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

Participant Guide

5

Reporting and Monitoring System

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.

Expected competency on completion of session:

Ability to correctly fill out recording and reporting tools at primary health care level.

Target users:

Health care providers
Facility managers
District supervisors

In this session, you will discover how to:

- Complete Facility Register for Hypertension
- Complete Quarterly and Annual reports
- Record standardized indicators.

5.1 Monitoring

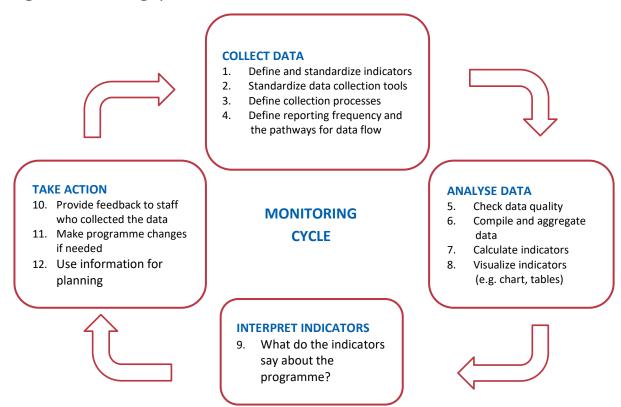
Monitoring is the ongoing collection, management and use of information to assess if:

- An activity or programme is proceeding according to guidelines
- Defined targets are being achieved.

Standardized indicators are important in monitoring because they:

- Enable all primary healthcare facilities to monitor and report in the same way
- Allow performance assessment and comparison.

Figure 1: Monitoring cycle



5.2 Facility Register for Hypertension

Each facility maintains a Facility Register for Hypertension, which lists information on each patient's blood pressure (BP) treatment in that health facility. This register is maintained at the level of the health facility by the [DATA ASSISTANT/DEDICATED NCD STAFF NURSE/HEALTH WORKER] designated for this task. The Facility Register is:

- updated with new, registered patients:
 - o at the time of issuing the treatment card or soon after
- updated for treatment outcome in registered patients (i.e., BP control status):

- o every quarter, and
- o at the end of the year.

The register helps to:

- determine the proportion of patients whose BP was under control after 6–9 months, which gives an indication of quality of services provided
- determine the proportion of patients whose BP was under control during the January–March quarter every year, which allows for an estimate of coverage of hypertension services within the community.

The Facility Register will be used to prepare the Quarterly Facility Report, compiled at the beginning of each quarter and reporting on the previous quarter.

5.3 How to fill out the Facility Register for Hypertension

All patients with hypertension who will be receiving treatment should be issued with a Patient Treatment Card and recorded sequentially in the Facility Register.

At the time of issuing the treatment card, or at the end of every week, patient information should be entered in the Facility Register.

The six columns on the left of the register (highlighted in light grey in Figure 2) should be completed using information from the first page of the Patient Treatment Cards.

FACILITY REGISTER FOR HYPERTENSION Quarterly HTN Annual HTN outcome: BP controlled: Y/N (Q1, year 2019) outcome: BP controlled: Y/N (Q1, year 2020) outcome: BP controlled: Y/N Address (Q1, year 2021) Filled out immediately or soon Filled out later after starting the treatment card Page summary Y = systolic blood pressure <140 mmHg and diastolic blood pressure <90 mmHg Total number registered: Total number with documented control in Q1 6-9 months after registration N = if blood pressure ≥140/90 or patient did not visit for follow up, or blood pr Total number with documented control in Q1 of 2019 Total number with documented control in Q1 of 2019 Total number with documented control in Q1 of 2020 6-9-month cohort monitoring - registration and corresponding reporting dates If patient registered between: Report to district on 1 January - 31 March 15 October 1 April - 30 June 15 January

Figure 2: Facility Register for Hypertension

15 April

15 July

1 July - September 30

1 October - 1 December

The columns on the right of Figure 2 (highlighted in dark grey) are for recording the BP control status of each registered patient 6–9 months after treatment initiation and every year during Quarter 1 (January–March). The columns are updated using the Patient Treatment Cards and will be used when completing the Quarterly and Annual Facility Reports (additional details below).

Figure 3: Example of a completed Facility Register

			FACILITY F	REGISTI	ER F	OR HYPERTENSIC	ON		
Date of reg.	Unique patient treatment no.	Name	Address		Age	Quarterly HTN outcome: BP controlled? Y/N (6-9 months after reg.)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2019)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2020)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2021)
08-01-18	00001	Ram Singh	Alappad	M 56		Yes	Yes		
20-02-18	00002	Raj Kumar	Alathur	M	67	Yes	Yes		
22-03-18	00003	Prem Pal	Alappad	М	60	Yes	No		
15-04-18	00004	Saroj Rani	Inchamudi	F	58	No	No		
04-05-18	00005	Santhoshi Devi	Pullazhi	F	57	Yes	Yes		
02-06-18	00006	Kamal Kapoor	Aniur	М	42	Yes	No		
03-07-18	00007	Sunita Sharma	Alappad	F	47	No	No		
04-07-18	80000	Rahul Sharma	Mangad	М	53	No	Yes		
15-08-18	00009	Neha Trivedi	Kadappuram	F	48	Yes	Yes		
21-08-18	00010	Sumani Kapoor	Pullazhi	F	46	No	No		
Page sur	mmary					BP control:			
Total nun	nber registered:						ssure <140 mmHg and	l diastolic blood pressu	ire <90 mmHg
Total nun	nber with docum	ented control in Q1	6-9 months after registration			during last quarter			
Total nun	nber with docum	ented control in Q1	of 2019			N = if blood pressure not measured	≥140/90 or patient did	not visit for follow up,	or blood pressure
Total nun	nber with docum	ented control in Q1	of 2019						
Total nun	nber with docum	ented control in Q1	of 2020						
	6–9-mor	nth cohort monitori	ng – registration and corresp	onding re	portir	ng dates			
If patient	t registered betw	/een:	Report to district on:						
1 Janua	ry – 31 March		15 October						
1 April –	30 June		15 January						
1 July –	September 30		15 April						
1 Octobe	er – 1 December	r	15 July						

5.4 Reporting BP control status in the Facility Register for Hypertension

5.4.1 Six-monthly control of BP among people treated for hypertension

The treatment outcome (i.e., BP control status) of each patient registered for hypertension treatment is assessed two quarters (6–9 months) after the quarter in which the patient is registered. This treatment outcome is then reported the first month of the next quarter. For example, if a patient is registered for treatment in Q1, his or her BP control status would be determined in Q3. The control status would be reported in the first month of Q4.

For each patient, the 6–9 month treatment outcome will be assessed and entered only once in the Facility Register. Follow these steps:

Step 1: Identify the quarter for which the 6–9 month reporting is needed

• In the first week of every quarter, determine which 6-9 month treatment outcomes will need to be reported on and the corresponding quarter in which those patients were registered. For example, as shown in the table below, if the report is being prepared in the first week of October 2018, the BP control

status of patients registered two quarters prior (January–March 2018) would be reported in the Facility Register.

Table 1: Registration quarters

Month in which quarterly report is prepared and sent to the district	Quarter for checking if BP is under control (Yes/No) (A2)	Quarter in which patients were registered for hypertension treatment (A1)
October 2018	July – September 2018	January – March 2018
January 2019	October – December 2018	April – June 2018
April 2019	January – March 2019	July – September 2018
July 2019	April – June 2019	October – December 2018
October 2019	July – September 2019	January – March 2019
January 2020	October – December 2019	April – June 2019
April 2020	January – March 2020	July – September 2019
July 2020	April – June 2020	October – December 2019
October 2020	July – September 2020	January – March 2020
January 2021	October – December 2020	April – June 2020
April 2021	January – March 2021	July – September 2020
July 2021	April – June 2021	October – December 2020
October 2021	July – September 2021	January – March 2021
January 2022	October – December 2021	April – June 2021
April 2022	January – March 2022	July – September 2021
July 2022	April – June 2022	October- December 2021

Step 2: Determine the unique patient treatment numbers

• From the Facility Register, identify the unique patient treatment number of patients registered for treatment during the quarter identified in step 1, such as 0207–0274.

Step 3: Retrieve the relevant Patient Treatment Cards

In our example, those with unique patient treatment numbers 0207–0204.

Step 4: Identify the quarter in which the BP control status of these patients was assessed

In our example, the quarter for assessing BP was July-September 2018.

Step 5: Review the patient BP reading at the last visit during the quarter determined in step 4

- For example:
 - If the patient visited in July, August, and September, use the BP reading from September.
 - o If the patient visited in July and August, use the BP reading from August.

Step 6: Enter BP control status of the patient into the Facility Register

- Enter the control status in the "Quarterly HTN outcome" column, using BP reading described in step 5.
 - Write 'Yes' if BP <140 and <90

 Write 'No' if BP ≥140 and/or ≥90 or if no patient visit or no BP was recorded during that period.

5.4.2 Annual BP control status of all registered patients

In addition to the 6–9 month BP control assessment done only once, the BP control status of every patient registered at the facility will also be determined in Quarter 1 (January–March) of every year and entered by 15 April every year in the Facility Register.

To report the annual BP control status in the Facility Register, follow the steps below:

- As soon as the first quarter has finished, retrieve Patient Treatment Cards of all
 patients beginning with unique patient treatment number 0001 through the final
 patient treatment number allotted on 31 December of the previous year.
- 2. For each treatment card, identify the last BP reading in Quarter 1 (1 January 31 March) of the current year.
- 3. Based on the reading, enter BP control status of each patient as "Yes" or "No" in the "Annual HTN outcome" column of the Facility Register following parameters in step 6 above.

KEY POINTS

For each patient, their six-monthly (6–9 month) treatment outcome will be reported only once.

For each patient, annual treatment outcome will be reported every year.

5.4.3 Completing Page Summary at bottom of the Facility Register

Each quarter, at the bottom of the Facility Register, enter the summary information on the total number of patients registered. Also, enter how many of the patients achieved controlled BP at 6-9 months after treatment initiation and during annual follow-up.

Figure 4: Section of Facility Register

Page summary	
Total number registered:	
Total number with documented control in Q1 6-9 months after registration	
Total number with documented control in Q1 of 2019	
Total number with documented control in Q1 of 2020	
Total number with documented control in Q1 of 2021	

TIPS

- 1. Each quarter start a new page in the Facility Register. This will help when preparing quarterly reports.
- 2. Quarterly outcomes should be updated at the end of every quarter by summing up the page summaries.
- 3. Complete all columns for registered patients. Any entries that are crossed out should be signed.



EXERCISE 1: COMPLETING A HYPERTENSION TREATMENT REGISTER

Using a blank hypertension treatment register form, fill in the details of five patients – the two patients from Participant Guide 4 (Exercises 2–4) and three more from the hypertension treatment cards provided below.

			FACILITY	REGIST	ER FC	R HYPERTENSION							
Date of reg.	Unique patient treatment no.	Name	Address	Gender M/F	Age	Quarterly HTN outcome: BP controlled? Y/N (6–9 months after reg.)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2019)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2020)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2021)				
Page su	ımmary					BP control:							
Total num	ber registered:					Y = systolic blood preduring last quarter	ssure <140 mmHg and	diastolic blood pressu	ıre <90 mmHg				
Total num	ber with documer	nted control in Q1 6–9 r	nonths after registration			N = if blood pressure	≥140/90 or patient did	not visit for follow up,	or blood pressure				
Total num	ber with documer	nted control in Q1 of 20	019			not measured							
Total num	ber with documer	nted control in Q1 of 20)20										
Total num	ber with documer	nted control in Q1 of 20)21										

	CVD PATIENT TRI	EATN	IENT CARD		
Name of Health Facility: SA NA	GAR PHC	Naı	me of District/ State/Provinc	e: KANCHE	EPURAM
Date of registration: 9.4.2018		Uni	ique Identification n° 00003		
A. Patient identification info	ormation	В.	Diagnosis		
Patient ID number: 2345678000)	1.	Hypertension:		
Name: PREM PAL			Yes, treatment initiated Yes, was already on treatr	nent when r	egistered
Father's/husband's name:		Oth	ner co-morbidity		
Sex: MALE Age:	60	2.	Prior heart attack:	□Yes	⊠ No
Address:		3.	If yes, h/o heart attack in the	he past 3 ye	ears?
012 KRISHNA NAGAR THAMBARAM WEST				□Yes	□No
KANCHEEPURAM 600044		4.	Prior stroke:	□Yes	⊠ No
Phone number: 99944 00012		5.	Chronic kidney disease:	□Yes	⊠ No
		6.	Diabetes:	□Yes	⊠No
Alternative phone number:		7.	H/o smoking:	□Yes	⊠No
C. Hypertension treatment at re	gistration	D.	Diabetes treatment at regist	ration	
Medication AMLODIPINE	10 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	e 🔲 Both lifest	yle mo	odification & medication		
Any other advice :					

					E. Init	ial and follo	w-up visit							
SL r	0	At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	9.4.18	10.5.18	8.6.18	9.7.18	11.8.18	9.9.18	10.10.18	9.11.18	14.12.18	5.1.19	6.2.19	5.3.19	7.4.19
2	Blood pressure – systolic	140	130	129	128	132	131	130	132	135	125	124	124	126
3	Blood pressure – diastolic	95	80	78	82	78	82	85	80	85	78	80	78	82
4	Blood sugar fasting													
5	amlodipine	N 10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg	10mg
	telmisartan													
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F	Referred to specialist													
G	Date of next visit	9.5.18	10.6.18	8.7.18	9.8.18	11.9.18	9.10.18	10.11.18	9.12.18	14.1.19	5.2.19	6.3.19	5.4.19	7.5.19
н	Signature of doctor	AR												

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 10.5.18		Visit date	
1. Serum potassium		1. Stroke	
2. Serum creatinine	1.2	2. Hypertension	
3. Total cholesterol	170	3. CVD	
4. Urine protein	NIL	4. Renal failure	
5. Fundus examination		5. Lower limb amputation	
6. Foot examination		6. Others	
RBS	107		

CVD PATIENT TRE	ATMENT CARD
Name of Health Facility: SA NAGAR	Name of District/ State/Province: KANCHEEPURAM
Date of registration: 25.8.2018	Unique Identification n° 00004
A. Patient identification information	B. Diagnosis
Patient ID number: 3456789001	1. Hypertension:
Name: PRIYA KISHORE	✓ Yes, treatment initiated✓ Yes, was already on treatment when registered
Father's/husband's name:	Other co-morbidity
Sex: FEMALE Age: 42	2. Prior heart attack: ☐Yes ☒ No
Address: 6 KOVIL STREET SAMANAGAR	3. If yes, h/o heart attack in the past 3 years? ☐Yes ☐ No
THAMBARAM WEST KANCHEEPURAM 600044	4. Prior stroke: ☐Yes ☒No
Phone number: 90000 000001	5. Chronic kidney disease: ☐Yes ☒ No
Alternative phone number:	6. Diabetes: □Yes ☒ No
(spouse's phone) 90101 000001	7. H/o smoking: □Yes ⊠No
C. Hypertension treatment at registration	D. Diabetes treatment at registration
Medication AMLODIPINE 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	/le modification & medication
Any other advice :	

					E. Init	ial and follo	w-up visit							
SLı	0	At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	25.8.18	20.9.18	15.10.18	15.11.18	20.12.18	25.1.19							
2	Blood pressure – systolic	150	146	138	130	133	131							
3	Blood pressure – diastolic	95	99	90	88	81								
4	Blood sugar fasting													
5	amlodipine	N 5 mg	10 mg	10 mg	10 mg	10 mg	10 mg							
	telmisartan			N 40 mg	40 mg	40 mg	40mg							
	enalapril													
	chlorthalidone													
	aspirin													
	statin													
	beta blocker													
	metformin													
F	Referred to specialist													
G	Date of next visit	24.9.18	20.1018	15.11.18	20.12.18	20.1.19	24.2.19							
Н	Signature of doctor	AR	AR	AR										

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
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		

CVD PATIENT TI	REATMENT CARD
Name of Health Facility: SA NAGAR	Name of District/ State/Province: KANCHEERPURAM
Date of registration: 12.11.2018	Unique Identification n° 00005
A. Patient identification information	B. Diagnosis
Patient ID number: 3456789123	1. Hypertension:
Name: SUNITHA VARMA	✓ Yes, treatment initiated✓ Yes, was already on treatment when registered
Father's/husband's name:	Other co-morbidity
Sex: FEMALE Age: 39	2. Prior heart attack: ☐Yes ☒No
Address: 72/77 VIVEKANANDA STREET THAMBARAM WEST	3. If yes, h/o heart attack in the past 3 years? ☐Yes ☐ No
KANCHEEPURAM 6000044	4. Prior stroke: ☐Yes ☒ No
Phone number: 98941 111111	5. Chronic kidney disease: ☐Yes ☒ No
Thore number. 30341 TTTTT	6. Diabetes: □Yes ☒ No
Alternative phone number:	7. H/o smoking: □Yes ☒ No
C. Hypertension treatment at registration	D. Diabetes treatment at registration
Medication AMLODIPINIE 10 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 lifest Any other advice :	yle modification & medication

					E. Init	ial and follo	w-up visit							
SL n		At Rx start	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit	Visit
1	Date attended	12.11.18	11.1.19	15.3.19	1.5.19	7.7.19								
2	Blood pressure – systolic	159	152	151	140	142								
3	Blood pressure – diastolic	97	89	93	88									
4	Blood sugar fasting													
	amlodipine	N 10 mg	10 mg	10 mg	10 mg	10 mg								
	telmisartan		N 40 mg	40 mg	40 mg	40 mg								
	enalapril													
	chlorthalidone													
5	aspirin													
5	statin													
	beta blocker													
	metformin													
F I	Referred to specialist													
G I	Date of next visit	12.12.18	11.2.19	15.4.19	1.6.19	7.8.19								
н :	Signature of doctor	AR	AR											

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	

5.5 Facility Quarterly and Annual Reports

The purpose of the Facility Quarterly and Annual Reports is to:

- Assess success rate in bringing hypertension under control among registered patients – at 6–9 months after treatment initiation and annually during Quarter 1.
- Share the results of reports with health workers, which can help them understand how their efforts have improved the control rate.
- Help the supervisor understand areas that need additional support.

The [DESIGNATED HEALTH STAFF] will be responsible for timely submission of the Quarterly and Annual reports. Reports will be prepared by the [DESIGNATED HEALTH STAFF] and submitted to the [DESIGNATED SUPERVISOR].

Figure 5: Health Facility Report

HEALTH FACILITY REPORT						
Sections A and B will be filled out by health	n facilities where	HTN Facility Regis	ster is	placed.		
Sections C and D will be filled out by all he	alth facilities					
Name of health facility:	Name of district:					
Name of state:		Date of reporting	(day/	month <i>l</i> year)		
Quarter for which you are making the report	t:	Quarter:	Year:			
				Quarter'. Usually this is the at has just finished.		
Section A: Quarterly treatment enrolmer	nt and outcome	es		Number of patients		
A1: Number of patients registered two qual	ters earlier					
A2: Out of (A1), number of patients whose <140/90 mmHg in the Reporting Quarter	BP was docume	ented to be				
Section B: Annual treatment enrolment (To be filled in only once a year, with Quart				Number of patients		
B1: Number of patients whose BP is docun Quarter 1. (If the patient made more than o reading.)			cent			
B2: Estimated number of people with hyper (only for district level).	rtension in the c	atchment populati	ion			
Section C: Drug consumption and availa	ability					
Quarterly consumption of drugs (Give number of tablets)	at the health facility			antity of drugs requested for the next quarter (Give number of tablets)		
calcium channel blocker						
angiotensin receptor blocker						
angiotensin converting enzyme inhibitor						
thiazide/thiazide like diuretic						
statin						
aspirin						
beta blocker	beta blocker					
Section D: Quarterly supervision						
Was there a supervision visit to this health facility by district staff during the reporting quarter?				No		

Sections a, c, and d of the facility report are submitted by the 15th of the first month of every quarter as the "Facility Quarterly Report" of the previous quarter. On 15 April every year, section b is also submitted as the "Facility Annual Report."

5.5.1 Facility Quarterly Reports

The data for the quarterly reports is compiled by using the Facility Register. Data reported in this form helps to calculate the overall 6–9 month BP control rate. The Facility Quarterly Report is prepared and submitted in the first week, or at latest by the 15th, of the first month of every quarter.

Below is an example of how to complete a form with the reporting date of 15 October 2018. The reporting quarter would be Quarter 3 of 2018.

Section A1: For Section A, the 6–9 month BP control rate recorded in Quarter 3 will be for patients who were registered two quarters earlier (Quarter 1, 2018). Therefore, count all patients who were registered in Quarter 1 (between 1 January and 31 March) and complete A1.

TIP

In the Facility Register, flag pages with the date of registration between 1 January and 31 March. This makes it easier to focus on the pages between these two flags.

- Section A2: Out of A1, count how many patients' BP control status was documented as "Yes" in the column titled, "Quarterly HTN outcome". (As described in 5.4.1, this column corresponds to patients with BP reading <140/90 in the reporting quarter on their treatment cards.) Complete A2.
- Section C: To complete section C, use the drug stock register. Review the drug consumption in the last quarter. Keep in mind the closing stock. Put in a request for a quantity sufficient for two quarters.
- Section D: If the health facility received a supervisory visit in the previous quarter (Quarter 3), circle "Yes". If not, circle "No".

5.5.2 Facility Annual Report

Section B of the Health Facility Report constitutes the Facility Annual Report, which should be submitted on 15 April every year.

To complete this section:

- Section B1: Determine the number of patients at the facility who have BP in control during Quarter 1 of the current year. This will be calculated by adding the number of times "Yes" appears in the column "Annual HTN outcome" for all patients registered before 1 January of the current year.
 - **Tip:** Write the total yeses for each page and then sum up the page totals.
- Section B2: Only for district level and above. Base the estimated number of patients with hypertension in the area on the most recent survey results.



Complete the table as if you are planning the reports for the Quarterly Facility Report – Section A.

Date of Reporting	Quarter in which patients were registered for hypertension treatment	Quarter in which 6–9 month BP was checked
15 April 2018		
15 April 2019		
15 July 2018		
15 January 2019		
15 October 2018		



It is April 2019 and time to submit Quarterly and Annual reports. Using the sample register on pages 21 and 22, prepare a Quarterly and Annual Facility Report (sections A & B) for 20 patients by filling in the template on page 23.

Sample Register from Primary Health Care Unit SA Nagar

	FACILITY REGISTER FOR HYPERTENSION								
Date of reg.	Unique patient treatment no.	Name	Address	Gender M/F	Age	Quarterly HTN outcome: BP controlled? Y/N (6–9 months after reg.)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2019)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2020)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2021)
8.1.18	00001	Ram Singh	Alappad	М	56	Yes	Yes		
20.2.18	00002	Raj Kumar	Alathus	М	67	Yes	Yes		
22.3.18	00003	Prem Pal	Alappad	М	60	Yes	No		
15.4.18	00004	Saroj Rani	Inchamudi	F	58	No	No		
4.5.18	00005	Santhoshi Devi	Pullazhi	F	57	Yes	Yes		
2.6.18	00006	Kamal Kapoor	Anjur	М	42	Yes	No		
3.7.18	00007	Sunita Sharma	Alappad	F	47	No	No		
4.7.18	00008	Rahul Sharma	Mangad	М	53	No	Yes		
15.8.18	00009	Neha Trivedi	Kadappuram	F	48	Yes	Yes		
21.8.18	00010	Sumani Kapoor	Pullazhi	F	46	No	No		
Page summary Total number registered: Total number with documented control in Q1 6–9 months after registration				BP control: Yes = systolic blood pressure <140 mmHg and diastolic blood pressure <90 mmHg during quarter No = if blood pressure ≥140/90 or patient did not visit for follow up, or blood pressure measured					
	Total number with documented control in Q1 of 2019				incusurcu				
		ented control in Q1 of 2							
Total num	Total number with documented control in Q1 of 2020								

			FACILITY RE	GISTER	FOR H	HYPERTENSION (co	ont)		
Date of reg.	Unique patient treatment no.	Name	Address	Gender M/F	Age	Quarterly HTN outcome: BP controlled? Y/N (6–9 months after reg.)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2019)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2020)	Annual HTN outcome: BP controlled: Y/N (Q1, year 2021)
6.9.18	00011	Asha Srinivasan	Inchamudi	F	58	Yes	Yes		
9.9.18	00012	Poornima Narain	Alathur	F	60	Yes	Yes		
21.9.18	00013	Karan Raj	Mangad	М	41	No	No		
4.10.18	00014	Bhim Singh	Inchamudi	М	35	Yes	No		
11.10.18	00015	Arjun Dev	Pullazhi	М	60	No	No		
14.10.18	00016	Arjun Singh	Anjur	М	45	No	No		
30.10.18	00017	Neena Devi	Alappad	F	50	No	Yes		
01.12.18	00018	Aatma Singh	Mangad	М	42	Yes	Yes		
12.12.18	00019	Abdul Raheem	Kadappuram	М	53	Yes	Yes		
29.12.18	00020	Rahman Aziz	Kadappuram	М	59	Yes	No		
Page summary Total number registered:				BP control: Yes = systolic blood pre					
Total number with documented control in Q1 6–9 months after registration				No = if blood pressure \geq 140/90 or patient did not visit for follow up, or blood press measured					
Total number with documented control in Q1 of 2019									
Fotal numb	er with docume	ented control in Q1 of 2	2019						
rotal numb	er with docume	ented control in Q1 of 2	2020						

HEALTH FACILITY REPORT					
Sections A and B will be filled out by health facilities where HTN Facility Register is placed.					
Sections C and D will be filled out by all health facilities					
Name of health facility:		Name of district:			
Name of state:		Date of reporting	(day/	month/year)	
Quarter for which you are making the repor	t:	Quarter:	,	Year:	
This is the 'Reporting Quarter'. Usually this is the most recent quarter that has just finished.					
Section A: Quarterly treatment enrolmer	nt and outcome	s		Number of patients	
A1: Number of patients registered two quar	ters earlier				
A2: Out of (A1), number of patients whose <140/90 mmHg in the Reporting Quarter	BP was docume	ented to be			
Section B: Annual treatment enrolment a (To be filled in only once a year, with Quart				Number of patients	
	B1: Number of patients whose BP is documented as <140/90 mmHg during Quarter 1. (If the patient made more than one visit in the quarter, use most recent reading.)				
B2: Estimated number of people with hypertension in the catchment population (only for district level).					
Section C: Drug consumption and availa	bility				
Quarterly consumption of drugs (Give number of tablets)	health facility the		ntity of drugs requested for next quarter re number of tablets)		
calcium channel blocker					
angiotensin receptor blocker					
angiotensin converting enzyme inhibitor					
thiazide/thiazide like diuretic					
statin					
aspirin					
beta blocker					
Section D: Quarterly supervision					
Was there a supervision visit to this health facility by district staff during the reporting quarter?	,	Yes		No	

5.6 Core hypertension indicators

There is one health facility-level indicator and one district/subnational-level indicator calculated from the Facility Quarterly Reports and Facility Annual Report:

- 1. Quarterly indicator: Proportion of patients registered for hypertensive treatment at the health facility whose BP is controlled 6–9 months after treatment initiation. This indicator is reported every three months.
- 2. **Annual indicator:** The proportion of hypertensive people at health facilities in a given geographical area, such as a district, province or state, with controlled BP. This indicator is reported annually.

Table 2: Quarterly indicator

SIX-MONTHLY CONTROL OF	BP AMONG PEOPLE TREATED FOR HYPERTENSION
Definition	Proportion of patients registered for hypertensive treatment at the health facility whose BP is controlled 6–9 months after treatment initiation
Purpose	To measure the effectiveness of clinical services in the programme to control BP among cohorts of treated patient
Method of calculation	A = Number of patients with controlled BP (SBP <140 and DBP <90 mmHg) at the last clinical visit in the most recent quarter (just before the reporting quarter).
	B = Number of patients registered for treatment of hypertension during the quarter that ended 6 months previously.
	Calculation: A ÷ B
Source of data	Health Facility Register for Hypertension
Recommended target	Fix a target as per the local context
Key data elements	Date of registration, date of last visit, systolic BP, diastolic BP
Frequency of reporting	Quarterly
Users of data	Facility managers: • to understand what proportion of patients at their facility are achieving the BP goal
	 District-level manager: to assess the overall quality of hypertension treatment services to identify poorly performing facilities and rectify problems at an early stage
Data collection tool	Health Facility Register for Hypertension (see Annex)

Table 3: Annual indicator

CONTROL OF BP	AMONG PEOPLE WITH HYPERTENSION
Definition	The proportion of hypertensive people at health facilities in a given geographical area, such as a district, province, or state, with controlled BP
Purpose	To measure the increase in coverage of the programme to treat and control hypertension in a given geographical area, such as a district, province, or state
Method of calculation	A = Cumulative number of registered patients with controlled BP (SBP <140 and DBP <90) in the most recent quarter at all health facilities in a given geographical area, such as a district, province, or state
	B = Estimated number of people with hypertension at the subnational level
	Calculation: A ÷ B
Source of data	Numerator: registers from health facilities reporting in the given geographical area such as a district, province, or state
	Denominator: Prevalence of hypertension from population- based survey (STEPS or similar survey)
Disaggregated by	Health facility
Recommended target	Fix a target as per local context
Key data elements	Date of last visit, systolic BP, diastolic BP
Frequency of reporting	Annual
Users of data	District, province, or state programme managers to monitor increase in programme coverage of hypertension services within a geographical area
	National programme managers to monitor progress towards universal health coverage
Data collection tool example	Health Facility Register for Hypertension
	Health Facility Reports



EXERCISE 4: CONDUCTING A SITE VISIT TO A HEALTH FACILITY (HALF-DAY FIELD WORK)

Health care workers and facility managers will visit a primary health facility to practise measuring blood pressure and providing care to patients, using the standard protocol and corresponding tools (e.g., patient identification cards, treatment cards, etc.)

Sources

 HEARTS technical package: Systems for monitoring module. Geneva: World Health Organization; 2016.