# Effective Diagnosis, Treatment, and Monitoring of Hypertension in Primary Care

### **Facilitator Notes**

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# 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.

Facilitators should review all materials prior to the training workshop to ensure they have a full understanding of the session and to determine what hard copy print outs will be required to conduct the exercises.

#### Overview of session

Participants will apply what they learned about the monitoring of hypertension by undertaking exercises that involve assessing service delivery and filling in case details on patient treatment cards.



#### Instructions

- A total of 40 minutes is recommended for this activity.
- Read out the activity outline to the participants.
- Ask participants to outline the patient flow pathway in their clinic, including key activities that may occur at each step (see slide 21 of session 1 PowerPoint for an example). Give them about 10 minutes to create the flow pathway.
- Once the flow pathway is complete, ask participants to identify the main assets (strengths) and barriers (challenges) to incorporating hypertension screening and management into their current service-delivery model. Allow participants to reflect for about 5 minutes.
- Ask participants to share with the group some of the assets and barriers.
   Prompt participants to identify ways their service-delivery model could be strengthened to allow for integration of hypertension screening and management. Allow about 15–20 minutes for discussion.
- Summarize the main points identified, and give some suggestions on how best to incorporate solutions in the service delivery model.



#### Instructions

- A total of 20 minutes is recommended for this exercise.
- Give participants 10 minutes to review the patient details provided in the Participant Guide for Exercise 2 and to complete the treatment card accordingly. While there is a blank Patient Treatment Card in the Participant Guide, the facilitator should make additional copies in case they are needed.
- Spend 10 minutes reviewing the answers with the group. (The completed treatment card is provided on pages 4 and 5.)

#### Answers

CVD PATIENT TRI	EATMENT CARD
Name of Health Facility: SA NAGAR PHC	Name of District/ State/Province: Kancheepuram
Date of registration: 6.1.18	Unique Identification n° 00001
A. Patient identification information	B. Diagnosis
Patient ID number:	1. Hypertension:
Name: Rohan Sharma	<ul><li>✓ Yes, treatment initiated</li><li>☐ Yes, was already on treatment when registered</li></ul>
Father's/husband's name:	Other co-morbidity
Sex: Male Age: 34	2. Prior heart attack: ☐Yes ☒ No
Address: No. 121, Nethaji Colony, Thambaram West, Kancheepuram 600044	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
Phone number:	7. H/o smoking: ⊠Yes □ No
Alternative phone number: 981856xxxx (Neighbour)	
C. Hypertension treatment at registration	D. Diabetes treatment at registration
Medication AMLODIPINE dose 5 MG	1. Medication dose
2. Medication dose	2. Medication dose
3. Medication dose	3. Medication dose
4. Medication dose	4. Medication dose
Additional notes	
Life-style modification (LSM)	
☐ Life-style modification alone ☐ Both lifesty  Any other advice:  1.1.18 At initial BP screening, patient advised to reduce s	yle modification & medication salt in diet.

					E. In	itial and fo	llow-up vis	sit						
SLı	1°	At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	6.1.18	4.2.18	5.3.18	5.4.18	4.5.18	5.6.18	3.7.18						
2	Blood pressure – systolic	150	150	130	124	120	125	130						
3	Blood pressure – diastolic	96	85	80	80	80	76	80						
4	Blood sugar fasting													
5	amlodipine	N 5 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg						
	telmisartan													
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F	Referred to specialist													
G	Date of next visit	4.2.18	5.3.18	5.4.18	4.5.18	5.6.18	3.7.18							
н	Signature of doctor	8	Ø											

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

I. Additional investigations if available	J. New complications	K. Additional information
Visit date	Visit date	
1. Serum potassium	1. Stroke	
2. Serum creatinine	2. Hypertension	
3. Total cholesterol	3. CVD	
4. Urine protein	4. Renal failure	
5. Fundus examination	5. Lower limb amputation	
6. Foot examination	6. Others	



#### Instructions

- A total of 15 minutes is recommended for this exercise.
- Provide participants with the completed treatment card (Exercise 3 handout).
- Give participants 10 minutes to review the patient details in the Participant
   Guide and the provided, completed treatment card, and identify at least three errors on the card.
- Spend 5 minutes reviewing the answers.

#### Answers

- Name & age of patient incorrect
- Date of registration incorrect- on page 1 and page 2
- Was already on treatment when registered
- Doctor had not signed
- Lab investigations not entered
- Amlodipine is not a new drug. Should not be marked as "N"
- BP values not entered in 4th and 5th visit
- Date of next visit not mentioned in last 3 visits



## EXERCISE 4: COMPLETING A PATIENT TREATMENT CARD WITH FOLLOW-UP VISITS

#### Instructions

- A total of 25 minutes is recommended for this exercise.
- Give participants 15 minutes to correct and update patient treatment card, based on continuation of case study provided in the Participant Guide.
  - Participants should request a separate continuation sheet to fill in 2019 visits. However, have them continue filling in information from the followup visits on the same card for the purpose of the exercise.
- Ask participants if they had any specific questions about filling out this sheet.
  - Point out that a separate continuation sheet should have been used for 2019 visits.
- Spend 10 minutes discussing the continuation sheet. (The completed continuation sheet is provided on page 8.)

#### Answers

CVD PATIENT TR	EATMENT CARD
Name of Health Facility: SA NAGAR PHC	Name of District/ State/Province:
Date of registration: 8.1.18	Unique Identification n° 00002
A. Patient identification information	B. Diagnosis
Patient ID number: 1000034568	1. Hypertension:
Name: Radha Srinivasan	Yes, treatment initiated  Yes, was already on treatment when registered
Father's/husband's name:	Other co-morbidity
Sex: Female Age: 56	2. Prior heart attack: ☐Yes ☒ No
Address: 6, CLC WORKS LANE, THAMBARAM,	3. If yes, h/o heart attack in the past 3 years?
KANCHEEPURAM DISTRICT 600044	□Yes □No
	4. Prior stroke: ☐Yes ☒ No
	5. Chronic kidney disease: ☐Yes ☒ No
	6. Diabetes: □Yes ☒ No
Phone number:	7. H/o smoking: ☐Yes ☒ No
Alternative phone number: 98976***** (SPOUSE)	
C. Hypertension treatment at registration	D. Diabetes treatment at registration
Medication AMLODIPINE dose 10 MG	1. Medication dose
2. Medication TELMISARTAN dose 40 MG	2. Medication dose
3. Medication dose	3. Medication dose
4. Medication dose	4. Medication dose
Additional notes	
Life-style modification (LSM)	
☐ Life-style modification alone ☐ Both lifest Any other advice :	yle modification & medication

					E. In	itial and fo	llow-up vis	it						
SL n°	2018 (new sheet for each year)	At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	8.1.18	4.2.18	2.3.18	2.4.18	12.5.18	19.8.18	15.9.18	2.11.18	3.12.18	5.1.19	6.2.19	3.3.19	
2	Blood pressure – systolic	131	129	117	120	124	138	111	132	134	130	127	128	
3	Blood pressure – diastolic	99	81	73	72	76	85	84	93	85	80	79	78	
4	Blood sugar fasting													
5	amlodipine	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	10 mg	
	telmisartan	N 40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	40 mg	
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
<b>F</b> R	referred to specialist													
<b>G</b> D	ate of next visit	4.2.18	2.3.18	2.4.18	12.5.18	4.6.18	15.918	2.10.18	3.12.18	5.1.19	6.2.19	3.3.19		
<b>H</b> S	ignature of doctor	&	<b>&amp;</b>											

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

I. Additional investigation	ons if available	J. New complications		K. Additional information
Visit date	4.2.18	Visit date		
1. Serum potassium		1. Stroke		
2. Serum creatinine	1.7 mg	2. Hypertension		
3. Total cholesterol	226 mg/dl	3. CVD		
4. Urine protein	Nil	4. Renal failure		
5. Fundus examination		5. Lower limb amputation		
6. Foot examination		6. Others		
Random blood sugar	140 mg/dl			

#### SESSION 4 – HANDOUT – BLANK PATIENT TREATMENT CARD

С	VD PATIENT TRI	EATN	MENT CARD		
Name of Health Facility:		Nam	e of District/ State/Province	:	
Date of registration:		Uniq	ue patient treatment numbe	er:	
A. Patient identification informa	ation	В.	Diagnosis		
Patient ID number:		1.	Hypertension:		
Name:			Yes, treatment initiated		
			Yes, was already on treatr	nent when r	registered
Father's/husband's name:		Ott	ner co-morbidity		
Sex: Age:		2.	Prior heart attack:	Yes	□No
Address:		3.	If yes, h/o heart attack in t	he past 3 ye	ears?
				Yes	□No
		4.	Prior stroke:	Yes	□No
		5.	Chronic kidney disease:	Yes	□No
Phone number:		6.	Diabetes:	Yes	□No
		7.	H/o amoking:	Yes	□No
Alternative phone number:					
C. Hypertension treatment at re	egistration	D.	Diabetes treatment at re	gistration	
	000	1	Medication	dose	
	ose		Medication	dose	
3. Medication do	000	3.	Medication	dose	
4. Medication do	000	4.	Medication	dose	
Additional notes					
Life-style modification (LSM)					
☐ Life-style modification alone	☐ Both lifest	tyle m	odification & medication		
Any other advice :		.,			

					E. Inii	E. Initial and follow-up visit	w-up visit							
SL n°		At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
-	Date attended													
8	Blood pressure - systolic													
ო	Blood pressure - diastolic													
4	Blood sugar fasting													
ıs	amlodipine													
	telmisartan													
98	enalapril													
	chlorthalidone													
ant co														
Gen G														
L	metformin													
E.	Referred to specialist													
<u>ص</u>	Date of next visit													
υ Ε	Signature of doctor													
Treatme	reatment dose and code. Indicate dosage. Note when starting (N for new), and stopping (D for discontinued).	sage. Note	when start	ing (N for	new), and st	opping (D for	discontin	.(pen						
I. Addi	I. Additional investigations if available	eldi			J. New complications	plications				-	C. Addition	K. Additional information	ion	
Visit date	tate				Visit date		L	_	L					
1. Ser	1. Serum potassium				1. Stroke									
2. Ser	2. Serum creatinine				2. Hypertension	sion								
3. Tot	3. Total cholesterol				3. CVD									
4. Urir	4. Urine protein				4. Renal failure	ure								
5. Fur	5. Fundus examination				5. Lower lin	<ol><li>Lower limb amputation</li></ol>	ç							
6. Foc	6. Foot examination				6. Others									

FACILITATOR NOTES 4

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CVD PATIENT TR	REATMENT CARD							
Name of Health Facility: SA NAGAR PHC	Name of District/ State/Province:							
Date of registration: 6.1.18	Unique Identification n° 00002							
A. Patient identification information	B. Diagnosis							
Patient ID number: 1000034568	1. Hypertension:							
Name: RADHA								
	Yes, was already on treatment when registered							
Father's/husband's name:	Other co-morbidity							
Sex: Female Age: 46	2. Prior heart attack: □Yes ☒ No							
Address: 6, CLC WORKS LANE, THAMBARAM,	3. If yes, h/o heart attack in the past 3 years?							
KANCHEEPURAM DISTRICT 600044	□Yes □No							
	4. Prior stroke: ☐Yes ☒ No							
	5. Chronic kidney disease: ☐Yes ☒ No							
	6. Diabetes: □Yes ☒ No							
Phone number:	7. H/o smoking: □Yes ☑No							
Alternative phone number: 98976***** (SPOUSE)								
C. Hypertension treatment at registration	D. Diabetes treatment at registration							
Medication AMLODIPINE dose 10 MG	1. Medication dose							
2. Medication TELMISARTAN dose 40 MG	2. Medication dose							
3. Medication dose	3. Medication dose							
4. Medication dose	4. Medication dose							
Additional notes								
Life-style modification (LSM)								
☐ Life-style modification alone ☐ Both lifes	tyle modification & medication							
Any other advice :								

#### SESSION 4 – EXERCISE 3 "SPOT THE MISTAKES" HANDOUT

					E. In	nitial and foll	ow-up vi	sit						
SL n°		At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	6.1.18	4.2.18	2.3.18	2.4.18	12.5.18								
2	Blood pressure – systolic	131	129	117	OK	ОК								
3	Blood pressure – diastolic	99	81	73	OK	OK								
4	Blood sugar fasting													
5	amlodipine	N 10mg	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>								
	telmisartan	N 40mg	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>								
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F R	eferred to specialist													
G D	ate of next visit	4.2.18	2.3.18											
H S	ignature of doctor													
Treatme	ent dose and code. Indicate d	osage. Not	e when sta	rting (N fo	r new), and	stopping (D f	or discon	itinued).						
I. Addi	tional investigations if avail	able			J. New co	mplications					K. Addit	ional infor	mation	
Visit d	ate				Visit date									
1. Ser	um potassium				1. Stroke									
2. Ser	um creatinine				2. Hyperte	ension								
3. Tota	al cholesterol				3. CVD									
4. Urir	ne protein				4. Renal fa	ailure								
5. Fun	dus examination				5. Lower li	imb amputation	on							
6. Foo	t examination				6. Others									