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

Session

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.

## Competency and objectives

#### **Competency:**

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

#### In this session you will learn about:

- Facility Register for Hypertension
- Quarterly and annual reports
- Core indicators

## Monitoring

Monitoring = ongoing collection, management and use of information

It assesses whether:

- an activity or programme is proceeding according to guidelines
- whether defined targets are being achieved

## The monitoring cycle



#### COLLECT DATA

- Define and standardize indicators
- Standardize data collection tools
- Define collection processes
- Define reporting frequency and thepathways for data flow



#### TAKE ACTION

- 10. Provide feedback to staff who collected the data
- 11. Make programme changes if needed
- 12. Use information for planning



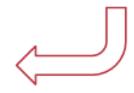




What do the indicators say about the programme?



- Check data quality
- Compile and aggregate data
- 7. Calculate indicators
- Visualize indicators (e.g. chart, tables)





## Facility Register for Hypertension

			FACILITY R	OR HYPERTENSIO	N						
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)		
	Filled im	mediately	or soon after sta	rting			Filled	later			
		thotroat	ment card								
		tile treat	illelit caru								
Page su	mmary					BP control:					
Total nun	mber registered:					Y = systolic blood pressure <140 mmHg and diastolic blood pressure <90 mmHg during last quarter					
Total nun	mber with docum	ented control in Q1 (	3-9 months after registration								
Total nun	mber with docum	ented control in Q1	of 2019			N = if blood pressure ≥140/90 or patient did not visit for follow up, or blood pressure not measured					
Total number with documented control in Q1 of 2019											
Total number with documented control in Q1 of 2020											
	6 <del>-0</del> -mor	nth cohort monitorin	ng - registration and correspo	onding re	portin	g dates					
If patient registered between: Report to district on:											
1 January – 31 March 15 October											
1 April – 30 June 15 January											
1 July - September 30 15 April											
1 October – 1 December 15 July			5 July								

- Each patient with high blood pressure who is receiving treatment will be registered.
- Each quarter, summary information on the total number of patients registered will be recorded.
- Summary information on the number of patients that achieved controlled BP at 6-9 months and during annual follow-up will be recorded.

## Sample completed facility register

						OR 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 sum	mary					BP control:			
Total num	ber registered:					Yes = systolic blood pre quarter	ssure <140 mmHg and di	astolic blood pressure <9	90 mmHg during la
Total number with documented control in Q1 6–9 months after registration				_	No=if blood pressure ≥140/90 or patient did not visit for follow up, or blood pressure not				
<u> </u>					measured				
Total number with documented control in Q1 of 2019									
Total num	Total number with documented control in Q1 of 2019								
Total num	her with docume	ented 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					
1 July – September 30	15 April					
1 October – 1 December	15 July					

## Steps for reporting BP control status quarterly

**Step 1**: In the first week of every quarter, determine the quarter of registration of patients whose 6–9 month (two quarters) treatment outcome will be reported during the current quarter.

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 registered for treatment of hypertension (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		

## Steps for reporting BP control status quarterly

- **Step 2**: Determine the unique patient treatment numbers.
- **Step 3**: Retrieve the relevant Patient Treatment Cards.
- **Step 4**: Identify the quarter in which the BP control status of those patients was assessed.
- **Step 5**: Review the patients BP reading at the last visit during the quarter determined in step 4.
- **Step 6**: Enter BP control status of the patients into the Facility Register in the "Quarterly HTN outcome" column, using the BP reading described in step 5.
- Write "Yes" if BP <140 and <90.</li>
- Write "No" if BP ≥140 and/or ≥90 or if no patient visit or no BP was recorded during that period.

## Steps for reporting BP control status annually

**Step 1**: Retrieve treatment cards of all patients from ID 0001 until last ID allotted on 31 December of the previous year.

**Step 2**: For each treatment card, identify the last BP reading in Quarter 1 (1 January - 31 March) of the current year

**Step 3**: Based on reading, enter BP control status of each patient as "Yes" or "No" in the "Annual HTN outcome" column of the Facility Register

- Write "Yes" if BP <140 and <90.</li>
- Write "No" if BP ≥140 and/or ≥90 or if no patient visit or no BP was recorded during that period.

## Completing page summary of the 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 on filling out Facility Register

- For each patient, six-monthly (6–9 month) treatment outcome will be reported only once.
- For each patient, annual treatment outcome will be reported every year.
- Each quarter, start a new page in the Facility Register. This will help when preparing quarterly reports.
- Quarterly outcomes should be updated at the end of every quarter by summing up the page summaries.
- Complete all columns for registered patients. Any entries that are crossed out should be signed.



## Completing a Hypertension Treatment Register

Using a blank hypertension treatment register form, fill in the details of five patients:

- Two patients from session 4
- Three more from treatment cards samples provided in Participant Guide 5.

## Quarterly Facility Report

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 state:	month/year)						
Quarter for which you are making the repor	Quarter: Year:						
This is the 'Reporting Quarter'. Usually this is the most recent quarter that has just finished.							
Section A: Quarterly treatment enrolmen	nt and outcome	5		Number of patients			
A1: Number of patients registered two quar	ters earlier						
A2: Out of (A1), number of patients whose BP was documented to be <140/90 mmHg in the Reporting Quarter							
Section B: Annual treatment enrolment and outcomes (To be filled in only once a year, with Quarter 1 report)  Number of							
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 (gally for district level).							
Section C: Drug consumption and availa	ability						
Quarterly consumption of drugs (Give number of tablets)	antity of drugs requested for the next quarter (Give number of tablets)						
(Give number of tablets) (Give number of tablets) (Give 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?							

- Information is collected quarterly from the Facility Register
- A count is made of hypertensive patients and their outcomes
- A count is made of drugs consumed and stock outs
- A record is made of whether a supervisory visit was made

## **Annual Facility Report**

HEA	LTH FACILIT	Y 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 health facility:							
Name of state:		Date of reporting Quarter:					
Quarter for which you are making the report		Year: Quarter' Unually this is the					
This is the 'Reporting Quarter'. Usually this is the most recent quarter that has just finished.							
Section A: Quarterly treatment enrolmer		Number of patients					
A1: Number of patients registered two quar	rters earlier						
A2: Out of (A1), number of patients whose BP was documented to be <140/90 mmHg in the Reporting Quarter							
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 documented as <140/90 mmHg during Cuarter 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 (gglg/for district level).							
Section C: Drug consumption and availa	ability						
of drugs 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							
Section D: Quarterly supervision							
Was there a supervision visit to this health facility by district staff during the reporting quarter?							

Section B: Annual treatment enrolment and outcomes (To be filled in only once a year, with Quarter 1 report)	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 (gally for district level).	

 Section B of the Health Facility Report form contains the Annual Facility Report, submitted on 15 April every year



## Determining the quarter

Complete the table provided.

This exercise invites you to work out which time period you should be extracting data from when filling out Section A (Quarterly treatment enrolment and outcomes) of the Health Facility Report for a specific quarter.



# Completing the Quarterly and Annual reports

It is April 2019 and time to submit quarterly and annual reports.

Using the sample register provided, prepare a Quarterly and Annual Facility Report for 20 patients, filling in the template provided.

## Core hypertension indicators

#### Standardized indicators are the foundation of a good monitoring system.

They measure whether various aspects of a programme are achieving what they are supposed to achieve.

## Quarterly indicator

Proportion of patients registered for hypertensive treatment at the health facility whose blood pressure is controlled 6-9 months after treatment initiation

Numerator: Number of patients with controlled blood pressure (<140 and <90) at the last

clinical visit in the most recent quarter (just before the reporting quarter)

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**Denominator**: Number of patients registered for treatment of hypertension during the quarter

that ended 6 months previously

### Annual indicator

Proportion of patients with hypertension at health facilities in a given geographical area such as a district, province, or state who have controlled BP

Numerator: Cumulative number of registered patients with controlled blood pressure (<140

and <90) in the most recent quarter at all health facilities in a given geographical

area, such as a district, province, or state

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**Denominator**: Estimated number of people with hypertension at the subnational level



# Conducting a site visit to a health facility

Make a half-day 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.).