Effective Diagnosis, Treatment, and Monitoring of Hypertension in Primary Care: Training Workshop

Session 4

Service Delivery and Patient Monitoring

Content should be adapted with country-specific information prior to use. Red text denotes places where modification may be required. Guidance on how to adapt the training is provided in the Course Overview.

Competency and objectives

Competency:

Ability to identify current service delivery strengths and gaps and to accurately fill out recording tools at the primary health care level

In this session, you will discover how to:

- Modify service delivery and patient flow
- Complete individual patient treatment cards
- Store cards

Expected activities at primary health care facility

Task/subtask	Frequency/timeframe
Opportunistic screening	
Measure blood pressure (BP) of all adults waiting in the outpatient department queue following the protocol.	*Daily during outpatient department (OPD) hours*
Refer patients with BP >160/100 to the doctor.	*When a patient with BP >160/100 is identified*
Ask patients with systolic between 140–160 to come back for a second reading at least one week later in order to establish diagnosis.	*When a patient initially presents with SBP 140–160*
Initiate treatment	
Measure biometrics.	*Every time a new patient who needs treatment is diagnosed*
Follow hypertension treatment protocol.	
Lifestyle counselling	
Counsel patients receiving treatment.	*At each clinic visit*
Dispensing	
Dispense medications and provide adherence advice.	*At each clinic visit*
Refill medications for stable patients.	*Refill medications monthly for patients who had controlled BP three visits in a row*

Task/subtask	Frequency/timeframe
Maintaining records and reports	
Patient Treatment Card: Fill in sections of the first page of the treatment card. Fill in data in the follow-up sheets.	*For every new hypertensive patient* *At every follow-up visit*
Facility Register for Hypertension: Enter newly registered patients. Update quarterly treatment outcomes. Update annual treatment outcomes. Prepare quarterly facility reports. Prepare annual facility report.	*End of every week* *End of every month* *End of first quarter of the year* *Every quarter* *15 April of each year*
Follow-up of defaulting patients	
Telephone patients who missed their appointment the previous month.	*Start of new month: follow-up on all patients who missed their appointment the previous month*
Make a home visit to track a patient who cannot be contacted by phone.	*Start of new month: follow-up on all patients who missed their appointment the previous month who cannot be contacted by phone*
Referral of patients to higher levels	
Refer patients whose BP is not controlled after following the protocol.	*Every time BP is not controlled after following the protocol.*
Call referred patients who have not followed up after one month of referral.	*One month after every referral is made*

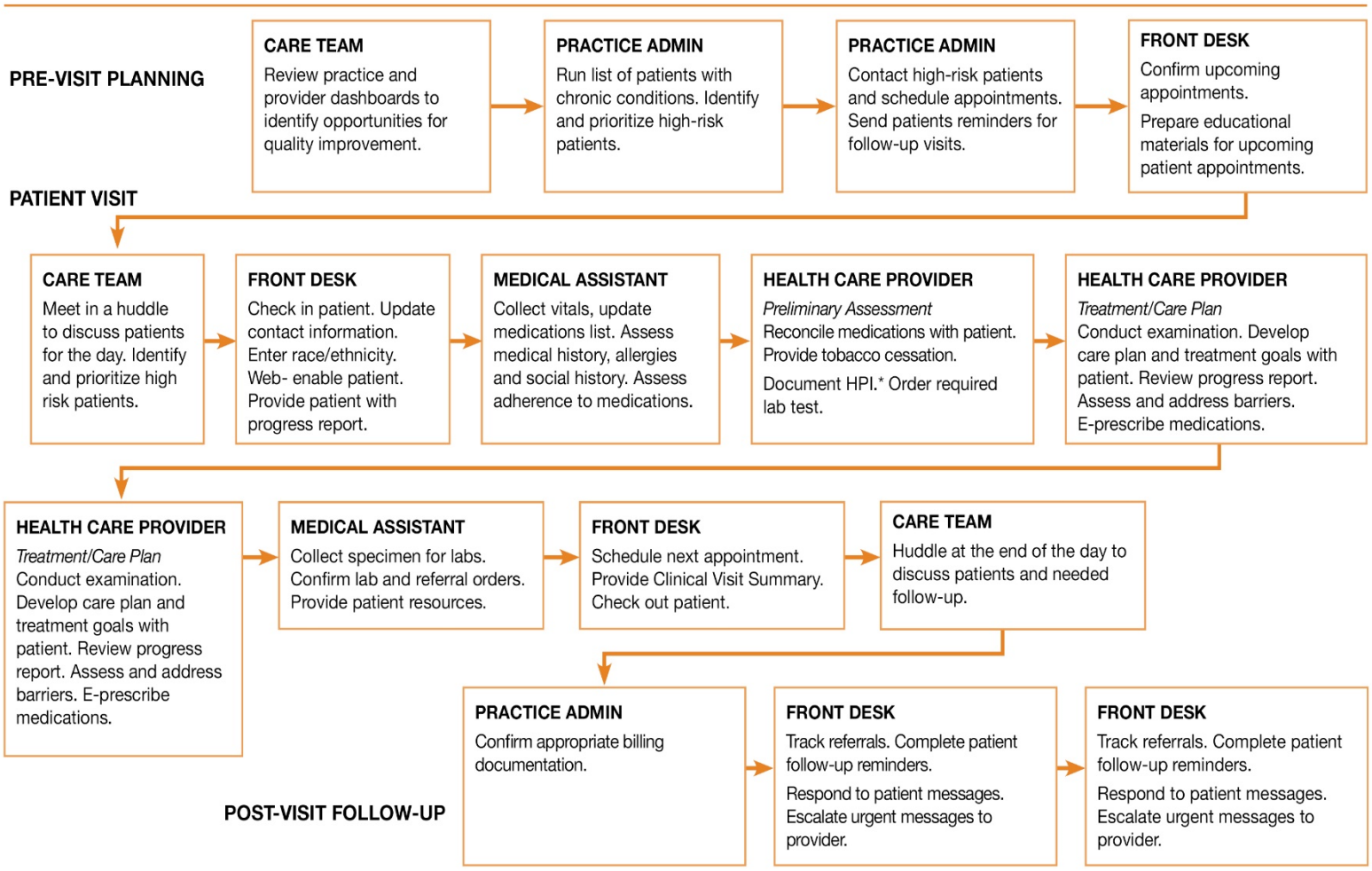
Service Delivery Model

A Service Delivery Model is essential to identify the right approach to provide effective patient management.

Key requirements for a successful model:

- Clear roles for care at the facility level
- Strong referral mechanisms to secondary and tertiary levels of care
- Established patient monitoring system
- Impact evaluation system for patient outcomes

Example 1. New York City workflow

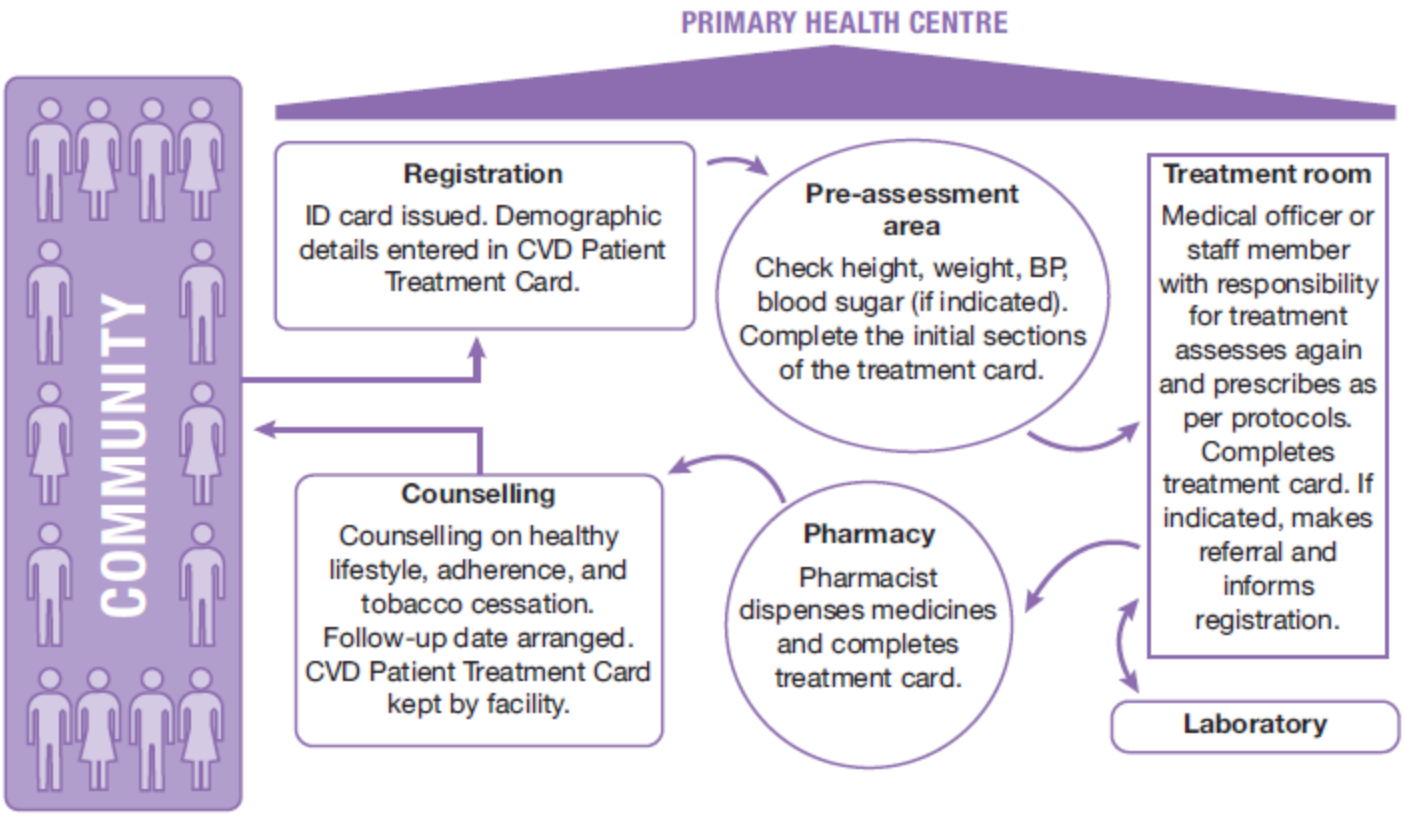


Adapted from: ABCS Toolkit for the Practice Facilitator, HealthyHearts NYC. New York City Department of Health and Mental Hygiene. 2017.

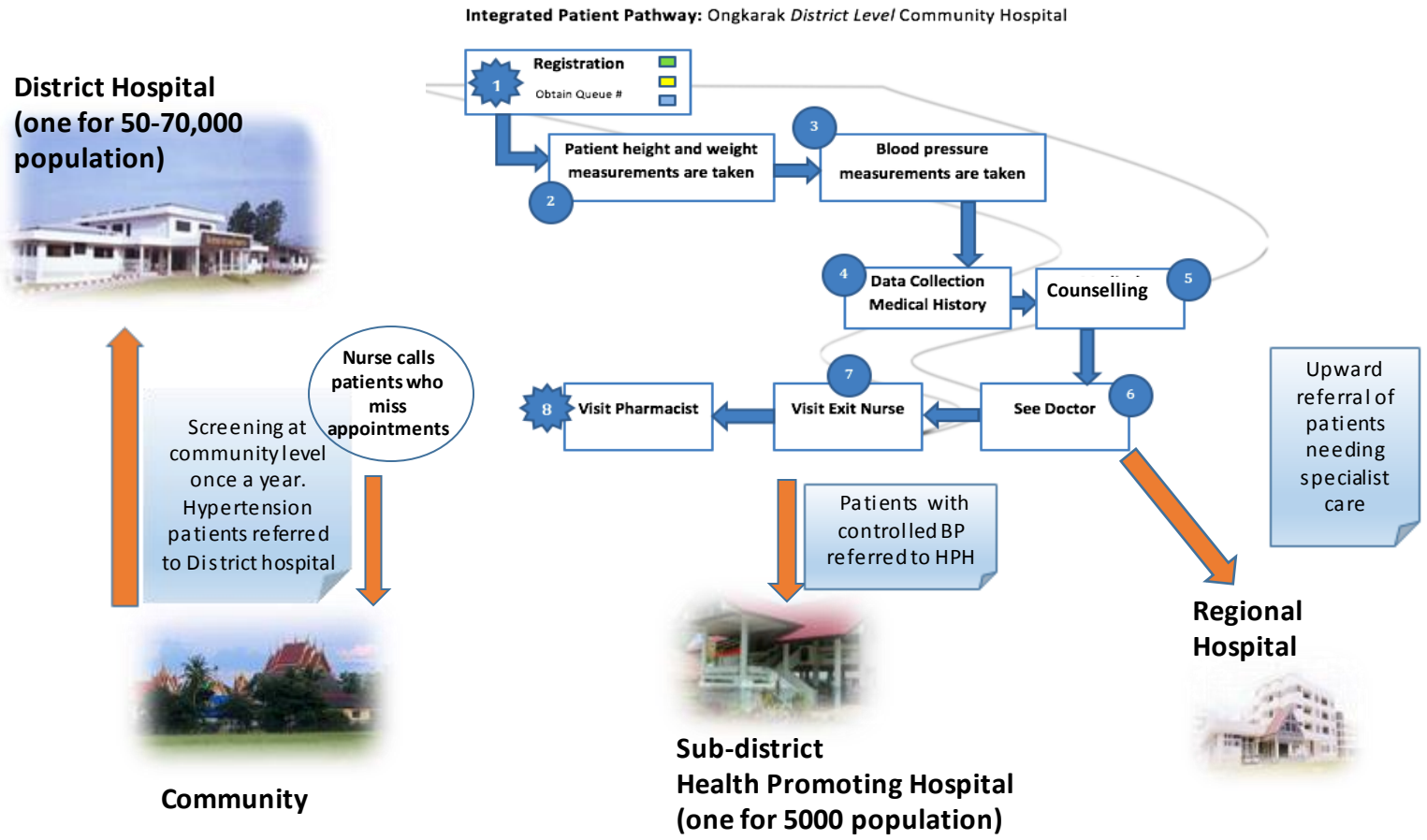
Example 2

[Insert image of country's existing service delivery model.]

Example 3: Sample patient-flow pathway



Example 4: Thailand Integrated Patient Pathway



EXERCISE 1

Patient flow and service delivery

Part 1: *Outline the patient flow pathway in your clinic.*

Part 2: *Identify the main assets and barriers to incorporating hypertension screening and management into your current service delivery model.*

Facility-level recording tool

Front page, one-time information →

CVD PATIENT TREATMENT CARD

Name of Health Facility: Name of District/ State/Province:

Date of registration: Unique patient treatment number:

A. Patient identification information

Patient ID number:

Name:

Father's/husband's name:

Sex: Age:

Address:

Phone number:

Alternative phone number:

B. Diagnosis

1. Hypertension:

☐ Yes, treatment initiated

☐ Yes, was already on treatment when registered

Other co-morbidity

2. Prior heart attack: ☐ Yes ☐ No
3. If yes, h/o heart attack in the past 3 years? ☐ Yes ☐ No
4. Prior stroke: ☐ Yes ☐ No
5. Chronic kidney disease: ☐ Yes ☐ No
6. Diabetes: ☐ Yes ☐ No
7. H/o smoking: ☐ Yes ☐ No

C. Hypertension treatment at registration

1. Medication dose
2. Medication dose
3. Medication dose
4. Medication dose

D. Diabetes treatment at registration

1. Medication dose
2. Medication dose
3. Medication dose
4. Medication dose

Additional notes

Life-style modification (LSM)

☐ Life-style modification alone ☐ Both lifestyle modification & medication

Any other advice :

Follow-up visits to record BP and medicines prescribed at every visit ↓

E. Initial and follow-up visit

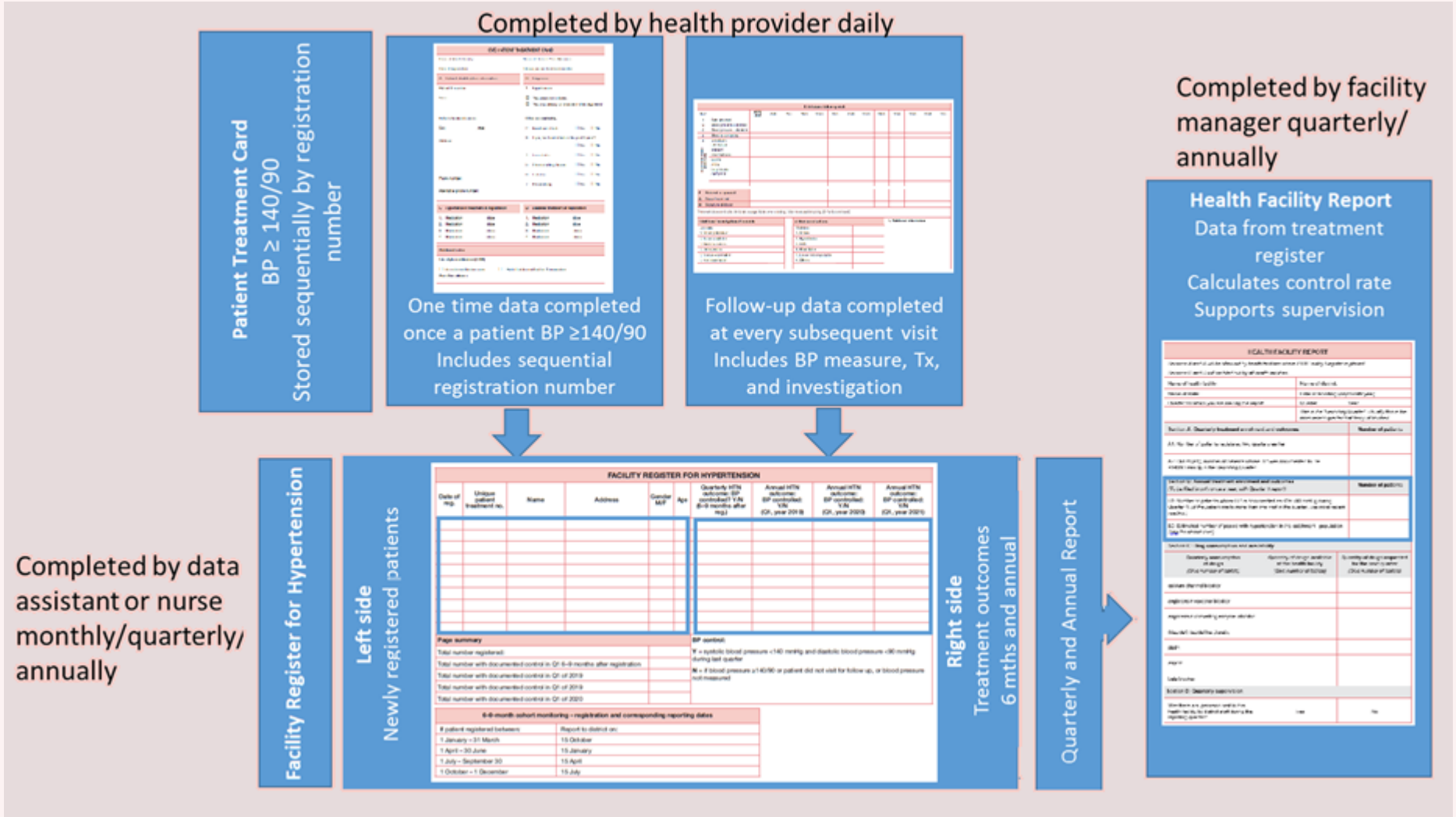
SL n°		At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended													
2	Blood pressure – systolic													
3	Blood pressure – diastolic													
4	Blood sugar fasting													
5	amlodipine													
Treatment dose and code	telmisartan													
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F	Referred to specialist													
G	Date of next visit													
H	Signature of doctor													

Treatment dose and code. Indicate dosage. Note when starting (N for new), and stopping (D for discontinued).

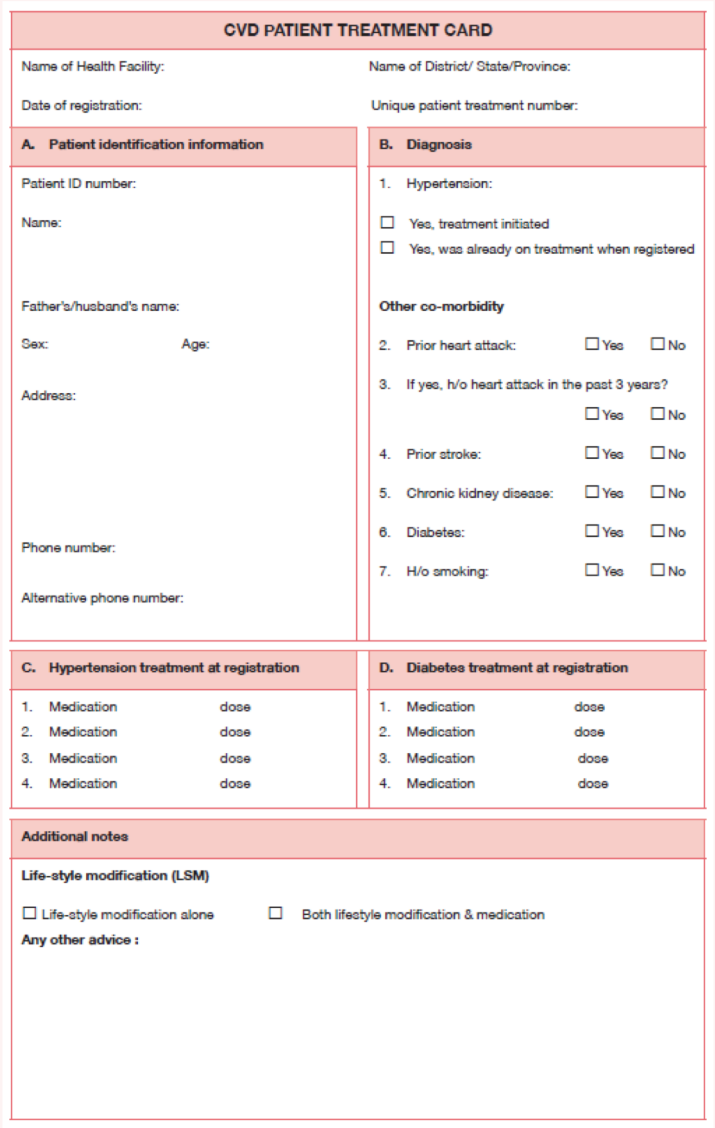
I. Additional investigations if available			
Visit date			
1. Serum potassium			
2. Serum creatinine			
3. Total cholesterol			
4. Urine protein			
5. Fundus examination			
6. Foot examination			

J. New complications				K. Additional information
Visit date				
1. Stroke				
2. Hypertension				
3. CVD				
4. Renal failure				
5. Lower limb amputation				
6. Others				

Facility-level information flow



Patient Treatment Card



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Additional notes

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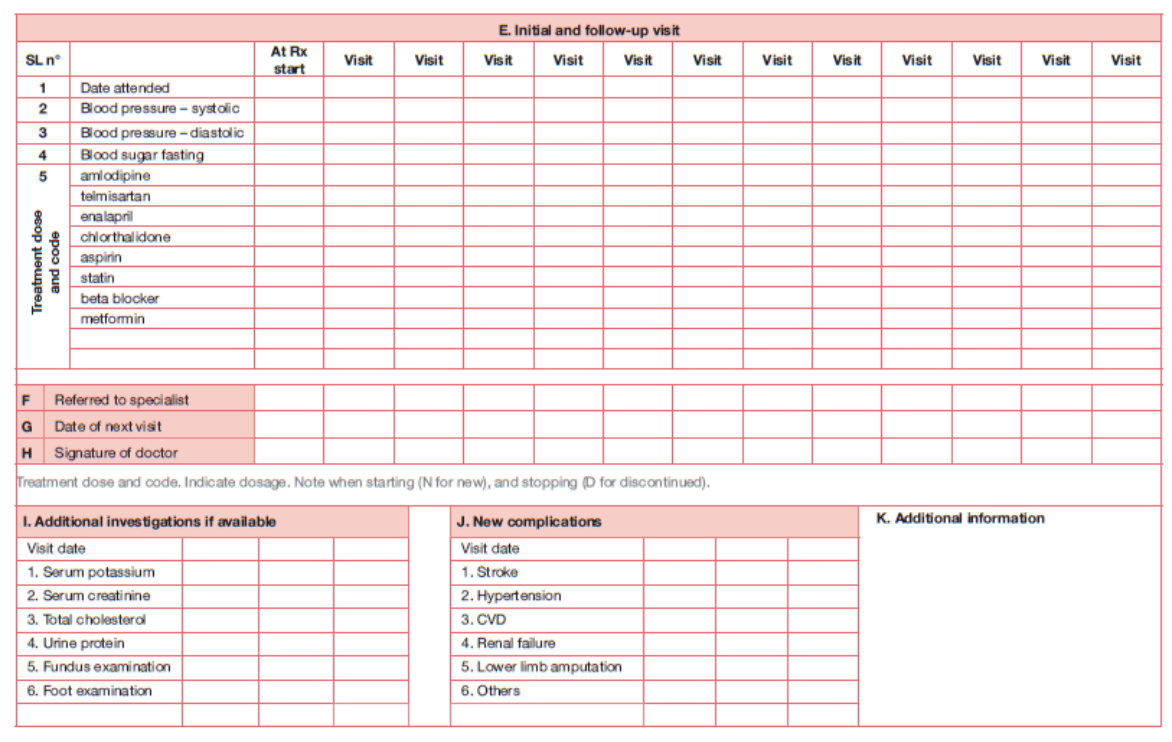
Any other advice :

Treatment follow-up sheets



E. Initial and follow-up visit

SL n°		At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended													
2	Blood pressure – systolic													
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4	Blood sugar fasting													
5	amlodipine													
Treatment dose and code	telmisartan													
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F	Referred to specialist													
G	Date of next visit													
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J. New complications			
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6. Others			

K. Additional information

- Accounts for medication checks at follow-up visits, blood pressure monitoring, and future visit planning
- Follow-up visits are accounted for with each visit record:
  date, SBP, DBP, treatment dose and code, referred to specialist, and date of next visit

Additional investigations

I. Additional investigations if available			
Visit date			
1. Serum potassium			
2. Serum creatinine			
3. Total cholesterol			
4. Urine protein			
5. Fundus examination			
6. Foot examination			

K. Additional information

- Results of investigations should be recorded, if available.
- Use the space under additional notes to record any significant event related to hypertension treatment, such as side effects.

EXERCISE 2

Completing a Patient Treatment Card

Review the patient details and complete the treatment card accordingly.

Please keep the completed treatment card for future exercises.

EXERCISE 3

Spot the mistake

Review the patient details and the completed treatment card.
*Identify at least **three** errors on the card.*

EXERCISE 4

Completing a patient treatment card with follow-up visits

The story continues from Exercise 3.

The nurse asked the ANM to visit the patient's house and counsel the patient. After the counselling, the patient decided to return and continue treatment.

Complete the patient treatment card with the information given.

Patient Treatment Card storage

Shelf I: Arrange cards by unique treatment number at the start of the month/ quarter

Shelf II: Move the treatment card to next shelf after giving treatment and marking a tick on the card.

End of quarter

Count cards in each shelf/box

1. Leftover cards in shelf I at the end of each month means these patients have missed their follow-up visit and have not collected medicines. Call patients to remind them to visit health facility for follow-up.
2. If patient has been confirmed for transfer to another facility, move the card to Shelf III.
3. If patients have missed visits for one year, move the card to Shelf IV.
4. If the patient has died, mention date of death in the follow-up section of treatment card and move the card to Shelf V.

Models of record keeping