CVD & Stroke (CCCS) -[www.cccs.org.in](http://www.cccs.org.in)
10. Certificate Course in Healthcare Quality (CCHQ) - [www.cchq.org.in](http://www.cchq.org.in)

### iii. Advertisement in medical journals

Advertisement of the course is published at regular intervals in reputed journals for the enrolment of participants. Few of the journals are-

- JIMA (Journal of Indian Medical Association)
- JAPI (Journal of the Association of Physicians of India)
- IJO (Indian Journal of Ophthalmology)
- FOGSI (The Federation of Obstetric and Gynaecological Societies of India)

### iv. Advocacy in medical conferences

During the course, the program secretariat participates in various National and International conferences organized by partner organizations, National Experts and Faculty. These conferences act as a platform for new collaborations. In most of the conferences a concession on delegate registration fee is provided to the participants of the courses. The conference organizing committee usually provides PHFI the complimentary space/ stall and speaker slot for the advocacy of the program on request.

### v. Media relations/ press conference

During the launch of the course, press conferences are organized at various session sites by the faculty to give overview about the course and its achievements.

## ENROLLMENT

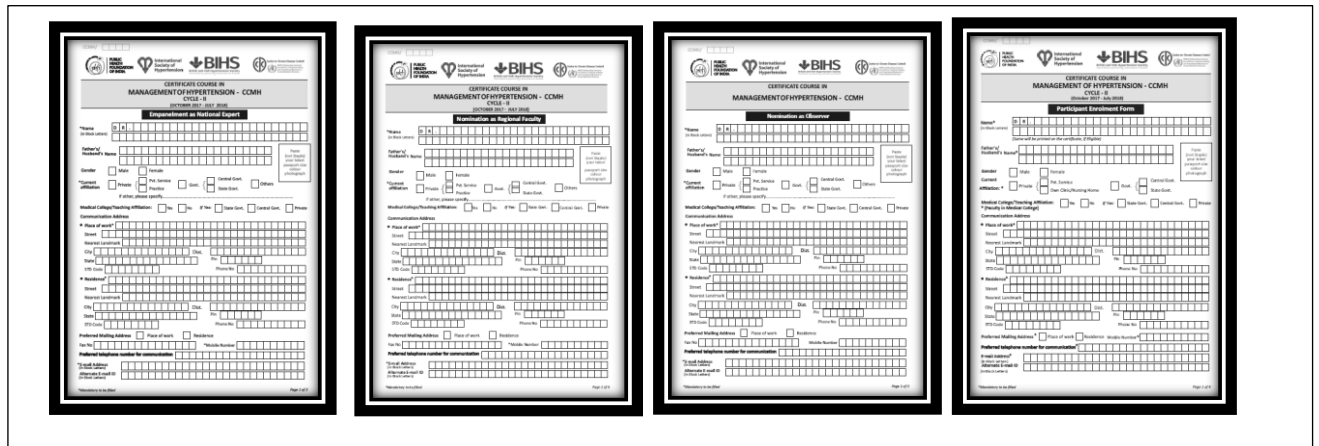
Once the stakeholders of program, i.e. National Expert, Faculty, Observers and Participants are identified, secretariat starts the preparation of application forms as well as contracts to document and establish their association with the training program. These forms are used for collection of personal details, professional credentials and the supporting documents of the respective stakeholder.

It is mandatory for all the stakeholders to duly send the forms with necessary enclosures back to Program Secretariat in the form of signed hard copies for documentation purposes. The different types of application forms used during the program are-

1. **Empanelment Form** – An empanelment form is prepared for empanelment of National Expert for the program. It encloses the personal details of National Expert along with their professional credentials.

2. **Nomination Form** - Nomination form is filled by the Faculty and Observers. It captures their personal details and professional credentials.

3. **Participants Enrolment Form** - This form documents basic information about the participants. An “Undertaking” from Faculty in the application form is mandatory for participants to apply in the program. Participants have to duly fill the complete form and attach a draft of course fees in favour of Public Health Foundation of India, payable at New Delhi; before sending it to program secretariat for enrolment in the course.



**National Expert  
Empanelment  
Form**

**Faculty  
Nomination Form**

**Observer  
Nomination Form**

**Participant  
Application Form**

## Enrollment process of participants

- Collection and verification of application form by the secretariat
- Allocation of centre to the participant
- Data entry and maintenance of records
- Dispatch of course brochure to the participants along with acknowledgment receipt of course fee
- Dispatch of course modules in the form of hard copies as well as soft copies to participants

## **CURRICULUM DEVELOPMENT/REVISION**

Course curriculum is the backbone of these capacity building programs. It comprises of technical content, disease management guidelines, case studies, group discussion, videos etc. The curriculum for the course is designed and drafted by the academic partners/ knowledge partner/ technical partner etc. The first draft of modules is reviewed by the secretariat and the same is circulated amongst all the national experts for their valuable feedback one month prior to the national expert curriculum review meet. The feedbacks given by the experts are subsequently collated by the secretariat.

The collated feedbacks are discussed in national expert meet. The main agenda of the National Expert meet is to review course curriculum and finalize the same with mutual consensus.

## Consultation Meetings

### National Expert Consultation Meet

#### **Objective of the meet**

- To review course curriculum
- To present and discuss possible changes, updates and corrections pertaining to each module
- To acquire feedback from all of the national experts and include the same
- To finalize the course curriculum with mutual consensus

To accomplish the objective of the meet, National Experts are divided into small groups to review the modules with one rapporteur from PHFI secretariat to facilitate the discussion and to record notes and comments. Each group of experts then review the designated module and suggest changes in that particular module. In the final session, one representative from each group presents their suggested changes to the rest of the attendees for their feedback. The session usually witnesses intense discussions and general consensus is sought on each topic.

The next milestone meeting in the curriculum finalization is the faculty orientation meet which is organized to apprise all the faculty on the course modalities and curriculum under the guidance of national experts.



## Faculty Orientation Meet

**(Usually conducted 1-2 months after National Expert Meet to allow time for collation and updation based on discussions of the meet)**

### Objective of the meet

- To apprise and orient the faculty on the course curriculum with the help of national expert panel members
- To acquire and adopt feedback from faculty on the course curriculum
- To have a detailed discussion on all the modules by the national expert panel so that a systematic pattern for course delivery can be adopted in all centres across the country

The modules are divided among the national experts so that they may apprise the faculty on the various key discussion points to be stressed upon during training. The program secretariat apprises the faculty on modalities of program execution at their respective training centres during this meet.

Once the national expert panel and group of faculty approve the whole course curriculum, it goes into designing and printing.

### Pilot Testing

Once the necessary changes are incorporated in the curriculum, academic partner pilot test the curriculum. The aim of the pilot testing is to identify potential problem areas and areas of improvement in the curriculum and to increase the likelihood that it will achieve its objectives when implemented. Pilot testing is done by conducting the sessions with the physicians other than the actual participants of the course.

### Curriculum Revision

Curriculum revision is usually done at the end of each cycle as it is not possible to make changes during the implementation phase of the program cycle. In the event of major changes like notification of new guidelines etc. an annexure or addendum can be shared with the faculty as well as the participants via fastest method of communication preferably email. This process is based on the feedbacks provided by the faculty, national experts, participants and observers during the sessions.

The program secretariat collates all the feedback over the course of the program cycle in the form of a feedback collation booklet

At the end of each program cycle, this feedback collation booklet is shared with the panel of national experts and academic/knowledge/technical partner for their review and discussion in the National Expert Consultation Meet for subsequent program cycle.

In the meet, panel of national experts discuss upon these comments and feedback and make the necessary changes after arriving at a consensus. Apart from these comments, panel also suggest changes based on the newly published medical guidelines, research papers to make updated and evidence based curriculum.

Following this, the academic partner makes the changes in the final curriculum before the printing and designing for the upcoming cycle. The printed modules are dispatched to all faculty, national experts and participants a month prior to launch of the next cycle of the course.

## SESSION CONDUCTION

### Pre-session activities

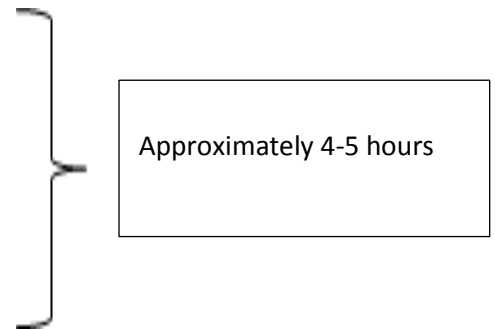
**Before session starts, the faculty will require the following:**

1. Attendance and assessment sheet
2. Pen-drive with soft copy of the modules
3. Audiovisual aids: Laptop, microphone, projector, screen, pointer
4. Pre and post-test forms
5. Facilitator's Guide

### Session activities

**Each module session consists of the following components:**

- Introduction/ recapitulation of the previous module
- Pre-test
- Lecture/ discussions
- Informative case studies
- Group work activity
- Instructive videos
- Take home messages
- Post-test with discussion of the questions
- Primer to the next module



- Session starts with the day's attendance in the attendance sheet that is been provided. Please note that to grant the participant the day's attendance the participant should be present from the start of the pre-test to the end of post-test discussions and primer of next module. The soft copy of this attendance and assessment sheet at the end of every session is archived at the secretariat.
- A short tea break halfway through the session is arranged. The session would end/start with a working meal (lunch or dinner depending on the time of session) as many participants travel long distances to take part in the sessions. faculty utilize session conduction money that is transferred one month prior to the session for arranging the audiovisual aids, venue, tea as well as working meal (lunch/dinner).
- The opening day starts with an **introduction of the faculty and the participants along with the orientation of the course**. On the other days, a **recapitulation** should precede the day's discussions. **Sessions are made more interactive by presenting interesting cases** that the faculty has come across in their practice. This is followed by **the pre-test** consisting of ten multiple choice questions (MCQs) designed to assess the trainee's baseline knowledge relevant to the day's module. **The same ten MCQs will be administered as post-test at the end of the lecture. The correct answers of all the MCQs (provided in facilitator's guide) should be discussed** with the participants at the end of post-test by facilitator.
- **At the first session, the baseline questionnaire is administered.** The same questionnaire will be administered along with final exit exam in last session. This would help understand the base-line to end-line improvement in knowledge of the participants who have completed the course.

- In addition to the pre-test and post-test, faculty are also expected to **discuss the group activity** included in the modules and to make the course as interactive as possible.
- **Case studies** form an integral part of the course. Each module contains a significant number of cases to promote discussion on the relevant topics. As for most things in clinical medicine, there might not be “right” or “wrong” answers to most of the cases, so here they are only meant to provoke thoughts and discussion amongst the participants.
- Each module barring the last module, ends with a glimpse of the topics to be discussed in the next module session. This is intended to keep up the interest level of the trainee over the following module. **As mentioned before, all sessions should conclude with the post-test, including a discussion of the correct answers of the MCQs at the end.**
- In addition to the pre-test and post-test, the **participants are expected to submit interim assignments** at specific points of time during the course.
- In the final session, **an exit examination** is carried out. The examination is in the form of 50 MCQs, including questions from all modules. A minimum of 50% marks is required to pass, which is one of the major criteria for the award of course completion certificate.

### Post session activities

- Check the pretest and post-tests
- Mark the attendance and scores in assessment sheet/score sheet
- Share the duly filled and signed assessment sheet with the secretariat

### Exit exam

The exit exam is one of the main criteria for the participants to receive the certificate of completion. The exit exam is conducted with the last module and it comprises of 50 MCQ. The participant is required to clear the exam with minimum 50% of the marks.

#### Steps to conduct exit exam –

1. Step 1: Preparation of the exit exam question paper  
Academic partner(s) will prepare 2 sets of exit exam question paper to conduct exit exam on two different dates as per the convenience of the centres.
2. Step 2: Exit exam packet  
Secretariat team prepares packet containing guidelines, SoPs, score sheets, exit exam papers (attached in annexure). Secretariat team is also responsible to make sure that each faculty receive the sealed packet a week before the date of exit exam.
3. Step 3: Information to participants  
Once the faculty finalise the date of exit exam, secretariat team share the date and timing of the exit exam with all the participants through mails and sms.
4. Step 4: Conduction of exit exam – On the day of exit exam, faculty plays the role of examiner and open the seal of the packet and distribute the question paper among the participants after completion of last module. Faculty also read out the exit exam conduction guidelines to the participants. Faculty collects the answer sheets and waits for the answer keys from the secretariat
5. Step 5: Answer Key  
The secretariat team share the answer keys to faculty via email in the same evening and communicate the same via phone or messages.
6. Step 6: Score card  
Faculty after receiving the answer key put the scores of participants on score sheet with his/ her signature at the end and the score sheet along with answer sheets to the secretariat for verification and records.

## MONITORING & EVALUATION

Monitoring and evaluation is the backbone and integral part of our capacity building programs. The monitoring and evaluation is carried out by a pool of observers and national experts. Observers are public health specialists or hospital administrators (faculty of community medicine or hospital administration from various medical colleges of India) as well as representatives from secretariat. National experts are renowned medical doctors and leaders of international or national stature in the respective field. Their main role is to guide the development and updating of the training materials, train the trainer, and act as monitors during training sessions. The capacity building initiatives engage a host of monitoring and evaluation tools to check, ensure and sustain quality of training. This mechanism has enabled to measure short-term, interim and end line outcomes during and after the program

### Observer Orientation Meeting

#### Objective of the meet

- To appraise and orient the observers on various modalities of program management, monitoring mechanism and different tools and techniques to be used for monitoring purpose
- To discuss on the monitoring mechanism to achieve a standardized pattern for monitoring across the country
- To incorporate the suggestions proposed by the observers on the various monitoring & evaluation forms and formats.

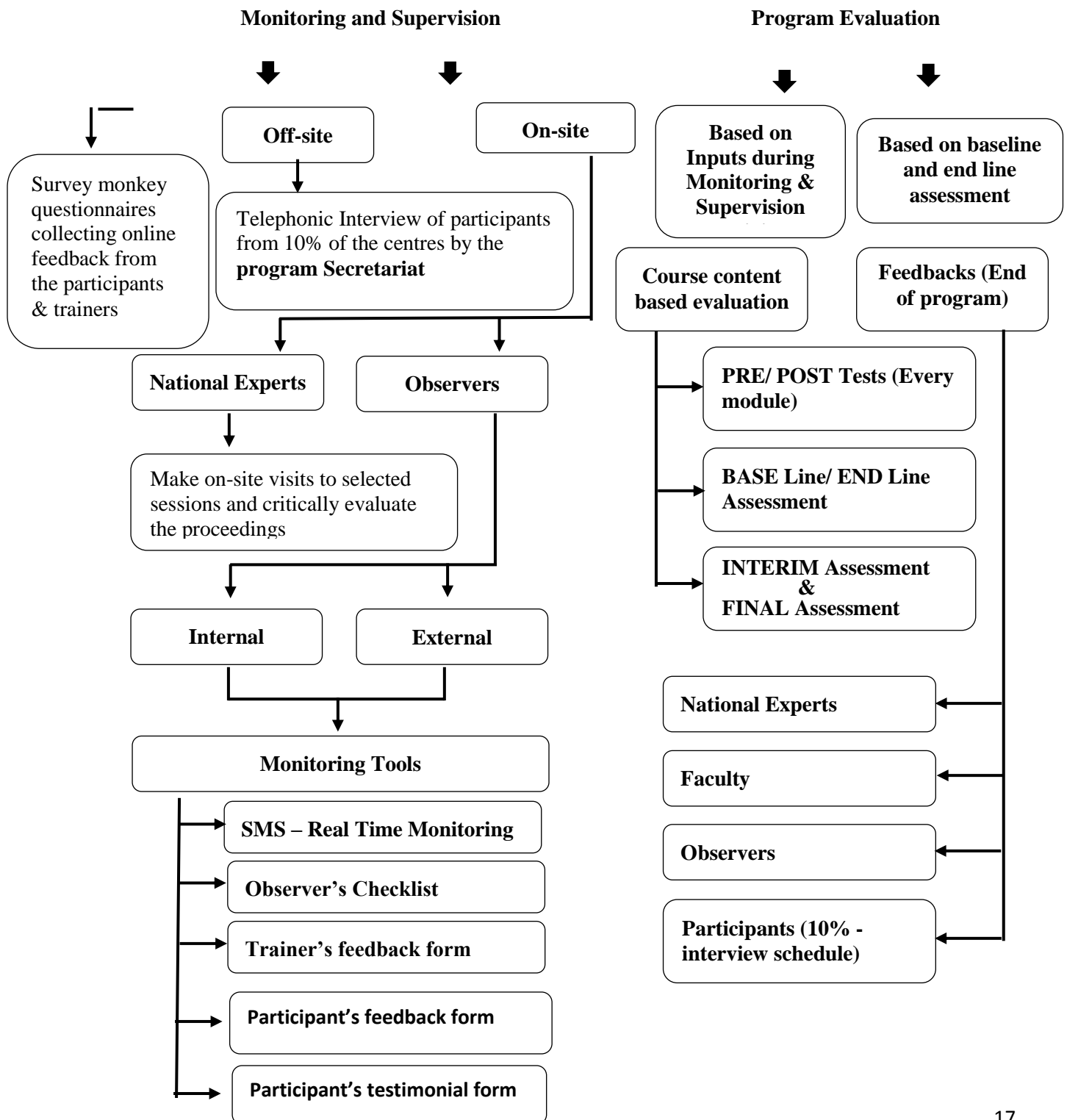
The monitoring and evaluation mechanism of PHFI trainings are envisioned as a tool for standardization, quality assurance as well as a method of feedback so that the program evolves over time. The training sessions are monitored during the entire duration of the program with the objectives of supervising the quality of sessions, determining the critical bottlenecks and difficulties faced by trainers/participants and resolve the identified problems facilitating program delivery across India.

1. Baseline assessment is carried out at the beginning of the cycle and includes questions based on knowledge on disease
2. Monitoring is carried out monthly by the team of observers and national experts and it employs predesigned and structured monitoring formats consisting of participants, and faculty feedback and observer checklist.
3. End line evaluation is carried out at cycle completion and explores areas such as knowledge, diagnosis and management practices of the participants after they have undertaken the course. End line evaluation is carried out with the objective of identifying challenges, describing disease management strategies and assessing establishment of networks between primary care physicians for the management of disease with existing specialised centres for improving patient outcomes and also to evaluate the potential improvement in service delivery.

The programs manoeuvre it's monitoring and evaluation system by encompassing baseline assessment, monthly monitoring of training sessions, end of course evaluation and end line assessment [Figure 1].

### Monitoring and evaluation mechanism of training programs

Figure: Monitoring and evaluation mechanism



The monitoring and evaluation framework of PHFI programs focusses on assessing the program's curriculum and the quality of sessions. The mechanism also assesses intermediate outcomes, for example, increased knowledge and skills of the participants in managing patients, networking opportunities and other activities which the training can plausibly influence. At the same time, it also looks at long-term outcomes such as improvement in clinical skills of the participants by maintaining a network with the participants even after completion of the course. Participants voluntarily share their success stories long after course completion, which is a hallmark of the long-term training outcome.

### **Monitoring & Evaluation (M&E) Tools**

M & E mechanism engages a host of monitoring and evaluation tools to check, ensure and sustain quality of training. Training secretariat has devised a multifaceted approach for measuring program outcomes using the survey data. The programs use a combination of onsite monitoring and evaluation tools and supplements this onsite data generated by conducting online and offsite survey research. Standardized forms and checklists which help in capturing and collection of data in a systematic and uniform manner from observers, participants and faculty have been formulated and used.

**Onsite monitoring** involves visiting 10-15% of training centres with self-administered tools for the participants, trainers and observers.

**E SMS based system:** The observers also respond via a **Short Message system** envisaged to capture responses in real time to update the secretariat on key observations on the same day of monitoring so that immediate action can be taken. The response is based on 15 identified parameters.

**Offsite Monitoring:** Telephonic interviews of participants from 10% of the remaining centres and an online feedback, on survey monkey platform is taken at the end of every module as a part of offsite monitoring to obtain specific feedback on each module to improve in the next cycle.

**End line evaluation:** At the end of the course, end line evaluation is carried out with an aim to amalgamate the overall experiences of the participants during the program. The end line evaluation questionnaire is designed after every cycle, and it consists of quantitative and qualitative questions. The process is carried out after approval from the institutional ethics committee of PHFI.

**Baseline and End line evaluation:** In addition, knowledge of the participants is assessed using a questionnaire at the commencement of the cycle (Baseline survey) as well as at the completion of the cycle. (End line survey). The questionnaire, is designed in consultation with the academic partner. It consists of multiple choice questions related to basic knowledge of disease area. The results of the monitoring and evaluation process are reported to program stakeholders in several ways including monthly and annual monitoring report and end line evaluation report on evaluation activities. All the reports are also uploaded regularly on the program web site as open resources.

**Data analysis:** The monitoring and evaluation data is entered into the database. The survey monkey online portal has an online dynamic database which saves manual data entry process. SMS monitoring system also has an inbuilt mechanism of receiving real time data and compiling and reporting on the same day.

### **Usefulness of the M & E system**

Progress on the course objective is measured by tracking changes in knowledge and skills of the participants as well as the feedback received from the trainers and observers. This progress is measured during the regular monitoring and evaluation process. Every cycle, 10-15% of centres are

monitored onsite, 100% participants are covered by online feedback, while offsite (telephonic) monitoring is conducted with 10 % participants. This process of onsite, online and offsite monitoring provides a maximum coverage of participants every module so that we receive a comprehensive feedback. End line evaluation is carried out with a sample of 10% of enrolled participants per cycle.

**Monitoring forms and formats:**

Standardized formats are prepared to collect data in a systematic and uniform manner from all the stakeholders across the country (attached as an annexure).

## **END LINE EVALUATION**

**Overview**

End line evaluation amalgamates the overall experiences of the participants during the program. The evaluation thoroughly examines inputs, processes, outputs and outcomes of the project. It measures the improvement in the knowledge and skills of all eligible participants. It will also be crucial to understand the barriers and challenges of quality NCD care and is very critical for improvising the next program cycle.

**Objectives of Evaluation:**

**Primary:**

- To identify challenges, barriers and potential solutions to improve quality of knowledge offered by the training programs.

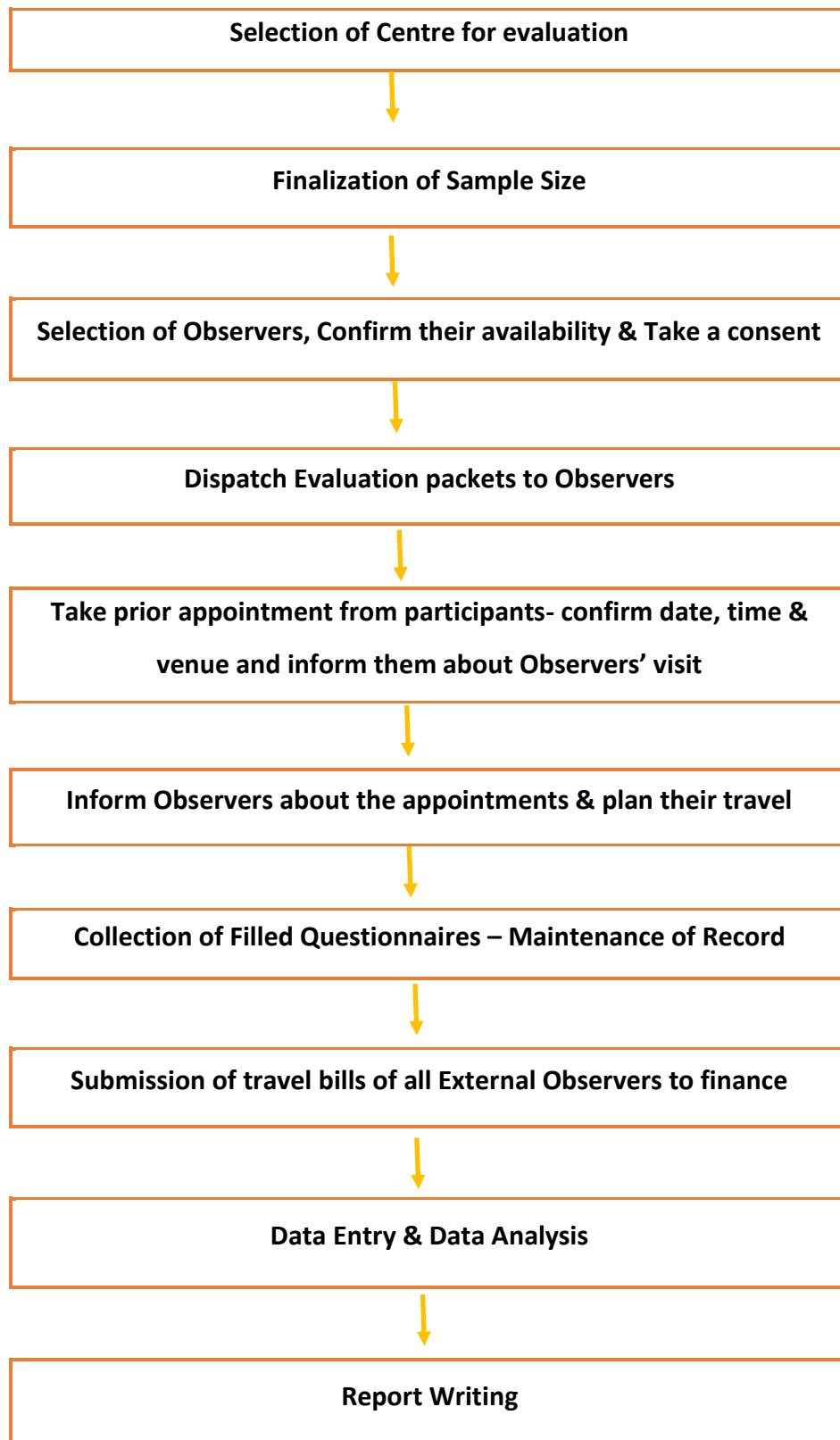
**Secondary:**

- To describe the clinic structure and NCD management strategies of clinics of the enrolled participants.
- To assess the potential for the establishment of networks between PCPs for the management of NCDs and to establish their networks with existing specialized centres/ eminent specialists for improving patient outcomes.
- To evaluate the potential improvement in the service delivery as measured by evaluation tools.

**Program Evaluation Protocol and process**

<b>Program Evaluation Protocol</b>
Designing and finalizing of evaluation tools and protocols
Submission of evaluation proposal in ethical committee for approval
Finalizing and executing onsite evaluation visits
Collation of data
Analysis of data
Approval of first draft of executive summary report of evaluation results
Preparation for dissemination meet
Executing Dissemination meet
Preparing evaluation report
Printing of evaluation report

## Evaluation Process





## **Evaluation Methodology**

### **Design:**

A mix of quantitative and qualitative methodology is utilized to implement and fulfil the study objectives of the program. A survey research study design is used in and questionnaire is designed to gather the necessary data. Findings are documented to assess the improvement in management and treatment strategies for NCDs adopted by the participants after completion of the course.

### **Sample population:**

The evaluation is conducted among enrolled Participants

### **Sample size:**

10% eligible participants out of the total enrolled participants were included in the study\*\*.

### **Sampling and recruitment:**

A cross sectional survey is conducted on NCD management strategies practiced by trained Participants (randomly selected) at their clinics spread across the country. The evaluation will be conducted by a team of Observers. The sampling is done using a two stage sampling methodology. Initially clusters should be chosen randomly and in the next stage, participants from each cluster should be chosen randomly. The sample is made more representative by including participants with MBBS and post graduate qualifications.

For the purpose of this evaluation, the following definitions will be considered:

1. Participants with Post Graduate Qualification i.e. M.D. /M.S. /DNB/Ph. D and/or DM degrees and diplomas
2. MBBS Participants/Medical graduates (with no additional degrees or diplomas)

The written informed consent is obtained from these participants and permissions to do the interviews in the clinics. Two/ three facilities are visited by one observer for the evaluation of the program and the tools used for this will be the participant self-administered questionnaire. Participant interview is done during non-patient visiting hours.

**\*\* Note: Eligible participants will be those who will fulfil the certification criteria.**

### **Evaluation Tools:**

The evaluation will be conducted by an interview schedule using a questionnaire to assess improvements in knowledge and clinical practices adopted by the -- randomly selected participants post the completion of the course. The questionnaire is used by the evaluators for making on-site observations as well as interviewing the participants about how the course has helped them in making improvements in their NCDs management practices. The

instrument is initially developed by the program Monitoring and Evaluation team and thereafter finalized in consultation with the Observer Panel. The evaluation is conducted by a team of Observers. They are oriented towards the evaluation plan and will be trained to use the tools.

**Interview schedule using a Questionnaire:** The questionnaire consists of five parts:

1. Participant information
2. Clinical Practice Structure Information
3. Feedback about Curriculum
4. Feedback about faculty, teaching methods and environment
5. Patient Management

This questionnaire is designed to obtain the participants feedback regarding improvement of their knowledge in NCD management practices after completion of the course. This tool contains both open and closed ended questions and will also allow the Evaluator to make some observations about the practice establishment of the participant, number of NCD patients being treated by the Participant etc.

#### **Preparatory Steps involved**

Planning of protocol, creation of tools, finalization of Evaluation Plan
Training of Evaluators
Submission for Ethical Board Approval
Evaluation Visits to selected participants by the Panel of Observers
Collation of Data, Data Analysis and Writing of Report
Dissemination of Report

## **DATA MANAGEMENT**

### Data definition, forms, and database design

There are different types of data that are required to be collected for the implementation of program, and during the planning phase of implementation it is important to asses through all the requirements for the implementation.

As existing forms are going to be used at the starting point, it is important that the forms should be modified if necessary, to collect only the data items which are relevant to this particular implementation. The data collection instruments, whether paper or electronic, should be available prior to the entry of the first information for implementation. Program Implementation should not be activated without data collection instruments in place, regardless of how urgent it is to start.

The design of the database for the implementation is closely related to the definition of data items to be collected. The maximum amount of data that can be entered into the database is the complete set of data collected from different forms.

## Software for data management and data entry

There are many types of software applications that can be used for implementation, but the key decisions to be made are about the software to be used for storage and maintenance of the implementation database and the software used for statistical analysis and reporting.

*PHFI has already developed data management system for managing its operation in India. We can provide the application and assistance for the management and analysis of central quality control of data and operations.*

## Central quality control of data

All data should undergo quality control checks to ensure that the data collected is complete and accurate. It is the responsibility of the Coordinating Center to implement quality control checks on all data that are submitted from participating stakeholders.

## Training and documentation

The Data Manager needs to be trained so that they understand the implementation requirements and how they fulfil them. Documentation covers detailed information about data processing. It is mandatory to keep all the documents in place.

## Defining data items to be collected

There are different types of data which is collected for the implementation of program. Along with collecting the academic data, it is also necessary to collect data to help with the administration and financial component of the implementation and document compliance as required. Coordinating Center is responsible for the collection of data and document. It is essential to maintain personal, academic, and financial data at all the levels.

- **Expert Panel Data-** Expert panel empanelment form would be dully filled by experts along with respective document. Data manager would be responsible for verifying all the data & document and process for entry into software.
- **Faculty nomination Data-** Expert panel empanelment form would be dully filled by experts along with respective document. Data manager would be responsible for verifying all the data & document and data entry.
- **Participant Enrollment Data-** When enrollment forms are received from the participants, it is essential that it should be validated as per enrollment criteria and Participants should be linked to the appropriate faculty/center.
- **Baseline Data-** Baseline evaluation is essential for all the participants before the session begins. It can be performed on paper or electronically and the data collected would be maintained and analyzed for the comparative analysis.
- **Assessment Data-** Assessment sheet would contain attendance of each module and respective pretest and post test score for each participants. Data would be electronically maintained throughout the implementation duration of program and it would be used for the analysis of eligibility of participants.
- **Participants Feedback Data:** Feedback would be collected from the Participants while onsite monitoring/offsite monitoring will be done at particular center. Feedback data would be maintained and entered into the software for analysis of the feedback.

- **Faculty Feedback Data:** Feedback would be collected from the Faculty while onsite monitoring/offsite monitoring will be done at particular center. Feedback data would be maintained and entered into the software for analysis of the feedback.
- **Endline Data-** Endline evaluation is essential for all the participants after the session completion. It can be performed on paper or electronically and data would be maintained and analyze for the comparative analysis.

## **CERTIFICATION**

Participant’s evaluation and certification:

Participant evaluation is done through continuous internal assessment with pre and post-test, evaluation of course progress by interim assignments and performance in the final written exit examination. The candidate completing the training program successfully are awarded the completion certification, jointly issued by all the partner organization (PHFI / Academic Partner) and the respective faculty.

**Candidates needs to fulfil the below mentioned criteria for successful completion of the course:**

1. Participation in a minimum number of modules as per initiatives, including the pre-test and post – test of each module.
2. Completion and submission of assigned course work to the respective faculty
3. Appearance and clearance in the final written examination of 50 MCQs at the end of the cycle along with the last module (Min. 50% score required to clear the examination).

## **PROCESS DOCUMENTATION**

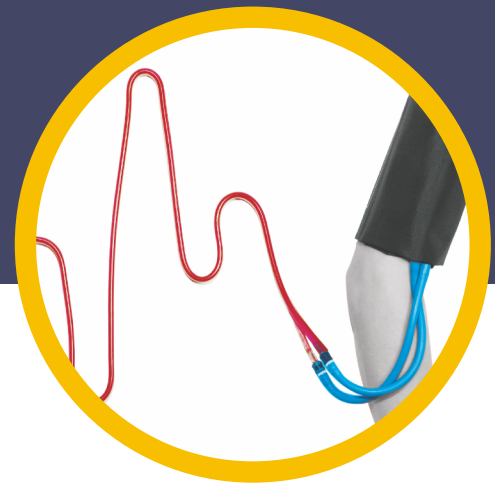
Process documentation provides a structured, focused way of capturing all the important events in the program. After completion of the each training, a Process Documentation Report (PDR) for the program has to be submitted to all the stakeholder. A PDR is a document which comprises of a detailed description of the program activities from the beginning of the program to the end of training cycle.

## **ANNEXURES**

### Samples of various forms and formats

- a) CCMH One Pager
- b) Course Calendar
- c) Hypertension Fact Sheet
- d) Participant Enrollment Form
- e) National expert empanelment form
- f) National Expert Contract
- g) Faculty – nomination form
- h) Faculty Contract
- i) Observer – nomination form
- j) Observer Contract
- k) Baseline Endline Questionnaire
- l) Assessment Sheet
- m) Sample Pre-test Questionnaire
- n) Sample Post-test Questionnaire
- o) SMS Monitoring Application
- p) Observer Checklist
- q) Participant Feedback Form
- r) Trainer Feedback Form
- s) Participant Testimonial Form
- t) PHFI Participant Information Sheet
- u) Consent Form
- v) Endline Evaluation – Participant Questionnaire
- w) Copy of completion certificate

# CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION



Trained over 600 primary care physicians  
in the 1<sup>st</sup> Cycle

## Salient Features of the Course



10 Modular Course



Renowned Faculty



Once-a-month session on weekend



Instructive Videos



Informative Case Studies



Interactive Group Activities

## Eligibility Criteria\*

- ▶ MBBS with minimum 3 years of clinical experience  
Or
- ▶ MD/DNB (Medicine/Internal Medicine/Family Medicine)



DOWNLOAD OUR  
CCMH APP



Course Fees  
INR \*\*  
**12,000/-**

LAST DATE OF ENROLMENT  
**31<sup>st</sup> August 2017**

For more details visit [www.ccmh.org.in](http://www.ccmh.org.in)

For Application Forms and Program Brochure, please contact:

**Program Secretariat-CCMH**

**Public Health Foundation of India**

Plot No. 47, Sector 44, Institutional Area, Gurgaon-122002, India

Tel: +91-124-4781400 Ext: 4590, 4592 | Fax: 0124-4722971 | Mobile: +91-8884837448

Email: [ccmh@phfi.org](mailto:ccmh@phfi.org), Web: [www.ccmh.org.in](http://www.ccmh.org.in), [www.phfi.org](http://www.phfi.org)

**Disclaimer:** PHFI, CCDC, ISH & BIHS hereby declare that this jointly designed "Certificate Course in Management of Hypertension" is not a recognized medical qualification, under section 11(1) of the Indian Council Act, 1956. PHFI, CCDC, ISH & BIHS offering this course hereby declare that they are not a medical college or a university and are not offering this course in accordance with the provisions of the Indian Medical Council Act/ University Grants Commission Act. Kindly note that CCMH is not a degree but only a certificate course with the objective to train doctors in the early diagnosis, prevention and management of hypertension. Successful participants are advised not to mention/call themselves as "Hypertension Specialists" anywhere after completion of this course.

\*Decision taken by PHFI for selection and enrolment of participants will be final.

\*\*Course fee to be paid by NEFT or in the form of Demand Draft (DD) for INR 12,000/- drawn in favour of Public Health Foundation of India, payable at New Delhi.



PUBLIC HEALTH FOUNDATION OF INDIA



International Society of Hypertension



Centre for Chronic Disease Control  
WHO Collaborating Centre for Surveillance, Capacity building and Translational Research in Cardio-Metabolic Diseases



## CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION

### CCMH Course Calendar

Module	CCMH Contact Session Date
Module 1 (Launch of Program)	22-Oct-17
Module 2	26-Nov-17
Module 3	24-Dec-17
Module 4	17-Jan-18
Module 5	25-Feb-18
Module 6	25-Mar-18
Module 7	15-Apr-18
Module 8	20-May-18
Module 9	17-Jun-18
Module 10 & Exit-Examination	8-Jul-18/ 22-Jul-18





# Certificate Course in Management of Hypertension

## HYPERTENSION FACTSHEET

Hypertension is one of the most common lifestyle diseases today!!



PUBLIC HEALTH FOUNDATION OF INDIA



International Society of Hypertension



British and Irish Hypertension Society



Centre for Chronic Disease Control

WHO Collaborating Centre for Surveillance, Capacity Building and Translational Research in Cardio-Metabolic Diseases

**Hypertension:** High blood pressure among adult is defined as a

blood pressure exceeding 140/90 mm Hg-a systolic pressure above 140 mm Hg, or a diastolic pressure above 90 mm Hg, on repeated measurements.

### BURDEN OF HYPERTENTION-GLOBAL SCENARIO

High blood pressure is estimated to cause **7.5 million deaths globally**, almost **13% of all deaths**, according to the WHO.

The overall number of people with high blood pressure rose from **594 million** in **1975** to more than **1 billion** in **2015**, due to factors such as a large global population and an increasing number of older adults<sup>(1)</sup>

An estimated **1.39 (1.34–1.44) billion** people had hypertension in **2010**<sup>(2)</sup>

The number of adults with hypertension in **2025** is predicted to increase by about **60%** to a total of **1.56 billion**<sup>(3)</sup>

In **2015**, there were **1.13 billion** people living with high blood pressure worldwide, with the majority of them in low and middle-income countries.<sup>(1)</sup>

### BURDEN OF HYPERTENTION-INDIAN SCENARIO<sup>(4)</sup>

ICMR estimates that:

- 16%** of ischemic heart disease
- 21%** of peripheral vascular disease
- 24%** of acute myocardial infarctions
- 29%** of strokes are attributable to high blood pressure



Hypertension is present in **20-40% urban** and **12-17% rural** subjects in India.



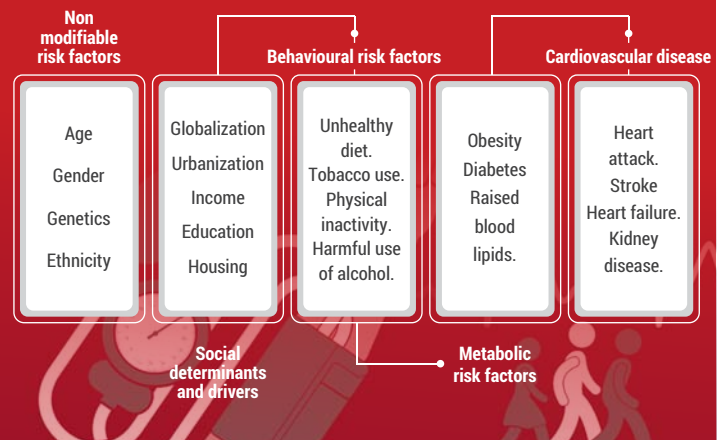
The number of people with hypertension is projected to increase from **118 million** in **2000** to **214 million** in **2025**, with nearly equal numbers of men and women



### CLASSIFICATION OF HYPERTENTION

Blood Pressure Category	Systolic mm Hg	and	Diastolic mm Hg
Normal	less than 120	and	less than 80
Prehypertension	120 - 139	or	80 - 89
Stage 1	140 - 159	or	90 - 99
Stage 2	160 or higher	or	100 or higher

### FACTORS CONTRIBUTING TO THE DEVELOPMENT OF HIGH BLOOD PRESSURE & ITS COMPLICATIONS



### LIFESTYLE MODIFICATIONS TO MANAGE HYPERTENSION<sup>(5)</sup>

<p><b>Modification</b> Weight reduction</p> <p><b>Recommendation</b> Maintain normal body weight (body mass index, 18.4-24.9 kg/m<sup>2</sup>)</p> <p><b>Approximate SBP Reduction Range</b> 5-20 mmHg; 10-kg weight loss</p>	<p><b>Modification</b> Adopt DASH eating plan</p> <p><b>Recommendation</b> Consume diet rich in fruits, vegetables, low-fat dairy products, with reduced content of saturated and total fats</p> <p><b>Approximate SBP Reduction Range</b> 8-14 mmHg</p>	<p><b>Modification</b> Dietary sodium reduction</p> <p><b>Recommendation</b> Reduce dietary sodium intake to no more than 100 mmol/day (2.4g sodium or 6g salt)</p> <p><b>Approximate SBP Reduction Range</b> 2-8 mmHg</p>
<p><b>Modification</b> Physical activity</p> <p><b>Recommendation</b> Engage in regular aerobic physical activity (e.g., brisk walking) at least 30 min/day, most days of the week</p> <p><b>Approximate SBP Reduction Range</b> 4-9 mmHg</p>	<p><b>Modification</b> Moderation of alcohol consumption</p> <p><b>Recommendation</b> Most men: Limit consumption to no more than two drinks/day Most women and those whose weight is less than normal: Limit consumption no more than one drink/day</p> <p><b>Approximate SBP Reduction Range</b> 2-4 mmHg</p>	

DASH, Dietary Approaches to Stop Hypertension; SBP, systolic blood pressure

\* For overall cardiovascular risk reduction, stop smoking.

† The effects of implementing these modifications are dose- and time-dependent and could be more effective for some patients.

‡ 1 oz or 30 mL ethanol: 12 oz wine, 1.5 oz of 80-proof whiskey.

### TIPS TO GET AN ACCURATE BLOOD PRESSURE READING<sup>(6,7)</sup>

<p><b>PUT CUFF ON BARE ARM</b> Cuff over clothing adds 10-40 mm Hg</p>	<p><b>SUPPORT ARM AT HEART LEVEL</b> Unsupported arm adds 10 mm Hg</p>
<p><b>DON'T HAVE A CONVERSATION</b> Talking adds 10-15 mm Hg</p>	<p><b>EMPTY BLADDER FIRST</b> Full bladder adds 10-15 mm Hg</p>
<p><b>SUPPORT FEET</b> Unsupported feet adds 5-15 mm Hg</p>	<p><b>SUPPORT BACK</b> Unsupported back adds 5-15 mm Hg</p>
<p><b>KEEP LEGS UNCROSSED</b> Crossed legs adds 5-8 mm Hg</p>	



## FACTORS CONTRIBUTING TO HIGH BLOOD PRESSURE AND ITS COMPLICATIONS.

All complications of hypertension are related to vascular (vessel wall) damage, either directly in the vessel or in certain organs.



**Ophthalmic vascular disease:**

- Hypertensive retinopathy
- Intraocular hemorrhage



**Renal Vascular Disease:**

- Chronic renal failure
- Renal artery stenosis



**Cerebrovascular Disease:**

- Haemorrhagic stroke
- Atherosclerotic stroke
- Sub-arachnoid haemorrhage
- Arterial aneurysms



**Miscellaneous**

- Vascular Syndromes



**Coronary Artery Disease:**

- Acute Myocardial Infarction
- Non-Q Myocardial Infarction/Unstable Angina
- Stable Angina Syndromes



**Myocardial Disease:**

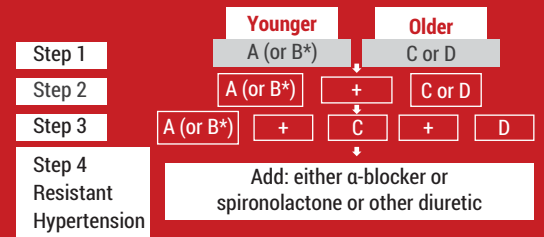
- Left ventricular hypertrophy
- Heart Failure (normal ejection fraction, reduced ejection fraction)
- Atrial fibrillation
- Other cardiac arrhythmias



**Peripheral Vascular Disease:**

- Aortic dissection
- Aortic aneurysms
- Large and small peripheral arterial disease

## ALGORITHM FOR RECOMMENDED DRUG COMBINATION<sup>(8)</sup>



A : ACE Inhibitor or angiotensin receptor blocker |  
B : Calcium Channel Blocker | C:  $\beta$ -blocker | D : Diuretic (thiazide)

\*Combination therapy involving B and D may induce more new onset diabetes compared with other combination therapies. Use  $\beta$  blockers only in special situations. B = Newer  $\beta$  blockers. Younger age: <55 years, Older: >55 years

## GUIDELINES FOR SELECTING THE MOST APPROPRIATE FIRST-LINE ANTIHYPERTENSIVE DRUGS

Class	Indications		Cautions	Contraindications	Side effects
	Compelling	Possible			
ACEis	CHF, post-MI, Type 1 and Type 2 diabetic nephropathy, Secondary stroke prevention	All individuals younger than 55 years. CKD, Type 2 diabetic nephropathy, proteinuria	Renal impairment (monitor Creatinine, K)	Pregnancy, renovascular disease	Dry irritating cough, angioedema, hyperkalemia and reversible decline in renal function in some
ARBs	ACEi intolerance	Same as above	Renal impairment (monitor Creatinine, K)	Pregnancy, renovascular disease	Cough, hyperkalemia and reversible decline in renal function in some
CCBs (DHP)	Elderly, Isolated systolic hypertension	Elderly, angina	-	-	Pedal edema at higher doses, headache, tachycardia
CCBs (rate limiting)	Angina	Angina	With $\beta$ -blockade	Heart block, CHF	
Diuretics (Thiazide and thiazide like)	Isolated systolic hypertension	As an add on with the above drugs.	-	Gout	Metabolic -hypokalemia, hyperglycemia, hyperuricemia. (Low dose minimizes metabolic effects)
$\beta$ -blockers	MI, Angina, CHF	-	-	Asthma, heart block, fatigue, reduced exercise tolerance, hyperglycemia especially when combined with diuretics	-
$\alpha$ -blockers	BPH	-	CHF, Postural hypotension	Incontinence	-
Aldosterone antagonist	Conn's syndrome; resistant hypertension	CHF	Hyperkalemia, gynecomastia	Hyperkalemia, gynecomastia, impotence, and menstrual abnormalities	-

## CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION

Certificate Course in Management of Hypertension (CCMH) is a joint certification program designed, implemented and delivered by Public Health Foundation of India in collaboration with academic partners; International Society of Hypertension (ISH), British and Irish Hypertension Society (BIHS), and Center for Chronic Disease Control (CCDC). The course aims to strengthen the technical competencies of primary care physicians in the management of hypertension and associated complications. In its first cycle CCMH trained 612 primary care physicians from 25 regional centres of India spread across 13 states, 1 Union Territory and 21 cities. CCMH is a 10 modular, contact based program, designed to be delivered once a month on a respective weekend by regional faculty who are eminent cardiologists/medicine specialist of their respective cities. In its second cycle, CCMH aims to train more than 615 PCPs across 41 regional centres covering 36 cities, 17 states, & 1 UT.

CCMH App available on:



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CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION

Do you possess computer/ laptop in your workplace ?      Yes       No

Do you access e-mails regularly ?      Yes       No

Do you use your phone/smart phone to access internet?      Yes       No

Please indicate motivation and benefits you foresee in undergoing this course.

(Please attach a separate sheet if required)

.....

.....

.....

Name : ..... Date : .....

Signature : ..... Place : .....

**D E C L A R A T I O N**

I hereby declare that the above mentioned information, which I have provided, is true to the best of my knowledge. I shall participate in the contact sessions organised once in a month on weekend and will devote self-reading time for the entire ten modules and participate in the assessments, organised by the offering institution. I understand that by participating in this course, I am enhancing my knowledge and skills related to Hypertension and completion of the said course will not entitle me the status of 'Cardiologist'. I also give my consent for publishing my feedback/testimonial which I forward to the Secretariat in any report or publication produced by PHFI. I also understand that this certificate course is not a recognised Medical Qualification, under section 11 (1) of the Indian Medical Council Act 1956 and the Institution offering this course is neither a medical college or a university nor offering the course in accordance with the provisions of the Indian Medical Act of the University Grants Commission Act.

Signature : ..... Name : .....

Date : ..... Place : .....

**RECOMMENDATION OF REGIONAL FACULTY (if required)**

**I Hereby recommend, Dr. .... for enrollement in the "CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION" to be conducted at my center. I have verified all the relevant documents and hereby state that he/she is eligible for enrollment. Name & Signature of Regional Faculty: ..... Date: .....**











DATE

**NAME**  
**ADDRESS**

**Subject:** Contractual engagement as National Expert in Certificate Course in Management of Hypertension (CCMH), Cycle-II.

Dear Dr. XXX

**In continuation to our discussion, we would like to thank you for accepting our proposal to be a part of National Expert Panel (NEP) in Cycle-II of CCMH.**

In pursuance of the above, we are pleased to have a consultancy contract with you on behalf of Public Health Foundation of India (PHFI) on below mentioned terms and conditions:

### **1. Background**

PHFI has undertaken to launch the second cycle of Certificate Course in Management of Hypertension, joint certification program by PHFI, CCDC (Centre for Chronic Disease Control), ISH (International Society of Hypertension) and BHS (British Hypertension Society) from **July, 2017**. The course will be supported by the educational grant from Sun Pharma Laboratories Limited, India.

The key features of the course are highlighted below:

1. The purpose of the said course is to train primary care physicians in the management of hypertension all across the country with an ultimate objective to improve patient outcomes.
2. The course is designed to enhance knowledge, skills and core competencies of primary care physicians to address case management, counseling, referral & prevention of hypertension in patients. This will enable early diagnosis & prompt referrals of patients and establish a referral linkage pattern.
3. The course will run as an intensive one-day contact session with hands on experience learning mode once-a-month for ten consecutive months covering ten different modules on various aspects of hypertension and its management. Case based learning and group discussions on current issues in hypertension diagnosis, management, care and prevention will be the focus of this course.
4. Upon completion of the day long workshops through this course, the participants will maintain contact with the Regional Faculty, so that the learning and discussion continues, lessons learned can be shared and best practices can be emulated.
5. The first cycle of the program was launched in 25 regional centers with 25 participating regional faculty (renowned cardiologist/ medicine specialists) in which 612 participants were trained. In the **second cycle** of the program each center will enroll **minimum 15** participants for **10 months** at **41 regional centers**. Thus approximately **615** primary care physicians are proposed to be trained in an upcoming **second cycle**. The course will roll out from October 2017 – July 2018 and the program will be delivered by trained **cardiologist/ medicine specialists** through once-a-month modular basis contact program.

In PHFI's view, the above mentioned course requires guidance and support in the development of the course curriculum from the National Technical Experts who already have a vast experience in their expertise field of hypertension & its management.

## 2. Terms of Reference

**As a National Expert, you will be responsible to:**

- 2.1. Participate in review and finalization of the course content, the curriculum and the effective course delivery methods
- 2.2. Attend National Expert Consultation Meet to review and finalize the curriculum
- 2.3. Conduct and evaluate two technical sessions at the designated centers (where ever feasible) throughout the course duration (**Oct, 2017 – July, 2018**)
- 2.4. Participate in monitoring and evaluation (wherever feasible) throughout the course duration

## 3. Key Deliverables

The National Expert will be responsible for:

- 3.1. Finalizing the curriculum, attending and contributing the decision making process at the **National Expert Consultation Meet** conducted in **July, 2017**.
- 3.2. Participation & conduction of the session at one regional center for any one module amongst **1<sup>st</sup> to 4<sup>th</sup> Module** due by **January, 2018** during the course duration.
- 3.3. Participation & conduction of the session at one regional center for any one module amongst **5<sup>th</sup> to 9<sup>th</sup> Module** due by **May, 2018** during the course duration.

The National Expert will be required to share the interim milestones regarding these deliverables regularly with PHFI's focal contact person, as per the project plan.





**Any papers presented by you in national and international conferences relevant to Cardiac / Hypertension care and management** (Attach separate sheet if required):

Title of Paper	Details where Presented by You

Do you have broadband connectivity in your workplace?  Yes  No

Do you use internet and check e-mails regularly?  Yes  No

Do you have space arrangement for training of the following numbers of doctors **(Tick appropriate answer)**:

30 doctors :  Yes  No

**If Yes**, skip the next question and kindly mention the address of the training venue in the space provided.

**If No**, will you be able to arrange a space/ hall where training of doctors can be conducted **(Tick appropriate answer)**:

30 doctors :  Yes  No

If Yes, Kindly mention details and address:

**Name and Address of Training Venue: (Please leave this blank if place of work and training venue will be same)**

Place of training

Street

Nearest Landmark

City  State

Pin  STD Code  Phone No

Do you possess a computer/Laptop at your training venue?  Yes  No

Do you have broadband connectivity at the training venue?  Yes  No

Do you possess LCD projector at your training venue?  Yes  No

Do you have power back-up at training venue?  Yes  No

Have you previously conducted any training/ workshop for physicians / Cardiologists  Yes  No

If yes, kindly specify the trainings conducted; also indicate whether involved in conduction of Cardiac / Hypertension care & management training or workshop

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**NAM**

**Address:**

**Subject:** Contractual engagement as Regional Faculty for Certificate Course in Management of Hypertension (CCMH), Cycle-II.

Dear Dr. XXXX,

**In continuation to our discussion, we would like to thank you for accepting our invitation to be a Regional Faculty (RF) for CCMH Cycle-II.**

In pursuance of the above, we are pleased to have a consultancy contract with you on behalf of Public Health Foundation of India (PHFI) on the below terms and conditions:

### **1. Background**

PHFI has undertaken to launch the second cycle of Certificate Course in Management of Hypertension, joint certification program by PHFI, CCDC (Centre for Chronic Disease Control), ISH (International Society of Hypertension) and BHS (British Hypertension Society) from **July 2017**. The course will be supported by the educational grant from Sun Pharma Laboratories Limited, India.

The key features of the course are highlighted below:

1. The purpose of the said course is to train primary care physicians in the management of hypertension all across the country with an ultimate objective to improve patient outcomes.
2. The course is designed to enhance knowledge, skills and core competencies of primary care physicians to address case management, counseling, referral & prevention of hypertension in patients. This will enable early diagnosis & prompt referrals of patients and establish a referral linkage pattern.
3. The course will run as an intensive one-day contact session with hands on experience learning mode once-a-month for ten consecutive months covering ten different modules on various aspects of hypertension and its management. Case based learning and group discussions on current issues in hypertension diagnosis, management, care and prevention will be the focus of this course.
4. Upon completion of the day long workshops through this course, the participants will maintain contact with the Regional Faculty, so that the learning and discussion continues, lessons learned can be shared and best practices can be emulated.
5. The first cycle of the program was launched in 25 regional centers with 25 participating regional faculty (renowned cardiologist/ medicine specialists) in which 612 participants were trained. In the **second cycle** of the program each center will enroll **minimum 15** participants for **10 months** at **41 regional centers**. Thus approximately **615** primary care physicians are proposed to be trained in an upcoming **second cycle**. The course will roll out from October 2017 – July 2018 and the program will be delivered by trained **cardiologist/ medicine specialists** through once-a-month modular basis contact program.

## 2. Terms of Reference

**As a Regional Faculty, the Consultant will be responsible to:**

- 2.1 Assist in enrollment of candidate i.e. the primary care physicians.
- 2.2 Ensure smooth and good quality conduct of 10 monthly contact sessions and Exit-Examination at their training site as per PHFI guidelines and standards, which shall be shared prior to organizing these monthly contact sessions (where applicable)\*.
- 2.3 Impart standardized curriculum based on Management of Hypertension to selected primary care physicians through 10 course modules.
- 2.4 Arrange for all training aids and other requirements for imparting good training to primary care physicians.
- 2.5 Conduct periodic learning and performance appraisals of the participating primary care physicians.
- 2.6 Maintain all the relevant records and submit periodic academic and financial reports and returns to PHFI (where applicable)\*.
- 2.7 Facilitate the monitoring and evaluation activities conducted by PHFI.

**\*NOTE: The fixed amount of sum for conducting the training (for LCD rent, working lunch, tea, venue rent and postage/courier) for each site will be combined and will be allocated by PHFI to a Faculty (In Charge) of this center to defray the cost of conducting the monthly sessions (for LCD rent, working lunch, tea, venue rent and postage/courier).**

## 3. Key Deliverables

The consultant will be responsible for:

- 3.1 Signing of this consultancy and successfully conducting and completing the first four course modules by **31<sup>st</sup> January, 2018**.
- 3.2 Successfully conducting & completing next four modules by **31<sup>st</sup> May, 2018**.
- 3.3 Final completion of remaining next two modules and exit exam by **31<sup>st</sup> July, 2018**.  
(The total modules to be conducted and completed by this date are ten).

You are required to share interim milestones regarding these deliverables regularly with PHFI, as per the project plan.

## 4. Contract Duration and Termination

- 4.1 This contract is to be effective from **01<sup>st</sup> July, 2017 to 31<sup>st</sup> July, 2018**.
- 4.2 This contract may be extended beyond the contract duration subject to prior written approval of the Project Lead (PL) at PHFI.
- 4.3 PHFI may terminate this contract by giving one (1) months' notice, in writing, to you, at the address specified above. You may not terminate this contract for any reason other than unforeseen events which affect your ability to produce deliverables as already mentioned in Section 3, by giving one month's written notice.





**CERTIFICATE COURSE IN MANAGEMENT OF HYPERTENSION**

\*Date of Birth 

D	D	M	M	Y	Y	Y	Y
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 (Attach proof)

Medical Council Registration No. 

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 (Attach proof)

Date 

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

 State 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**\*Educational/ Academic/ Technical/ Professional Qualifications** (Attach proof, attach separate sheet if required)

Qualification		College/ Institution/ Board/ University	Year
M.B.B.S	<input type="checkbox"/>		
MD	<input type="checkbox"/>	Dept.....	
DNB	<input type="checkbox"/>	Dept.....	
DM	<input type="checkbox"/>	Dept.....	
Ph.D	<input type="checkbox"/>	Dept.....	
Diploma/ Fellowship/ Certificate Program	<input type="checkbox"/>		
Any Other	<input type="checkbox"/>		

\*Total Professional / Clinical Experience 

--	--

 years

**Details of Professional Experience** (attach separate sheet, if required):

Designation	Organization	Period From.....	To.....

Do you use internet and check e-mails regularly                      Yes                       No

**D E C L A R A T I O N**

I hereby declare that I am an observer of the course and shall observe the conduct of monthly contact sessions at the training sites as per PHFI guidelines and standards for "Certificate course in Management of Hypertension". I will comply with all rules and regulations that are applied to observer of this course and will maintain confidentiality about the entire technical and financial management of the course. I hereby authorised PHFI to use my photograph and credentials for program announcements and reports. (I also understand that this certificate course is not recognised Medical Qualification, under section 11 (1) of the Indian Medical Council Act 1956 and the Institution offering this course is neither a medical college or a university nor offering the course in accordance with the provisions of the Indian Medical Act of the University Grants Commission Act. )

Signature : ..... Date : .....  
 Name : ..... Place : .....

**Check List of attachments required with this application form (Please ✓ Tick)**

- |  |                          |
|--|--------------------------|
| 1. Passport Size Photograph ( 1 pasted and 1 extra copy)                                 | <input type="checkbox"/> |
| 2. Date of Birth Proof<br>(High School Certificate/ PAN Card/ Passport/ Driving License) | <input type="checkbox"/> |
| 3. MCI/ State Council Registration Certificate   | <input type="checkbox"/> |
| 4. MBBS Degree Certificate   | <input type="checkbox"/> |
| 5. MD, DNB, DM, Ph.D – Degree (whichever is applicable, please attach all if applicable) | <input type="checkbox"/> |
| 6. Any other certificate for proof of Cardiac management certification of fellowship     | <input type="checkbox"/> |
| 7. Curriculum Vitae  | <input type="checkbox"/> |

**Please mail this form along with the required documents to:**



**Program Secretariat- CCMH  
 Public Health Foundaon of India**  
 Plot No. 47, Sector - 44, Institutional Area, Gurgaon,  
 Haryana - 122002, India Tel: +91 124 4781400, Mobile : 9650754333  
 Ext: 4514, Fax : 0124-4722971  
 Email: ccmh@phfi.org,  
 Web: www.ccmh.org.in, www.phfi.org

DATE

To,

NAME  
ADDRESS

**Subject: Nomination as an External Observer for Certificate Course in Management of Hypertension, Cycle-II.**

Dear Dr. XXX

Thank you very much for accepting our invitation to join as an External Observer for Monitoring of **Certificate Course in Management of Hypertension, Cycle-II** being conducted by Public Health Foundation of India (PHFI) as detailed below.

### 1. Background

PHFI has undertaken to launch the **second cycle** of Certificate Course in Management of Hypertension, joint certification program by PHFI, CCDC (Centre for Chronic Disease Control), ISH (International Society of Hypertension) and BHS (British Hypertension Society) from **July 2017**. The course will be supported by the educational grant from Sun Pharma Laboratories Limited, India.

The key features of the course are highlighted below:

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### 2. Terms of Reference for the external observer

**The terms of assignment will be as under:**

- 2.1. The term for assignment will be effective from DATE to DATE. This contract may be extended beyond the contract duration subject to prior written approval of the Principal Investigator (PI) of the Project at PHFI.
- 2.2. To observe conduction of monthly contact sessions at the training site as per PHFI guidelines and standards and to participate in the End Line Evaluation Study/ Impact Evaluation Study.
- 2.3. To send timely reports as per PHFI guidelines.
- 2.4. To maintain utmost confidentiality of all methods and documentation of all content, processes and reports.
- 2.5. The visits will be based as per the need based Observer Calendar developed by the CCMH Secretariat, Public Health Foundation of India in consensus with the observer.
- 2.6. This will be observer's voluntary contribution to the project.
- 2.7. However, the observer will be entitled for reimbursement of the following expenses at the time of field visit
- 2.8. No other expenses will be admissible.

**3. Termination**

- 3.1. PHFI may terminate this contract by giving one (1) months' notice, in writing, to you, at the address specified above. You may not terminate this contract for any reason other than unforeseen events which affect your ability to produce deliverables as already mentioned in Section 1, by giving one month's written notice.

# Certificate Course in Management of Hypertension



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA



International  
Society of  
Hypertension



British and Irish Hypertension Society  
Committed to preventing cardiovascular disease



Centre for Chronic Disease Control  
WHO Collaborating Centre for  
Surveillance, Capacity building  
and Translational Research in  
Cardio-Metabolic Diseases



## BASELINE QUESTIONNAIRE

Name of Faculty: \_\_\_\_\_

City: \_\_\_\_\_

### Q.1. Hypertension is typically defined as:

- a. Systolic  $\geq$  150mmHg OR Diastolic  $\geq$  100mmHg
- b. Systolic  $\geq$  140mmHg OR Diastolic  $\geq$  90mmHg
- c. Systolic  $\geq$  150mmHg AND Diastolic  $\geq$  100mmHg
- d. Systolic  $\geq$  140mmHg AND Diastolic  $\geq$  90mmHg

### Q.2. What is the minimum requirement for adequate tissue perfusion?

- a. A Mean Arterial Pressure (MAP) of 60mmHg
- b. A systolic pressure of 90mmHg
- c. A diastolic pressure of 50mmHg

### Q.3. What would be the estimated MAP for a patient whose blood pressure was 160/70 mmHg

- a. 100mmHg
- b. 240mmHg
- c. 120mmHg
- d. 80mmHg

### Q 4. Which of the following statements is true for diuretics?

- a. Work to lower BP initially by decreasing peripheral vascular resistance
- b. Thiazide diuretics are potassium sparing
- c. Are effective in lowering BP by 20 – 25 mmHg in most patients
- d. BP response to thiazides continues to increase at doses greater than usual therapeutic dose.
- e. Diuretics may impair glucose tolerance

### Q 5. Which of the following statements is true for Angiotensin Converting Enzyme inhibitors?

- a. Inhibit peptidyl dipeptidase thus preventing the inactivation of bradykinin
- b. Captopril is a prodrug
- c. Are to be used with caution in patients with IHD as reflex sympathetic activation occurs secondary to the hypotensive effects of the ACE inhibitors
- d. Have no role in treating the normotensive diabetic patients
- e. Are useful antihypertensive agents in late pregnancy

# Certificate Course in Management of Hypertension



**Q 6. Which of the following calcium channel blockers has the longest plasma half-life?**

- a. Felodipine
- b. Diltiazem
- c. Amlodipine
- d. Nimodipine
- e. Verapamil

**Q 7. A 75 year-old male presents with accelerated hypertension. Examination reveals grade 3 retinopathy, left ventricular hypertrophy and modest albuminuria. There is a mild hypokalaemic alkalosis. The most likely cause is:**

- a. Essential hypertension
- b. Glomerulonephritis
- c. Nephrolithiasis
- d. Carcinoma of the kidney
- e. Renal artery stenosis

**Q 8. Which of the following statements is false?**

- a. Out of office measures of blood pressure are better estimates of "usual blood pressure"
- b. Clinic BP readings help diagnose white coat hypertension
- c. Ambulatory blood pressure measurement correlates better with target organ damage as compared to clinic BP measurements
- d. Ambulatory BP measurement helps in diagnosis of masked hypertension

**Q9. Which of the following statements is false?**

- a. Salt = Sodium x 4.5
- b. DASH diet is rich in fruits, vegetables, and low-fat dairy products and with reduced saturated and total fat
- c. Visceral adiposity may have a stronger association with hypertension among Indian and Asians
- d. Approximate SBP Reduction of 5–20 mmHg/10 kg weight loss

**Q10. All the following statements regarding hypertensive urgencies are true, except:**

- a. Most of the time it can be managed with oral anti-hypertensives
- b. Potent anti-hypertensives in combination therapy are the treatment of choice
- c. Clear evidence of end-organ damage needs to be present
- d. BP reduction over several hours to days

# Certificate Course in Management of Hypertension



## ENDLINE QUESTIONNAIRE

Name of Faculty: \_\_\_\_\_

City: \_\_\_\_\_

### Q.1. Hypertension is typically defined as:

- a. Systolic  $\geq$  150mmHg OR Diastolic  $\geq$  100mmHg
- b. Systolic  $\geq$  140mmHg OR Diastolic  $\geq$  90mmHg
- c. Systolic  $\geq$  150mmHg AND Diastolic  $\geq$  100mmHg
- d. Systolic  $\geq$  140mmHg AND Diastolic  $\geq$  90mmHg

### Q.2. What is the minimum requirement for adequate tissue perfusion?

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- b. A systolic pressure of 90mmHg
- c. A diastolic pressure of 50mmHg

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- c. 120mmHg
- d. 80mmHg

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- b. Thiazide diuretics are potassium sparing
- c. Are effective in lowering BP by 20 – 25 mmHg in most patients
- d. BP response to thiazides continues to increase at doses greater than usual therapeutic dose.
- e. Diuretics may impair glucose tolerance

### Q 5. Which of the following statements is true for Angiotensin Converting Enzyme inhibitors?

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- b. Captopril is a prodrug
- c. Are to be used with caution in patients with IHD as reflex sympathetic activation occurs secondary to the hypotensive effects of the ACE inhibitors
- d. Have no role in treating the normotensive diabetic patients
- e. Are useful antihypertensive agents in late pregnancy



# Certificate Course in Management of Hypertension



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# Certificate Course in Management of Hypertension



## Assessment Sheet

Name of Regional Centre: ..... Date: .....

Name of Regional Faculty : ..... Module No. : .....

Module Name: .....

S. No	Name of Participants	Attendance (Yes/No)	Pre-test score	Post-test score	Improvement (Post test - Pre test)	Assignment Submitted (Yes/No)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						

S. No	Name of Participants	Attendance (Yes/No)	Pre-test score	Post-test score	Improvement (Post test - Pre test)	Assignment Submitted (Yes/No)
18.						
19.						
20.						
21.						
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39.						
40.						

Suggestions/Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature of the Faculty:.....

# Certificate Course in Management of Hypertension



## Pre Test Questionnaire

Name of the Participant: .....

Name of Regional Faculty: .....

Module No. **1: Introductory Overview of Hypertension**

### NOTE:

- I. Maximum Marks: 10
- II. Each question carries one mark
- III. Use ball-point pen. Tick mark the most appropriate answer

### Q1. All the following statements are true, except:

- a) Systolic BP is the maximal pressure, exerted by the blood on the arterial walls during ventricular contraction
- b) Diastolic BP is the minimal pressure, exerted by the blood on the arterial walls during ventricular relaxation
- c) Arterial BP is the pressure generated by the contraction of the heart.
- d) Pulse pressure is the difference between systolic and diastolic BP

### Q2. How is Mean Arterial Pressure (MAP) calculated?

- a) Diastolic pressure - ((systolic pressure - diastolic pressure)/3)
- b) Diastolic pressure + ((systolic pressure - diastolic pressure)/3)
- c) Diastolic pressure - ((diastolic pressure - systolic pressure)/3)
- d) Systolic pressure + ((systolic pressure - diastolic pressure)/3)

### Q3. The following scientist developed a wrap-around inflatable rubber cuff for measuring systolic blood pressure in 1896

- a) Nikolai Sergeyevich Korotkoff
- b) Freis ED
- c) Scipione Riva-Rocci
- d) Janeway

### Q4. All the following statements are true, except

- a) In adolescence and adulthood, men display a higher average level BP levels
- b) Blood pressure rises with age in both sexes
- c) "Central obesity" indicated by an increased waist to hip ratio, has been positively correlated with high Blood Pressure in several populations.
- d) Smoking is a direct risk factor for the development of hypertension

**Q5. Currently most guidelines suggest that a BP of \_\_\_\_\_ should be diagnosed as Hypertension.**

- a) >120mm of Hg systolic or >80 mm of Hg diastolic
- b) >150mm of Hg systolic and >90 mm of Hg diastolic
- c) >140mm of Hg systolic or >90 mm of Hg diastolic
- d) >140mm of Hg systolic and >90 mm of Hg diastolic

**Q6. All the following statements are true, except**

- a) The Multiple Risk Factor Intervention Trial (MRFIT), demonstrated a continuous and graded influence of both systolic and diastolic BP on CHD mortality, extending down to systolic blood pressures of 120 mmHg.
- b) Cardiovascular disease risk doubles for every 20-mmHg increase in systolic and 10-mmHg increase in diastolic pressure.
- c) Diastolic BP and pulse pressure are more powerful predictors of cardiovascular disease than systolic BP in older individuals.
- d) Risk of CHD and hypertension is inversely related to the consumption of dietary fibre

**Q7. All the following statements regarding prehypertension are true, except**

- a) Prehypertension is not a disease category.
- b) Both patients and clinicians are alerted to this risk and encouraged to intervene and prevent or delay the disease from developing.
- c) Pre-hypertensives are not candidates for drug therapy and are firmly and unambiguously advised to practice lifestyle modification in order to reduce their risk of developing hypertension in the future.
- d) An individual should have a systolic BP of 120 - 139 mm of Hg and diastolic BP of 80 – 89 mm of Hg to be categorized as having prehypertension.

**Q8. All the following statements regarding non-specific aorto-arteritis are true, except**

- a) More common in women
- b) Small artery involvement
- c) Differential or absent multiple pulses
- d) Also known as Takayasu's arteritis

**Q9. All the following statements regarding pheochromocytoma are true, except**

- a) Catecholamine-secreting tumors are located in the adrenal medulla (pheochromocytoma) or in extra-adrenal paraganglion tissue (paraganglioma)
- b) Inherited pheochromocytomas may be associated with multiple endocrine neoplasia (MEN) type 2A and type 2B
- c) Patients may present with hypotension rather than hypertension
- d) 90% of pheochromocytomas are bilateral

**Q10. Choose the incorrect statement**

- a) Virtually all disorders of the kidney may cause hypertension
- b) Renal disease is the most common cause of secondary hypertension
- c) Hypertension is present in >80% of patients with chronic kidney disease
- d) In general, hypertension is more severe in interstitial diseases than in glomerular diseases

Pre-test score

Signature of the Faculty

# Certificate Course in Management of Hypertension



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA



International  
Society of  
Hypertension



British and Irish Hypertension Society  
Committed to preventing cardiovascular disease



Centre for Chronic Disease Control  
WHO Collaborating Centre for  
Surveillance, Capacity building  
and Translational Research in  
Cardio-Metabolic Diseases



## Post Test Questionnaire

Name of the Participant: .....

Name of Regional Faculty: .....

Module No. **1: Introductory Overview of Hypertension**

### NOTE:

- I. Maximum Marks: 10
- II. Each question carries one mark
- III. Use ball-point pen. Tick mark the most appropriate answer

### Q1. All the following statements are true, except:

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Post-test score

Signature of the Faculty

## **Guide to Constructing SMS Code**

**On your Phone, Go to Menu Messages Compose and then start typing the code as per following instructions:**

**Step 1:** Type Phfism (assigned key) followed by a Space and then type CCMH

Type Comma = (,)

**Step 2:** Type in your Monitor Code (**This will be provided to you**) eg. ME13

Type Comma = (,)

**Step 3:** Module number being monitored

Type the number of module eg. M1 or M2

Type Comma = (,)

**Step 4:** Is the module number same as scheduled

Specify 1 if YES and 0 if NO

Type Comma = (,)

**Step 5:** No of Center trainers Registered eg. 1, 2

Type Comma = (,)

**Step 6:** No. of Center trainers Present eg. 1, 2

Type Comma= (,)

**Step 7:** External Speakers Adherence

Specify 1 if YES and 0 if NO

Type Comma = (,)

**Step 8:** Faculty Adherence to the duration of session

Specify 1 if Yes and 0 if No

Type Comma = (,)

**Step 9:** No of Participants Attended

Type the number eg. 15

Type Comma = (,)

**Step 10:** No of Participants Registered

Type the number eg. 16

Type Comma = (,)

**Step 11:** Arrangements as per guidelines (Seating arrangements; Audio-visual; Meal)

Specify 1 if Yes and 0 if No

Type Comma = (,)

**Step 12:** Delivery of the content as per standardized module

Specify 1 if YES and 0 if NO

68

Type Comma = (,)

**Step 13:** Discussion beyond the scope of Module

Specify 1 if YES and 0 if NO

Type Comma = (,)

**Step 14:** Discussion on Case studies

Specify 1 if YES and 0 if NO

Type Comma = (,)

**Step 15:** Pre-test and Post-test forms filled by Participants

Specify 1 if YES and 0 if NO

Type Comma = (,)

**Step 16:** Discussion on Post-test results by trainers

Specify 1 if YES and 0 if NO



At the end the code you have constructed should look like this on your phone screen:

**Phfism CCMH, ME13,M2,1,2,2,1,0,18,20,1,1,1,0,1**

**Enter SMS Collection Number of the Secretariat which is 9266680802 and then click SEND on your Phone.**

**The observer will receive confirmation from PHFI once code is successfully sent**



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA



International  
Society of  
Hypertension



British and Irish Hypertension Society  
Committed to preventing cardiovascular disease



Centre for Chronic Disease Control  
WHO Collaborating Centre for  
Surveillance, Capacity building  
and Translational Research in  
Cardio-Metabolic Diseases



## Certificate Course in Management of Hypertension

### OBSERVER'S CHECKLIST (Module 1-9)

S.no.		Observer Assessment
1	Date of monitoring (dd/mm/yyyy)	
2	Name of the Observer & Monitor Code No.	
3	Code of the centre monitored	
4	Module number being monitored	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
5	Is this module same as scheduled	<input type="checkbox"/> Yes <span style="margin-left: 200px;"><input type="checkbox"/> No</span>
6	Complete address of the Centre	
7	Is the location same as registered	<input type="checkbox"/> Yes <span style="margin-left: 200px;"><input type="checkbox"/> No</span>
8	Scheduled time for session start	
9	Session time	Start time: _____ End time: _____
10	Centre trainer present	<input type="checkbox"/> Yes <span style="margin-left: 200px;"><input type="checkbox"/> No</span>
11	External Speaker ( National Expert/ Visiting Faculty)	<input type="checkbox"/> Yes <input type="checkbox"/> No ( if yes , mention the topics covered by him)
12	Number of Participants registered at the centre	
13	Number of Participants attended the session	
14	Number & Name of participants who did not adhere with session timing	<input type="checkbox"/> Came late <input type="checkbox"/> Went early <input type="checkbox"/> N/A Names .....
15	<b>Arrangements at the centre:</b>	
15a	Learning Environment (including seating)	<input type="checkbox"/> Excellent <input type="checkbox"/> Average <input type="checkbox"/> Poor
15b	Audio	<input type="checkbox"/> Excellent <input type="checkbox"/> Average <input type="checkbox"/> Poor
15c	Visual	<input type="checkbox"/> Excellent <input type="checkbox"/> Average <input type="checkbox"/> Poor
15d	Working Lunch/Dinner	<input type="checkbox"/> Yes <input type="checkbox"/> No
15e	Tea/ Coffee	<input type="checkbox"/> Yes <input type="checkbox"/> No

16	Adherence to the duration of the training (Non-adherence will be considered if module start to end time is < 3 hrs.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>17</b>	<b>Delivery of course content:</b>		
17a	All slides presented and not rushed through	<input type="checkbox"/> Yes	<input type="checkbox"/> No
17b	Discussion on case studies (No discussion – If none of the participant interacted with the faculty on the subject of the case study)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
17c	Participants submitted assignments	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Not applicable
17d	Group Exercise discussed	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Not applicable
18a	Discussion beyond the scope of the module (Any topic discussed, which was not present in the module, for more than 15 minutes)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
18b	If yes, what was the topic discussed		
19a	Any additional slides presented by the faculty	<input type="checkbox"/> Yes	<input type="checkbox"/> No
19b	If yes, what was the topic of the slides		
20a	Any live demonstration or case presentation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
20b	If yes, please describe in brief		
21a	Pre-test and Post-test conducted	<input type="checkbox"/> Yes	<input type="checkbox"/> No
21b	Feedback on Pre-test and Post-test given by the trainer (correct answers and reason)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
22	Interactive Session	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> <li>• Trainer elicited interaction</li> <li>• Trainer encouraged /rewarded participants when answered</li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
23	Any other remarks		

Date: \_\_\_\_\_

Signature: \_\_\_\_\_





## Certificate Course in Management of Hypertension

### OBSERVER'S CHECKLIST FOR MODULE 10 AND EXIT EXAMINATION

S.no.		Observer Assessment
1	Date of monitoring (dd/mm/yyyy)	
2	Name of the Observer & Monitor Code No.	
3	Code of the centre monitored	
4	Is this module same as scheduled	<input type="checkbox"/> Yes <input type="checkbox"/> No
5	Complete address of the Centre	
6	Is the location same as registered	<input type="checkbox"/> Yes <input type="checkbox"/> No
7	Scheduled time for session start	
8	Session time	Start time:_____ End time:_____
9	Centre trainer present	<input type="checkbox"/> Yes <input type="checkbox"/> No
10	Number of Participants registered at the centre	
11	Number of Participants taking the examination	
12	Number of participants who came after the start of session OR left before the end of session	
13	<b>Arrangements at the centre:</b>	
13a	Seating arrangement according to examination	<input type="checkbox"/> Excellent <input type="checkbox"/> Average <input type="checkbox"/> Poor
13b	Working Lunch/Dinner	<input type="checkbox"/> Yes <input type="checkbox"/> No
13c	Tea/ Coffee	<input type="checkbox"/> Yes <input type="checkbox"/> No
14	Any other remarks	

Date: \_\_\_\_\_

Signature: \_\_\_\_\_



PUBLIC HEALTH FOUNDATION OF INDIA



International Society of Hypertension



Centre for Chronic Disease Control  
WHO Collaborating Centre for Surveillance, Capacity building and Translational Research in Cardio-Metabolic Diseases



## Certificate Course in Management of Hypertension

### PARTICIPANT'S FEEDBACK FORM

Name of Faculty: \_\_\_\_\_

Date: \_\_\_\_\_

City: \_\_\_\_\_

Module Number: \_\_\_\_\_

Please tick the appropriate answers:

1.	<i>Did the session meet its objective?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
2.	<i>Were the teaching methods used appropriate?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
3.	<i>Was the session interactive?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
4.	<i>Was there enough content for the time allotted?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
5.	<i>Was the educational material provided adequate for current use and future reference?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
6.	<i>Were adequate examples used?</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
7.	<i>Training environment was conducive to learning (e.g. quiet, well-lit, air-conditioning, ventilation)</i>	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say

Any other Comments :



## Certificate Course in Management of Hypertension

### TRAINER'S FEEDBACK FORM

Name of Faculty: \_\_\_\_\_

Date: \_\_\_\_\_

Module Number: \_\_\_\_\_

City: \_\_\_\_\_

Please tick the appropriate answers:

1.	Was the experience as per your expectation?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
2.	Was the educational material provided adequate for current use and future reference?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
3.	Are there any changes that you think need to be made in the modules?	<input type="radio"/> Yes		<input type="radio"/> No	
	If Yes, can you specify:				
4.	Was the allotted time appropriate for the module?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
5.	Was there enough content for the time allotted?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
6.	Were adequate and appropriate case studies included?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
7.	Were the case studies effective in initiating participant discussions?	<input type="radio"/> Fully	<input type="radio"/> To some extent	<input type="radio"/> Not at all	<input type="radio"/> Can't say
	<u>Any other Comments :</u>				

Dear CCMH participant,

Thank you for being a part of this course.

We're collecting testimonials about CCMH to support our future efforts to improve our course further and would like to hear your thoughts and experiences during your CCMH journey. To make this quick and easy for you, we've included some questions, which you may use as cues to writing your testimonial for us. We are interested in what your experiences were and what the benefits were to you in attending the course.

1. What was the best part of the CCMH for you?
2. Was the classroom teaching effective for learning? What did you learn? Give an example or two.
3. How has the CCMH course benefited you/brought change in your clinical practice for hypertension cases?

Kindly elaborate

4. Do you think such type of training programs are essential for practicing PCPs? Would you like to attend other courses of PHFI?

- i. Certificate Course in Evidence Based Diabetes Management (CCEBDM)
- ii. Certificate Course in Gestational Diabetes Mellitus (CCGDM)
- iii. Advanced Certificate Course in Prevention and Management of Diabetes &
- iv. Cardiovascular Disease (ACMDC)
- v. Certificate Course in Management of Thyroid Disorders (CCMTD)
- vi. Certificate Course in Evidence Based Management of Diabetic Retinopathy (CCDR)
- vii. Certificate Course in COPD & Asthma (CCCA)
- viii. Certificate Course in Women's Health (CCWH)
- ix. Certificate Course in CVD & Stroke (CCCS)
- x. Certificate Course in Healthcare Quality (CCHQ)

5. Would you recommend this course to others in future? If Yes. Why
6. How can we improve the course? Your suggestions.
7. Would you like to share any experience with us related to the course or its conduction.

***Thank you for your feedback.***

***Participant Name & Contact Details -----***

PHFI Participant Information Sheet

**Study Title: Program Evaluation Study of CCMH Cycle-I**

**Introduction:** Certificate Course in Management of Hypertension (CCMH) is a joint certification program designed and implemented by the PHFI in collaboration with the knowledge partner, Center for Chronic Disease Control (CCDC), technical partner, International Society of Hypertension (ISH) and academic partner, British Hypertension Society (BHS). The education grant for the program has been provided by SUN pharma laboratories Limited. CCMH is a ten months course with once-a-month contact session, conducted on a designated weekend at 25 regional training centers across India. The program includes a core team of 11 national experts, 25 regional faculty and 28 observers. The course has received an overwhelming response with 612 primary care physicians enrolled for its first cycle. The program was launched on 24<sup>th</sup> July 2016 across 25 centres in India.

**Purpose of the Study:** In this interview we aim to obtain your feedback as a participant of CCMH Cycle-I. Your answers to questions in the questionnaire will tell us about your experiences and guide us to improve this course both in terms of content and delivery.

**Methodology:** The interviewer will talk to you and seek answers to questions in of the evaluation tool. The process will take about 40-45 minutes.

**Risks of Participation:** We anticipate that no risk and discomfort will be experienced as questions only involve your experiences during the conduction of sessions of the Certificate Course in Management of Hypertension (CCMH). You are free not to participate, not to answer or decline to answer.

**Benefits of Participation:** The proposed evaluation exercise intends to identify facilitating and challenging experiences during and after undertaking the course. This will enable us to suitably modify the content and delivery of the upcoming cycles of this course. This will be helpful for the participants in the next cycle who will learn through the revised course.

**Withdrawal:** Your participation in this assessment is voluntary. You are not obligated to participate in it and are free to withdraw your consent at any time. Refusal to participate will not have any bearing in any way to the results, but your insights will be critical for us in bringing out further improvements in the content and delivery of CCMH.

**Privacy and Confidentiality:** All information collected for this study will be kept strictly confidential. This means that your answers to the questions will not be shared with anyone in the community or with anyone outside of the evaluation team. All identifiers are removed. Your answers are thus anonymous for the people outside the CCMH secretariat. All confidential data will be stored in locked files or password protected electronic records at the CCMH Program Secretariat. Your name will not appear on any of the study data in any way or in any reports or publications associated with this study.

**Compensation:** There will be no financial compensation for participating in this study.

For any further queries, please contact the undersigned:

**Study Title: Program Evaluation Study of CCMH Cycle-I**  
**PI: Prof. D. Prabhakaran**  
**Date: 7.2.2017**

INSTITUTIONAL ETHICS COMMITTEE  
March 15, 2017  
APPROVED  
CHAIRMAN / MEMBER SECRETARY  
PUBLIC HEALTH FOUNDATION OF INDIA



**Prof. D. Prabhakaran (Principal Investigator)**  
**M.D., DM (Cardiology), MSc, FRCP, FNASc.**  
**Director, Centre for Control of Chronic Conditions (CCCC)**  
**Vice President, Public Health Foundation of India (PHFI)**  
**Professor, Epidemiology,**  
**Public Health Foundation of India (PHFI)**  
**Director, Centre for Chronic Disease Control (CCDC)**  
**Professor, Department of Epidemiology**  
**London School of Hygiene and Tropical Medicine, UK**  
**Adjunct Professor, Rollins School of Public Health, Emory University, U.S.A**  
**4th Floor, Plot No. 47, Sector 44,**  
**Near HUDA City Metro Station,**  
**Gurgaon - 122002**  
**Office: +91-124-4781400**  
**Email Id: [dprabhakaran@phfi.org](mailto:dprabhakaran@phfi.org); [dprabhakaran@ccdcindia.org](mailto:dprabhakaran@ccdcindia.org)**

For any further queries regarding ethic review, please contact the undersigned:

**Dr. Preet Dhillon (Member-Secretary of PHFI-IEC)**  
**Public Health Foundation of India**  
**Tel:0124 4781400 (Extn. 4468, 4712)**  
**Email: [trc-iec@phfi.org](mailto:trc-iec@phfi.org)**  
**Organizational Address:**  
**Public Health Foundation of India**  
**Plot No. 47, Sector 44, Institutional Area,**  
**Gurgaon, Haryana-122002, India**

SAMPLE



**Program Evaluation of Certificate Course in Management of Hypertension (CCMH)  
Cycle-I [July 2016 – April 2017]  
Consent Form**

**Principal Investigator: Prof. D. Prabhakaran**

**Name of Organization: Public Health Foundation of India**

**Name of Sponsor: Sun Pharma Laboratories Ltd., India**

**Name of the Project: Program Evaluation Study for Cycle- I of CCMH**

**PURPOSE OF STUDY:** The evaluation of the program aims to document the experiences of the participants upon completion of cycle I of CCMH in order to improve the course both in terms of content and delivery in subsequent the cycles.

**PROCEDURES:** The evaluator will talk to you and seek answers to questions in the evaluation tool. The process would take about 40-45 minutes.

**RISKS/DISCOMFORTS:** We anticipate no risk and discomfort as questions only involve your experience during the conduction of CCMH session.

**BENEFITS:** The proposed evaluation exercise intends to identify facilitating and challenging experiences during and after undertaken the course. This will enable us to suitably modify the content and delivery of future cycles of this course thus strengthening the quality.

**CONFIDENTIALITY:** All information collected for this study will be kept strictly confidential. This means that your answers to the questions will not be shared with anyone in the community or with anyone outside of the evaluation team. All confidential data will be stored in locked files or password protected electronic records at the CCMH's program secretariat. Your name will not appear on any of the study data in any way. Also, your name will not appear on any reports or publications associated with this study.

**COMPENSATION:** There will be no compensation for participating in this study.

**RIGHT TO WITHDRAW:** Your participation in this study is voluntary. You are not obligated to participate and you are free to withdraw your consent at any time. Refusal to participate will not have any bearing in any way to the results, but your insights will be critical for us in bringing out further improvements in the content and delivery of CCMH.

INSTITUTIONAL ETHICS COMMITTEE  
 March 15, 2017  
 APPROVED  
 CHAIRMAN / MEMBER SECRETARY  
 PUBLIC HEALTH FOUNDATION OF INDIA

If you agree to participate in the evaluation study, please sign below:

Name of Participant:

Name of Evaluator:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

Date:

For further information please contact:

**Prof. D. Prabhakaran (Principal Investigator)**  
**M.D., DM (Cardiology), MSc, FRCP, FNASc.**  
**Director, Centre for Control of Chronic Conditions (CCCC)**  
**Vice President, Public Health Foundation of India (PHFI)**  
**Professor, Epidemiology,**  
**Public Health Foundation of India (PHFI)**  
**Director, Centre for Chronic Disease Control (CCDC)**  
**Professor, Department of Epidemiology,**  
**London School of Hygiene and Tropical Medicine, UK**  
**Adjunct Professor, Rollins School of Public Health, Emory University, U.S.A**  
**4th Floor, Plot No. 47, Sector 44,**  
**Near HUDA City Metro Station,**  
**Gurgaon - 122002**  
**Office: +91-124-4781400**  
**Email id: [dprabhakaran@phfi.org](mailto:dprabhakaran@phfi.org); [dprabhakaran@ccdcindia.org](mailto:dprabhakaran@ccdcindia.org)**





**Program Evaluation of Certificate Course in Management of Hypertension**  
**Participant Interview Schedule**

Please fill in all the required fields &/or tick the appropriate option provided

1. Name of Interviewer:

2. Code of Interviewer:

3. Date of Visit:      DD      MM      YY  
           

4. Place of Visit:

**Basic Information:**

5. Name of Participant:      First Name      Middle Name      Last Name  
 **SAMPLE**

6. Sex:       Male       Female

7. Age (In years):

8. Qualification:      MBBS      M.D      D.N.B      D.M      Other Degrees      Please Specify:  
                             

9. Regional Center

10. Regional Faculty

11 Type of practice

A. Government       B. Private       C. Non Profit/Charitable

D. Other \_\_\_\_\_

**Clinical Practice:**

12. Years of clinical experience Post MBBS  Post MD/DM

13. Facilities provided at your clinic

I.Laboratory services In-house  External (Sample sent/ col-  
laboration with External Lab)  No

II.In-house Lifestyle modification counselor Yes / No

III.Electronic Medical Records Yes / No

IV.In-house nurse Yes / No

If Yes,

Is he/she is trained to provide lifestyle modification advice: Yes / No

14. Do you provide Ambulatory Blood Pressure Measurement (ABPM) services at your clinic?

If Yes,

How many patients per month (approx.):

15.Availability of patient education resources Printed  Video  Others (Please specify)   
Yes / No  Yes / No



16. Approximate number of patients with hyper-  
tension diagnosed in a month?

17. Approximate number of individuals with hypertension/  
hypertension related complications treated last month?

18. How many patients are referred for intervention such as  
Surgery , renal artery stenting etc.

19. Do you have facilities to conduct the following test for evaluation of a patient with hypertension:

Blood Sugar (F)  HbA1c  Lipid profile  Blood Urea   
Serum electrolyte  Urine proteins  Serum Creatinine  ECG

20. Do you calculate cardiovascular risk score for your patients  
with hypertension. Yes  No

If yes, which cardiovascular risk calculator do you use \_\_\_\_\_

**CCMH Curriculum**

Given below are few statements which ask your perception about the course & your change in practice/knowledge after the course. Kindly rate your level of agreement or disagreement with each statement and explain your answer in the box provided.

21. "This course has improved your knowledge regarding hypertension and its complications"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

22. "The course has improved your ability to screen and evaluate a person with hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

23. "You are better equipped to identify and manage cases of masked, white coat and resistant hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

24. "You have improved your skills in identifying cases of secondary hypertension."

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

25. "You have either evaluated or referred the patient to specialist, necessary"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

26. "The course has improved your knowledge in providing lifestyle modification advice to patients"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

27. "You feel that you advice lifestyle modifications more often and in a more comprehensive and appropriate manner to your patients "

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

28. "You have better knowledge regarding pharmacotherapy of hypertension "

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

29. "You feel more confident in initiation of pharmacotherapy in patient with hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

30. "You prescribe combination therapy more often than before"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

31. "You provide empathetic support to patients to improve adherence and compliance to medication"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

33. "You now suspect/investigate for non-adherence in patients with poorly controlled BP "

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

34. "You feel more confident in evaluating patients for complications of hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

35. "You are better equipped to manage complications of hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

SAMPLE

36. "You have better knowledge regarding signs and symptoms of pregnancy Induced Hypertension (PIH)"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

37. "You are better equipped to manage PIH or recognize signs and symptoms that require referral "

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

38. "You are better equipped to screen, evaluate and refer elderly hypertensive patients"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

39. "You are better equipped to screen, evaluate and refer pediatric patients with hypertension"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

40. "You have been able to successfully implement changes in your clinic or your present work place to manage lifestyle disorders in a more comprehensive manner"

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

41. “ The following course modules have helped you in enriching your knowledge and skills in the management of hypertension and its complications”

I. Introductory Overview of Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

II. Screening and Initial Evaluation of patients with Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

III. Non Pharmacological Management of Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

IV. Approach to Pharmacotherapy of Hypertension—Part 1

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
---	-------------------	---	-------------------	---	----------------------------	---	----------------	---	----------------

V. Approach to Pharmacotherapy of Hypertension—Part 2

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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SAMPLE

VI. Complications of Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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VII. Hypertension management in special population and difficult to treat Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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VIII. Innovation in the management of Hypertension

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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IX. Setting up a comprehensive lifestyle clinic

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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X. Module 10 (Conclusions & Take home messages) adequately & appropriately summarizes the course.

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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42. Could you share with us any special case in your everyday practice which you were able to effectively diagnose, treat and manage due to the additional knowledge/ skill for treatment covered in the modules of this course ?

43. Please rank top three modules in this course that were found most useful.

1..... 2..... 3.....

44. Please suggest three topics that you feel should be added to the course and three topics that could be deleted from the course?

45. Have you made any changes to the facilities provided at your place of practice after completion of this course? (For e.g. : IEC material, updated software etc.)

1..... 2..... 3.....

48. The curriculum was up-to-date in its content

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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49. Topics relevant to hypertension management were covered

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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50. Appropriate time was allotted for study material/slides in all sessions

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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51. The structure of the curriculum was ideal for learning

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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52. The case studies were adequate in initiating discussions for replicating real-life clinical scenarios

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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**Faculty and Teaching Methods/Environment**

53. The teaching methods adopted by the faculty were effective

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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54. The faculty brought relevant personal clinical experience to the teaching session

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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55. The faculty shared additional teaching material during the sessions  Yes  No

56. The sessions were interactive and informative

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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57. The training environment was conducive to learning (e.g. quiet, well-lit, air-conditioning and ventilation)

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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58. The faculty was able to address your concerns/questions regarding clinical problems related to hypertension cases and management in your practice.

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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59. Do you feel this course has helped you connect with other hypertension management physicians in your area ?

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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60. Would you recommend this course to your fellow colleagues?

0	Strongly Disagree	1	Slightly Disagree	2	Neither Agree nor Disagree	3	Slightly Agree	4	Strongly Agree
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61. Please provide suggestions to make the Hypertension course more useful

# SAMPLE

62. Please feel free to share any other feedback/suggestions regarding cycle

63. Did you download the CCMH App

If Yes, please let us know if it was useful: \_\_\_\_\_

Please provide your suggestions on how we can improve the CCMH App in upcoming cycles: \_\_\_\_\_

If No, please let us know the reason for not downloading it: \_\_\_\_\_

Total time taken to complete interview: \_\_\_\_\_

Name of participant:

**Thank you!**

Name of Interviewer

.....

.....

Signature

Signature



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA



# Certificate Course in Management of Hypertension

*This is to certify that*

*Dr. Abc Xyz*

*has successfully completed*

*“Certificate Course in Management of Hypertension”*

*(July 2016-April 2017)*

*delivered by*

*Public Health Foundation of India, British & Irish Hypertension Society,  
International Society of Hypertension and Centre for Chronic Disease Control.*

Public Health Foundation of India

Regional Faculty,

President,  
British and Irish Hypertension Society

President,  
International Society of Hypertension

