

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

## Session

# 6

## Assessment: Turning Data into Actionable Intelligence

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 manage, analyse, and interpret data and prepare periodic performance reports*

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

- Data management and checking data for accuracy
- Data analysis and interpretation
- Performance reports for monitoring and feedback

# Assessing hypertension management

- **Assessing data patterns and trends** to provide real-time information for mid-course adjustments
- **Articulating this information well and to the appropriate people** to inform local, subnational, and national decision-making

# Effective assessment criteria

## 1. High-quality, consistent data collection and management

- Well-organized data tracking
- Regular data quality checks or audits
- Documented data cleaning

## 2. Accurate, ethical data analysis and interpretation

- Accurate calculations resulting in actionable interpretation of analyses

## 3. Dissemination of findings for improvement and decision-making

- Incorporate analyses into feedback loop

# Three levels of reporting

## 1. Health facility-level

- Occurs at least quarterly
- Demonstrates progress toward intended long-term outcomes

## 2. District- or regional-level

- Occurs quarterly and annually
- Looks comparatively across health facilities reports to highlight strengths and identify challenges

## 3. National-level

- Occurs annually
- Looks across facilities at their annual outputs and progress toward long-term goals
- Allows for observing trends over time

# District- or regional-level: Data management

## Process

- Identify and sequence key tasks for collecting, tracking, and troubleshooting data
- Determine who is responsible for each task
- Revisit assignments at least twice per year in case adjustments are needed

## Tasks

- Maintain a spreadsheet in Excel for tracking reports received from facilities
- Identify follow-up action for missing reports and synchronize follow-up action with tracking spreadsheet
- Check monthly for completeness, credibility, and consistency in each report received

# Data analysis: Quarterly indicators

## Indicator 1.a

- The number of patients in each facility for whom hypertension treatment was initiated in the last quarter, and
- The cumulative number since the outset of the programme

## Indicator 1.b

- The proportion of patients whose blood pressure is controlled 6-9 months after the initiation of treatment

$$\frac{\text{Cumulative number of registered patients with controlled (<140/90) blood pressure 6-9 months after the initiation of treatment}}{\text{Total number of registered patients in the facility}}$$

# Data analysis: Quarterly indicators (cont.)

## Indicator 1.c

- The proportion of participating facilities in the district whose 6-9 month control rate falls into each tier: <50%, 50-70%, >70%

Sample chart showing district- or regional-level quarterly control rates

	Facility control rate <50%	Facility control rate 50%–70%	Facility control rate >70%
Facility A	0	0	1
Facility B	1	0	0
Facility C	0	1	0
Facility D	0	1	0
<b>Total participating facilities in district</b>	<b>1/4 (25%)</b>	<b>2/4 (50%)</b>	<b>1/4 (25%)</b>

# Data analysis: Annual indicators

## Indicator 2.a

- The proportion of health facilities in a district participating in reporting for the programme

$$\frac{\text{Number of health facilities participating in and reporting to the programme}}{\text{Total number of health facilities in a district}}$$

## Indicator 2.b

- The proportion of facilities in the district whose annual blood pressure control rate falls into each tier: <10%, 10-30%, >30%

	Annual control rate <10%	Annual control rate 10%-30%	Annual control rate >30%
Facility A	1	0	0
Facility B	0	1	0
Facility C	0	1	0
Facility D	0	0	1
<b>Total facilities in district</b>	<b>1/4 (25%)</b>	<b>2/4 (50%)</b>	<b>1/4 (25%)</b>

# Data Analysis: Example for Indicator 2a

Sample chart showing proportion of facilities participating in a district

	Number of facilities participating in programme	Total number of facilities in district	Indicator: proportion of facilities participating in programme
District A	39	56	70%
District B	25	28	89%
District C	28	43	65%

# Identify patterns and trends

**Step 1: Set a benchmark** for each indicator.

- Choose a threshold that is appropriate and realistic for your programme and for its goals

**Step 2: Analyse your data against the benchmarks**

**Step 3: Identify the top five and bottom five facilities** based on their performance against the benchmarks

**Step 4: Monitor trends** across time

## **TIP**

It can be difficult to set realistic benchmarks at the outset of a programme if there is little data preceding the programme to give you clues as to what an appropriate threshold might be.

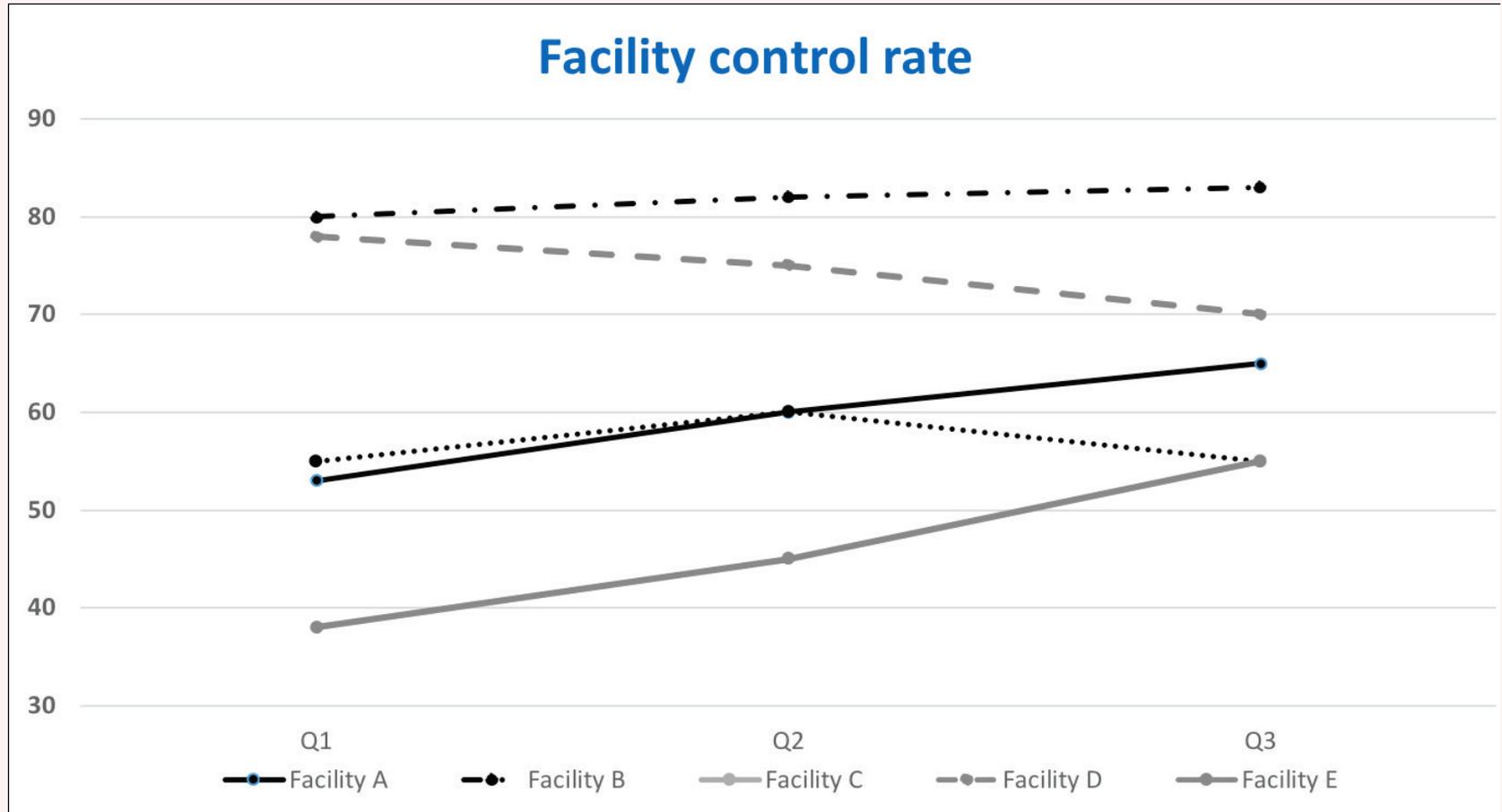
**Consider using the first quarter's data as a means of determining an appropriate benchmark.**

# Data Comparison: Benchmark Example

## Sample chart showing benchmarking and trends

	Benchmark	Percentage of patients with controlled BP (2 quarters ago)	Percentage of patients with controlled BP (previous quarter)	Percentage of patients with controlled BP (reporting quarter)	Trend
Facility A	70	53	60	65	Improving
Facility B	95	80	82	83	Improving
Facility C	70	55	60	55	Fluctuating
Facility D	95	78	75	70	Declining
Facility E	65	38	45	55	Improving

# Data Comparison: Example of Trend



# Interpret and report results

## Step 5: Interpret data analyses and plan for implementation adjustments

- For each facility-level indicator meeting or exceeding the benchmark, identify markers of success
- For each facility-level indicator falling short of the benchmark, determine:
  - Whether the shortfall is substantial enough that it signals a problem that needs to be addressed
  - Whether the shortfall is a trend over time, or a one-time occurrence
  - Whether the facility is struggling to meet benchmarks for most or all of its indicators, or just the one
  - Whether you have any other information to help you identify the cause of the facility's struggles
  - Whether there are corrective courses of action you can recommend

## Step 6: Reports and feedback

- Details and guidance provided in sessions 5 and 7

# EXERCISE 1



## Setting benchmarks

*Choose two of the key indicators from slides 7-9.*

*Select a benchmark for each that is relevant to your programme.*

*Practice creating a chart for tracking whether facilities meet the benchmark you have set.*

# EXERCISE 2



## Charting a trend over time

*Choose one of the key indicators you benchmarked in Exercise 1.*

*Create a chart allowing you to watch that indicator's trend over time for five imaginary facilities.*