Cardiovascular disease, Type 2 diabetes and hypertension in adults

IMPLEMENTATION PLANNING WORKSHOP Version 2. November 2013.

The text in blue highlights points which are likely to need adapting to your country context.

Implementation planning workshop guide. V2. Nov 2013. COMDIS-HSD and partners.

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BACKGROUND AND OBJECTIVES OF THE PLANNING WORKSHOP

Introduction

Cardiovascular disease (CVD) is a global issue and the effective prevention and management of CVD and associated conditions of hypertension and diabetes is a priority.

CVD accounts for 1/3 of deaths worldwide, with the majority of these in low and middle income countries (LMIC) (WHO 2011a). In developing countries, the cost of managing CVD is compounded by the fact that death due to these diseases results in loss of those who are most economically productive (WHO 2010; WHO 2007).

CVD is largely preventable and implementation of cost-effective measures can prevent intolerable increases in disease burden in the future. The challenge is to develop a systematic, feasible and effective approach to chronic care for patients with CVD, hypertension and diabetes in a primary care setting.

The Pakistan national health policy emphasises the control of non-communicable diseases and in 2003 an integrated national action plan for prevention and control of noncommunicable diseases was developed. Pakistan ranks 7th highest prevalence of diabetes in the world. Prevalence of type 2 diabetes age 25 and above is 10%. Currently, primary health care facilities are estimated to only identify 10% of all type 2 diabetes cases in the country. The Pakistan integrated national action plan is committed to improving the ability of national health systems to deliver quality care for hypertension, diabetes and associated conditions.

Tools have been developed for healthcare workers to help implement standardised quality procedures, assist effective screening, diagnosis and management of CVD, hypertension and diabetes in primary care in low resource settings.

This workshop is designed for orientation of district level managers to help them implement and manage a CVD package in a district. It will help them to implement the new strategies incorporated in this CVD strategy.

The workshop explains the essential steps and management tools needed to implement a care package for managing CVD and associated conditions of hypertension and diabetes in a district. The teaching methods used are participatory and skills based, including group discussions and practical exercises. You should keep the training material for reference after the workshop.

Workshop objectives

All participants should:

- understand the disease burden of CVD, diabetes and hypertension;
- understand the strategy for preventing and managing CVD, diabetes and hypertension;
- know the essential 9 steps for implementing community based CVD management tools;
- be able to use the guidelines, tools and materials for implementing the CVD strategy in the district effectively; and
- prepare a District Implementation Plan (DIP) for their respective districts, including actions to monitor implementation and outcomes.

Discuss and clarify the objectives with the facilitator.

Setting the norms

To ensure the workshop runs smoothly and to make the best of the workshop we need to agree on some norms. Together we will decide what behaviour is appropriate for our workshop.

We will consider:

- Workshop times i.e.
 - Starting the working day by 9am
 - Ending the working day by 3pm
 - Taking breaks of 15 mins
- Not answering telephone calls during the workshop
- Not attending to visitors during the workshop
- Not leaving the room unnecessarily during the workshop

Discuss and agree on norms.

SESSION 1: INTRODUCTION TO CVD AND ITS MANAGEMENT IN PAKISTAN

Session objectives

At the end of this session participants will:

- Understand the burden of CVD, hypertension and diabetes; and
- Know the details of the strategy for managing CVD, hypertension and diabetes in rural health clinics and outpatient departments in Pakistan.

The burden of disease in Pakistan

CVD, diabetes and hypertension have been given priority by the Ministry of Health in Pakistan because:

Insert facts re. Pakistan diabetes/hypertension/CVD etc

The CVD strategy is going to be introduced in response to this situation. The National Noncommunicable Disease Control Programme is responsible for effectively coordinating this strategy. Planning and implementation is the responsibility of the district health level that provides primary health care services. It is important that the implementation plan is produced in accordance with the national health development plan.

The strategy for preventing and managing CVD

This CVD strategy has been developed in line with the WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in low resource settings. It is intended to provide practical guidance for day to day prevention, management and care for patients with CVD, hypertension and diabetes.

Components of the CVD package include:

- Screening and diagnosis
- Drug treatment and adherence
- Referral mechanisms to/from secondary care
- Patient education lifestyle and disease specific
- Monitoring and supervision

Screening and diagnosis

A clinical Case Management Desk Guide for CVD, diabetes and hypertension has been developed to assist in the screening, diagnosis, drug initiation and identifying complications for health care workers in rural health clinics and Outpatient Departments (OPD). Recommendations included are based on current evidence and published guidelines to ensure that quality systematic assessment and diagnosis is routinely performed.

The Case Management Desk Guide will enable all adults presenting at a rural health facility/OPD to be considered for possible diagnosis of CVD and its associated conditions. This will include a simple assessment of symptoms and signs combined with affordable and feasible laboratory tests, such as blood glucose testing.

Drug treatment and adherence

Drugs should be freely available and with a regular supply to facilitate provider behaviour, patient adherence and quality care.

The case management desk guide includes guidance on effective drug treatment, potential side effects and contraindications. The drugs recommended are supported by international guidelines. Diabetes, hypertension and CVD are chronic and lifelong, thus requiring continued follow-up and monitoring. Of particular importance is the issue of drug adherence. Both the Case Management Desk Guide and Health Educator's Guide incorporate a number of effective evidence based strategies to address and encourage adherence to medication. These include integrated strategies, such as education, communication, reduced dose frequency of drugs and a patient-provider treatment contract, as well as methods such as using a treatment supporter and follow-up reminders for appointments. It is intended that the health worker and health educator deliver advice on adherence to clinic appointments and medication and that information be reiterated using the health education leaflet.

Patient education - lifestyle and disease specific

Improving lifestyle risk factors such as lack of physical activity, poor diet, smoking and alcohol intake, is essential to prevent progression and complications of CVD, diabetes and hypertension. Brief lifestyle advice is included in the case management desk guide to be delivered to all patients who are diagnosed with CVD, hypertension and diabetes, as well as those who are considered at high risk i.e. pre-diabetes, over 50, smokers and/or overweight. Those who are diagnosed will be referred to a health educator, who will help facilitate patient-led behaviour change. A Health Educator's Desk Guide has been produced to guide health workers through a step by step process of changing lifestyle behaviour and improving knowledge of specific conditions. The intervention involves assessing an individual's motivation and ability to change behaviour around key risk factors, as well as suggestions on how to support and encourage change using recognised techniques.

In addition, a Health Education Leaflet has been designed to support the advice delivered by both the health worker and health educator. This leaflet includes advice on living a healthy life as well as specific disease information and adherence to treatment. It should be given to all patients who are diagnosed or identified as at high risk of CVD, diabetes and hypertension.

Further information for patients on understanding their disease, prognosis, self-care and treatment is included in the Case Management Desk Guide for the health worker to use.

Referral mechanisms to/from secondary care

Whilst the strategy and associated tools are aimed at delivering effective management in primary care, it is important that patients can be safely identified and referred to secondary care facilities when appropriate. The tools provided, in particular the health worker's Case Management Desk Guide, include signposts for potential referral of patients during their assessment and management. To support this process, the channels of communication and referral mechanisms between primary and secondary care facilities in a district need to be well defined.

Monitoring and supervision

Individual patient monitoring and monitoring of facilities will enable you to compare the success of a programme over time. The results will be useful for guiding further expansion of the programme in other districts. The tools to assist patient monitoring and supervision include a patient register, patient treatment card, facility reporting card as well as tools at the district level. You should complete a patient register for all patients diagnosed with diabetes, CVD, hypertension and pre-diabetes. You should also record individual attendances with both the health worker and health educator along with outcome i.e. lost to follow up, still attending, transferred out, or died. This is to enable individual patient monitoring and progress and facilitate cross sectional and cohort analysis of each health care facility.

The reports on case finding and treatment outcomes from individual facilities should be monitored and presented regularly at district level meetings. The district coordinator will monitor facilities at frequent intervals throughout the year. The programme inputs (trained staff, drugs, printed materials, etc) will also be monitored to ensure uninterrupted quality of care.

Regular supervision of care providers and managers is important to ensure that the CVD strategy is implemented effectively and efficiently, to provide on the job training and to assist with problem solving at the local level. This is especially necessary in the first few months of implementation. You should use the programme input checklist and supervisory checklists to help facilitate this.

Discuss with the facilitator any points that are not understood

Complete exercise 1.

Exercise 1:

Describe the current burden of CVD, diabetes and hypertension in your district:

- Estimate the number of rural health centres in district.
- Estimate the number of rural health centres reporting diagnoses of CVD, diabetes and hypertension.
- Estimate the percentage of cases identified at rural health care centres.
- Estimate the number of people with undiagnosed CVD, hypertension and diabetes in your district.

Continue to session 2.

SESSION 2: DECISION AND PLAN TO IMPLEMENT THE CVD STRATEGY

Introduction

In the last session, we learnt about the significance of CVD, hypertension and diabetes, the disease burden and the important components of a strategy for CVD prevention and management. Now we will learn how to effectively implement the package of tools in a district in Pakistan by looking at the decision and the plan to implement.

Session objectives

- Know the 9 major steps for effective implementation in a district;
- Understand the important aspects in the process of deciding and planning the implementation of the package of CVD tools in a district; and
- Decide where to implement and fill in the sections 1.1 to 1.3 of the DIP.

Successful implementation of the CVD strategy

Effective implementation in a district requires coordinated efforts by the managers and care providers in the district. The district managers can ensure the success of the programme by careful planning, effective training and supervision, logistical arrangements and continued monitoring of the programmes. All these aspects will support and enable care providers to provide a high standard of patient care.

The important stages of implementation are outlined in the following 9-step process.

Summary flow chart: 9 steps to implementation



1. Plan the implementation of the CVD strategy

Once a district has decided to implement the strategy for prevention and management of CVD, diabetes and hypertension, a DIP needs to be prepared. The district CVD team will complete the DIP through the sessions and exercises in this workshop. This will include plans for preparation, implementation, supervision, monitoring and evaluation. It should detail what needs to be done, how it will be done and who will be responsible for completing each task, as well as detailing any other support that they may need and a deadline for completion.

It is important that the implementation is done in using a step by step process and the DIP will help to ensure this happens. The DIP outline can be found in appendix A and should be used as a template for the group to complete throughout these exercises.

Discuss and clarify any points that are not understood with the facilitator.

Complete exercise 2.

Collectively decide and fill in rows for DIP 1.1, 1.2 and 1.3.

Exercise 2a

Please decide and name the individuals in the district and sub district CVD team;

District CVD team

Name	Role

Sub district CVD team

Name	Role

Exercise 2b

Please answer the following questions;

- What are the advantages of gradual expansion in a district?
- What are the barriers to gradual expansion in a district?
- What are the advantages of rapid expansion in the district?
- What are the disadvantages of rapid expansion in a district?
- How would you expand in your district i.e. gradual/rapid?

SESSION 3: IDENTIFYING FACILITIES AND MAKING LOGISTICAL ARRANGEMENTS

Introduction

In the last session, we learnt about the 9 key steps for effective implementation of the strategy for CVD prevention and management in a district and planned the initial steps. Now we will learn about the next 2 steps:

- 1. identifying sites for phased implementation; and
- 2. making logistical arrangements for effective implementation of the CVD strategy in the district.

Session objectives

At the end of the session, the participants will be able to:

- understand the roles of the rural health facilities, health care workers, health educators, treatment supporters and referral centres in the care of CVD and associated conditions;
- prepare a list of facilities in the district;
- understand the significance and the proposed mechanism for making logistic arrangements in the district;
- discuss and agree on logistic arrangements for delivery and management of CVD care in the district; and
- decide and fill in sections 2.1 to 2.4 and 3.1 to 3.7 of the DIP.

2. Identify sites for phased implementation

Identification of treatment centres to participate in CVD programme

It is best to start the CVD strategy in a selected part of the district. Identify the first group of health facilities to be equipped and trained.

Rural health facilities and OPD

These facilities will be the primary source of care for patients with CVD, diabetes or hypertension. These will be the settings for the health care worker and health educator to assess, diagnose and deliver recommended interventions as outlined by the case management desk guide and health educator desk guide.

Referral centres i.e. hospitals

An individual will be referred to a hospital or specialised centre if they are suffering from urgent or non-urgent complications from their illness, or they require laboratory tests or examinations that are not available at the rural health facilities. However, if a patient is referred to secondary care, they will also continue to have appointments at their local health facility to ensure continuity of care.

Identifying key health care workers

Doctors/clinicians at the rural health facilities

These individuals will be responsible for diagnosing, treating and managing patients with CVD, diabetes and hypertension using the case management desk guide. They will also deliver brief lifestyle advice before referring them to the health educator.

Health educators at the rural health facilities

All patients diagnosed with diabetes, hypertension or CVD will be encouraged to attend an appointment with the health educator, ideally on the same day. The health educator will be responsible for facilitating and encouraging behaviour change in one of four key lifestyle risk factors, which are important in CVD and associated diseases. The health educator will also deliver information on adherence to clinic appointments and medication, as well as discussing specific key messages on conditions i.e. diabetes or hypertension.

Treatment supporter

Each individual who is diagnosed with diabetes, hypertension or CVD will be required to choose a treatment supporter. This should be someone who knows them well, is prepared to attend appointments regularly with the patient, help them to continue their medication and generally encourage and support them throughout their treatment, which may be life-long. This could be any member of the patient's family or community. The role and importance of the treatment supporter will be discussed with the patient in both the appointment with the clinician and health educator.

3. Make logistical arrangements

Continued logistic support is essential for the delivery of quality care for patients with CVD, diabetes and hypertension. The district health office, with facilitation support from the provincial CVD programme, will primarily be responsible for providing continued logistic support.

This logistic support involves ensuring that you provide:

- Laboratory tests and mechanism for testing i.e testing strips for cholesterol
- Drugs for CVD, hypertension and diabetes
- Equipment
- Consumables
- Printed materials
 - Case management desk guide
 - Health educator desk guide
 - Education leaflet
 - Treatment card (including treatment contract)
 - Diabetes annual review card
 - Patient register
 - Facility report including cohort analysis
- Supervision and monitoring tools
 - District register

- District report
- Transport for supervision

Discuss and clarify any points that are not understood with the facilitator.

Complete exercise 3.

Exercise 3

Complete the following tables:

- List of rural health facilities and referral centres
- List of catchment villages for each facility
- List of health care workers; doctors/clinicians, health educators.
- List of treatment supporters (non-family members).

Discuss and agree on logistic arrangements for the key areas mentioned above complete DIP section 2.1 to 2.4 and 3.1 to 3.7.

SESSION 4: TRAINING

Introduction

In the last session we learnt about identifying health facilities to carry out the delivery roles and to make logistical arrangements for effectively implementing the CVD strategy in your district. Now we will learn about training various staff and how to ensure that arrangements for effective implementation are in place.

Session objectives

At the end of the session the participants will be able to:

- Understand the need and the use of context specific training materials for managers and other categories of staff;
- Discuss and agree on plans/arrangements to train staff in the district;
- Understand the importance of preparation for implementation; and
- Decide and complete sections 4.1 to 4.3 and 5.1 of the DIP.

4. Train practitioners and researchers

Furthermore, do not start implementing the CVD strategy until all categories of staff are trained. This will ensure that the whole pathway of care can be provided properly. Once the facilities and health workers are identified and logistical arrangements in place, all those involved in implementing the CVD strategy can be trained. Different training courses will need to be run for the different categories of staff i.e. health educators will need to attend sessions on how to facilitate behavioural change effectively, whilst clinicians will need to be trained on how to use the Case Management Desk Guide. It is important to train all staff within a short time frame.

Staff	Duration	Where	Number per session
District manager			
CVD district coordinators			
Clinicians			
Health educators			
Community health workers			

There are 'X' categories of staff to be trained.

The initial rounds of training will be delivered by the national CVD programme. However in subsequent training, the responsibility for delivering training will be gradually undertaken by district coordinators and experienced staff.

Discuss and clarify any points that are not understood with the facilitator.

5. Ensure criteria for starting the pilot/research site are fulfilled

Complete the following criteria before implementing the CVD strategy. Do not start until all 8 elements below are in place:

- 1. The District Implementation Plan is prepared and agreed by the District CVD team.
- 2. Drugs are available at the health facilities.
- 3. Laboratory tests and consumables are available.
- 4. Printed materials including the CVD case management desk guide, health educator flip chart, treatment card, register and educational leaflet are distributed.
- 5. Ensure printed documents for district team are available i.e. checklist, register and report.
- 6. Each category of staff has been trained and is available to work.
- 7. Transport and tools for supervisory support are available for the District and sub-district CVD coordinators.
- 8. The District CVD coordinator has visited each health facility and ensured that the criteria for successful preparation for implementation of the CVD strategy are in place.

Complete Exercise 4.

Exercise 4

Complete section 5.1 of the DIP.

- Identify trainers to train people
- Arrange training courses dates and attendance
- Conduct training courses

Review the checklist of programme inputs and complete in conjunction with the DIP.

Checklist of programme inputs for each health facility

Criteria	Situation	Problem identified	Agreed action
Staff at facility identified and trained			
Clinician	(Y/N)		
Health educator	(Y/N)		
Treatment supporter	(Y/N)		
Community health workers	(Y/N)		
Staff have access to a copy of desk guide			
Clinician	(Y/N)		
Health educator	(Y/N)		
Supply of all CVD, hypertension and	(X/NI)		
diabetes drugs	(1/1)		
Named laboratory identified and	(X/NI)		
equipped	(1/1)		
Six months of printed treatment cards,	(V/NI)		
registers and educational leaflet.	(1/1)		
Arrangements in place to provide	(V/NI)		
lifestyle education/behaviour change	(1/1)		
Regular supervision completed according to plan	(Y/N)		
Observe that the case management procedures as recommended in the desk guide are being performed	(Y/N)		
Regular monitoring of registration, diagnosis and treatment outcomes are in place	(Y/N)		

SESSION 5: IMPLEMENTATION AND SUPERVISION

Introduction

In the last session we learnt about training staff and the criteria for starting implementation to ensure effective implementation of the CVD strategy in the district. Now we will learn about starting to implement the strategy and how to provide supervision and support.

Session objectives

At the end of the session the participants will be able to:

- Discuss and agree on the plans for effective supervision of staff in the district; and
- Decide and complete the sections 6.1 to 6.3 of the DIP.

6 & 7. Implement the intervention in chosen sites and supervise to ensure process quality

After ensuring that the checklist of programme inputs has been completed for all facilities involved in the CVD strategy, and any problems identified have been fully resolved, then diagnosis, registration, treatment and record keeping can begin.

Once implementation starts, the CVD team should begin supervision of each element of the CVD strategy immediately, i.e. are patient records being maintained correctly? Supervision is essential to ensure quality of care, as newly trained staff often have questions as they begin to carry out their new tasks. The district CVD coordinator is responsible for making a supervision visit to each health facility within the first month of implementation.

In addition, you should arrange meetings for each level of staff on a regular basis to discuss progress or to raise problems or difficulties. **Do not begin to train staff in the next area until implementation is working well in the previous area.**

Supervision of health facilities should be frequent for the first few months. If there are no problems, the frequency of visits can be reduced. We suggest the following frequency of supervision for a health facility delivering the CVD strategy:

- At least once a month for the first 4 months
- At least every 2 months for the next 4 months
- At least once every 3 months from then on, although returning to monthly visits if problems arise.

We recommend that facilities are generally informed in advance of a supervisory visit, although on occasion an unannounced visit may be useful.

Supervision should be supportive. It is often regarded negatively by health workers and as a result they may learn to hide things from their supervisor. It should be an opportunity for the health worker to raise those areas that are going well, as well as those they are finding difficult. It is also a chance to determine if the health care worker is carrying out their job as

they should. During a supervisory visit, the supervisor should sit in on a consultation, as well as monitoring patient records and talking to staff.

In giving feedback, it is best to first comment on the positive areas of the jobs being done before raising any areas which could be improved. Where the health worker has not been trained sufficiently, the supervisor should reiterate this aspect of the training. The supervisor should try to solve any problems that exist.

Before leaving, the supervisor should discuss and agree on which points should be improved before the next visit, record these and follow up on these points on the subsequent visit.

The following checklist can be used for the supervision of clinicians and health educators.

Discuss and clarify any points that are not understood with the facilitator.

Complete exercise 5.

Exercise 5

Look at the supervisory checklist for case management and health education.

Agree and complete section 6.1 to 6.3 of the DIP.

- Ensure supervisory arrangements in place
- Supervisory checklists
- Ensure agreed number of visits of supervision

When using the supervisory checklist for case management and health education, the possible reasons for variation in practice can be recorded as:

- Protocol deficient
- Protocol not feasible for the facility
- Provider not clear/skilled
- Patient did not accept
- Patient not willing

Supervisory checklist for case management and health education

Observed practicepracticeand timescaleNumber of patients registered on diabetes/hypertension/CVD registerObserved =-Percentage of registered patients attending for follow up with clinicianExpected =-Percentage of registered patients attending the health educator (at least once)Expected =-Average ratio of appointments to health educator: appointments to clinician for registered patients with complications referred to secondary careExpected =-Percentage of registered patientsExpected =Percentage of registered patientsExpected =Percentage of registered patientsExpected =Percentage of registered patientsExpected =Percentage of registered patients with complications referred to secondary careExpected =-Percentage of registered patients with diabetes with completed annual reviews at 1 yearExpected =-Percentage of registered patients with asigned treatment supporterExpected =-Percentage of registered patients with a treatment contract completedExpected =-Percentage of regist	Indicator	Expected/	Reasons for variation in	Agreed action
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SESSION 6: MONITOR PROGRAMME AND DECIDE TO EXPAND IN A DISTRICT

Introduction

In the last session we learnt about how to start implementing and supervising the CVD strategy in the district. Now we will learn about monitoring the programme and subsequently how to decide whether to expand in the district.

Session objectives

At the end of the session the participants will be able to:

- understand the importance, the process and the proposed tools for monitoring the CVD strategy in the district
- discuss and agree on plans and arrangements for effective monitoring of the CVD strategy in the district; and
- decide and complete 8.1 to 8.10 of the DIP.

8. Monitor and evaluate the CVD programme

It is essential that implementation of the CVD strategy is monitored and evaluated to determine if it is successful as a package of care, and to check that each aspect of the strategy is being implemented effectively. Only after this is complete, is it possible to decide whether the strategy should be scaled up to the next district.

Progress in implementation according to district CVD plan:

Use the following 3 tools to help you in the monitoring process;

- 1. DIP
- 2. Checklist of programme inputs
- 3. Supervisory checklist of case management practices

The DIP being completed as part of this workshop is a key tool to determine if implementation of the programme is progressing according to plan. Review the plan throughout implementation process to ensure that each activity is being completed on time.

Another useful tool is the checklist of programme inputs, see page 19. This list clearly identifies the practical inputs that are required for good quality care and should therefore be reviewed during implementation monitoring. It is important to check that the agreed action that was noted for particular facilities has been undertaken and the problem resolved.

In addition, the supervisory checklist for case management practices, see page 22 can be used in a similar manner.

Monitor treatment outcomes

To know if the programme has been successful at the sub district and district level, it is necessary to know how many patients diagnosed with diabetes and hypertension have reached targets for blood glucose and/or blood pressure control. It is recognised that achieving control of blood glucose and blood pressure may take up to 18 months and therefore it will not be possible to monitor this at first. Once it is possible, it is hoped that the district and sub districts would see an increased number of individuals reaching their targets each quarter. However, monitoring case registration, drug treatment/adherence and lifestyle facilitation will provide an indication of the success of the programme during this initial phase. It is important to recognise though improved CVD care, it is likely that the numbers of people diagnosed with diabetes, hypertension and CVD will increase for a while, as these individuals may not have previously been detected. This will eventually plateau.

Prepare quarterly reports

The staff at each health facility are responsible for preparing quarterly reports using the information collected in the CVD register. You should produce these reports during the first week of every quarter and submit these reports to the sub district/district CVD coordinator who will check the consistency and completeness of the data received from all health facilities in the area. The CVD coordinator is then responsible for producing a report compiling all the information from the individual health facilities.

These quarterly reports will be discussed during a quarterly District CVD team meeting in order to review progress, identify problems and decide on appropriate actions.

Discuss and clarify any points that are not understood with the facilitator.

Agree and complete DIP 8.1 to 8.10.

APPENDIX A: DISTRICT IMPLEMENTATION PLAN

	Cub district	Date		Responsibility	Comments
Activities		Start	Completion		
1. PLAN TO IMPLEMENT THE CVD STRATEGY					
1.1 Consultation between CVD programme, MoH coordinator, District health office and team to decide to implement CVD strategy in district, collaboration with essential programmes in district					
1.2 Identify and organise district and sub-district CVD teams including consent					
1.3 Orientate district and sub-district level managers					
2. IDENTIFY SITES FOR PHASED IMPLEMENTATION					
2.1 Identify facilities to participate in CVD programme					
2.2 Identify referral centres - working links - pathway of consultation and communication					
2.3 Identify key healthcare workers including clinicians, facilitators (paramedics) to be involved					
2.4 Identify monitoring supervisor					
3. MAKE LOGISITICAL ARRANGEMENTS					
3.1 Arrange tests availability and mechanism for laboratory					
3.2 Arrange drugs					
3.3 Arrange equipment					
3.4 Arrange consumables					
3.5 Arrange training modules, desk guide, facilitator guide, patient register, patient treatment contract - print materials					
3.6 Arrange supervision and monitoring - tools facility and district level					
3.7 Supervision and monitoring - transport					
4. TRAINING PRACTITIONERS AND RESEARCHERS					
4.1 Identify trainers to train people - facilitators and					

clinicians			
4.2 Arrange training courses dates and attendance			
4.3 Conduct training courses			
5. CRITERIA FOR STARTING IMPLEMENTATION			
5.1 Administrative and logistical arrangements for starting the service			
6&7. IMPLEMENTATION AND SUPERVISION			
6.1 Start diagnosing, registering, treating and record keeping			
6.2 Ensure supervisory arrangements in place			
6.3 Ensure agreed number of visits of supervision are happening			
8. MONITOR AND EVALUATE THE PROGRAMME			
8.1 Ensure quality control procedures in place			
8.2 Monitor case registration and diagnosis			
8.3 Monitor lifestyle advice facilitation			
8.4 Monitor referrals to hospitals			
8.5 Monitor drug treatment			
8.6 Monitor available consumables and drugs			
8.7 Monitor treatment outcomes			
8.8 Arrange and conduct regular quarterly monitoring meetings at sub district and district level			
8.9 Decide whether to expand to next sub district			
8.10 Links with NGOs			