Noncommunicable disease facility-based monitoring guidance

Diabetes and hypertension indicators

Leanne Riley

Head of Surveillance, Monitoring and Reporting Noncommunicable Diseases Department World Health Organization, Geneva, Switzerland



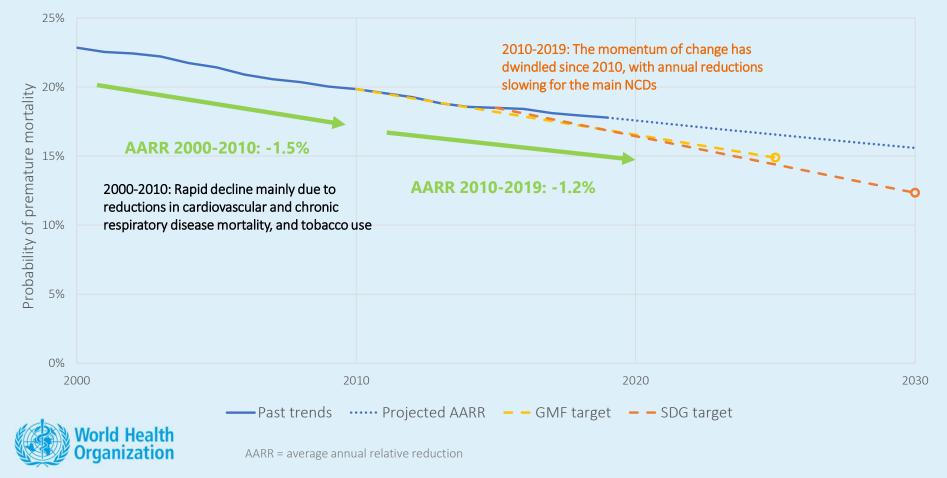


The global response to noncommunicable diseases (NCDs)



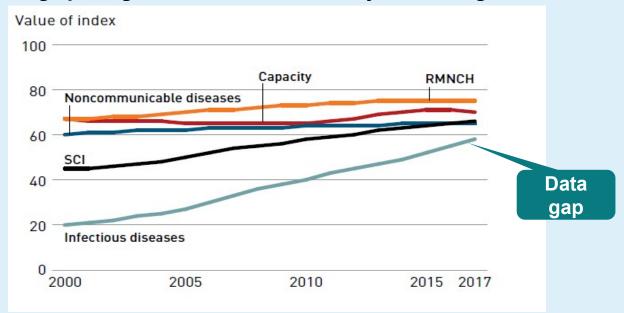






NCD services are lagging behind

Rapid improvements in coverage of infectious disease in Universal Health Coverage packages since 2000, vs relatively little change on NCDs



Primary Healthcare on the road to UHC, 2019 Monitoring Report



4

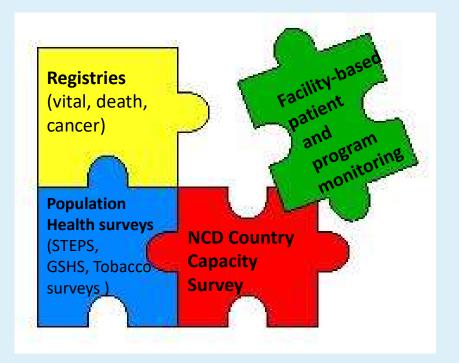
Strategies to address the NCDs

- 1. Accelerate national response based on the understanding of NCDs epidemiology and risk factors and the identified barriers and enablers in countries
- 2. Prioritize and invest in scale-up the implementation of most impactful and feasible interventions in the national context
- 3. Ensure timely, reliable and sustained national data on NCD risk factors, diseases and mortality for data driven actions and to strengthen accountability



NCD facility-based patient and programme monitoring

- Facility-based patient and program monitoring is the systematic capture, analysis, and use of health service data to make strategic decisions on patient and health service management at facility and higher levels and for disease surveillance.
- Health facility data from routine facility reporting systems can be available close-to-real-time and at every service delivery unit, including primary care level.
- Other facility-based sources include health facility surveys and health resource systems such health workforce information systems, logistics management information system

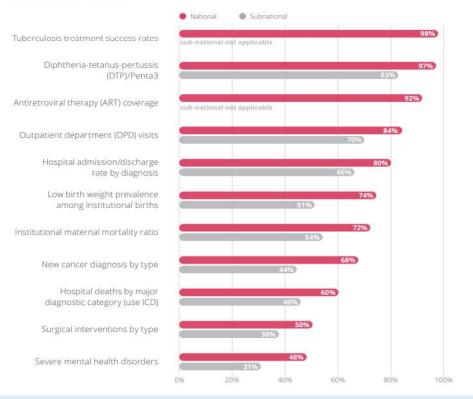




Health indicators from country facility-based monitoring systems

- More action needed to optimize existing facility reporting systems to include monitoring NCDs
- Hence, NCD facility-based monitoring guidance to support countries was developed

PERCENTAGE OF COUNTRIES (N=133) WITH DATA MEASURING FACILITY-BASED INDICATORS*



Source: Global report on health data systems and capacity, 2020



Noncommunicable disease facility-based guidance: scope and development process

- Comprehensive monitoring for essential noncommunicable disease interventions at primary care settings
 - o Cardiovascular diseases, including hypertension
 - Diabetes
 - Asthma and chronic obstructive pulmonary disease
 - Breast cancer, cervical cancer, childhood cancers and general cancers
- Rigorous development and prioritization processes (experts' opinions, systematic reviews, global and regional priorities)

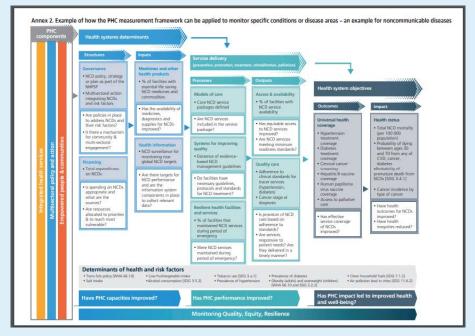




Noncommunicable disease facility-based guidance: monitoring domains and indicators

- Domains aligned with WHO primary health care measurement framework and indicators: monitoring health systems through a primary health care lens
 - Programme determinants (health system capacity and management)
 - Service delivery (early detection and diagnosis, treatment and complication assessment)
 - Programme objectives (disease control)
- A total of 22 core indicators and 59 optional indicators, organized by results chain framework, NCDs and monitoring domains





Noncommunicable disease facility-based guidance: diabetes indicators

- 4 core indicators
 - 1 patient level
 - 3 facility level
- 15 optional indicators
 - 12 patient level
 - 3 facility level

			CORE = OPTION/
Programme determinants	Service delivery		Programme objectives
Inputs/Processes	Outputs		Outcomes
SYSTEM CAPACITY AND MANAGEMENT	TREATMENT	COMPLICATION ASSESSMENT	DISEASE CONTROL
 Availability of diabetes core medicines Availability of plasma glucose testing Availability of Hemoglobin A1c testing 	 Pharmacological treatment among people with diabetes Statin therapy among people with diabetes Pharmacological treatment for chronic kidney disease among people with diabetes Pharmacological treatment for hypertension among people with diabetes 	 Assessment for diabetic chronic kidney disease among people with diabetes Assessment for diabetic foot among people with diabetes Referral for retinopathy screening among people with diabetes 	Glycaemic control among people with diabetes Glycaemic control among people with diabetes (follow-up) Chronic kidney disease among people with diabetes Lower-limb amputation among people with diabetes Blindness among people with diabetes
Cross-cutting indicators • Availability of trained staff • Completeness and timeliness of reporting of health facilities • Facilities receiving supervision visit	•	 Loss to follow-up 	



Data sources: routine facility reporting systems; patient information systems/electronic medical records; logistic management information systems; health workforce information systems health facility assessments/surveys

Diabetes core indicators

Disease control

□ Glycemic control among people with diabetes

Definition	Proportion of people with diabetes with good glycaemic control based on the global target of HbA1c <8% (64mmol/mol) in the last clinical visit
Numerator	Number of people with diabetes registered in the facility with HbA1c <8% (64mmol/mol) at the last clinical visit in the reporting period, excluding those who were newly diagnosed with less than three months of treatment
Denominator	Total number of people with diabetes registered in the facility, excluding those who were newly diagnosed with less than three months of treatment
Method of calculation	Numerator ÷ denominator × 100



One of the five WHO diabetes coverage targets for 2023-2030:

80% of people with diagnosed diabetes ٠ have good control of glycaemia (defined as HbA1c <8% or 64 mmol/mol)



Diabetes core indicators

System resources and management

Indicator	Definition	Method of calculation
Availability of diabetes core medicines	Proportion of health facilities that have diabetes core medicines based on WHO or national treatment guidelines Diabetes core medicines include: Insulin Metformin Sulfonylurea	N/D x 100 N: Number of health facilities reporting "no stock-out" of diabetes core medicines in the reporting period D: Total number of health facilities
Availability of plasma glucose testing	Proportion of health facilities that have capability of laboratory or point of care plasma glucose (PG) testing	N/D x 100 N: Number of health facilities reporting capability of performing either laboratory or point of care PG tests in the reporting period D: Total number of health facilities
Availability of HbA1c testing	Proportion of health facilities that have capability of HbA1c testing	N/D x 100 N: Number of health facilities reporting capability of performing either laboratory or point of care HbA1c tests in the reporting period D: Total number of health facilities



Indicator metadata

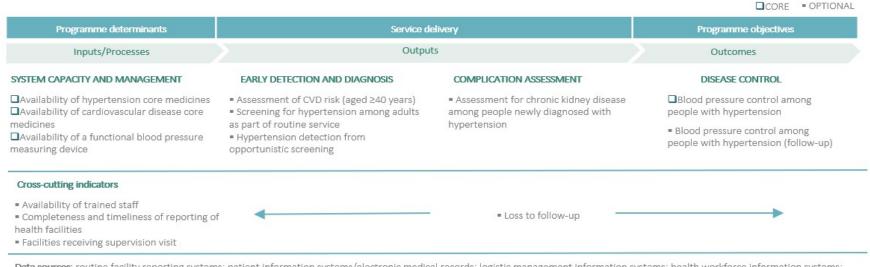
- Definition, purpose, numerator, denominator, calculation method, aggregation, disaggregation, sources of data, key data elements, frequency of reporting, users of data, limitations/comments and related links
- Comparability of data across geographical areas and across times



Indicator name	Availability of plasma glucose testing		
Purpose	To ensure uninterrupted services to diagnose diabetes and assess glycemic control among patients with diabetes		
Definition	Proportion of health facilities that have capability of laboratory or point of care plasma glucose (PG) testing		
Numerator	Number of health facilities reporting capability of performing either laboratory or point of care PG tests in the reporting period		
Denominator	Total number of health facilities		
Method of calculation	Numerator \div denominator \times 100		
Aggregation	District, province, state, national		
Disaggregation	Health facility, provider ownership type (public/private), facility location type (urban/rural), plasma glucose testing site (point-of-car or laboratory)		
Sources of data	Health facility reports, regional logistics information system or sur		
Key data elements	Count of number of facilities reporting "test capability"		
Frequency of reporting			
Users of data District-, province- and state-level managers to focus supervis health facilities reporting no lab capability, making facilities c and strengthening health systems to ensure uninterrupted labor services			
Limitations/ comments			
Related links	Harmonized health facility assessment (HHFA): core questions https://www.who.int/publications/i/item/harmonized-health-facility- assessment-(hhfa)		

Noncommunicable disease facility-based guidance: hypertension indicators

• 4 core indicators,9 optional indicators



Data sources: routine facility reporting systems; patient information systems/electronic medical records; logistic management information systems; health workforce information systems; health facility assessments/surveys



Application of the Noncommunicable disease facility-based monitoring guidance in country health facility-based monitoring systems

- Align the *Noncommunicable disease facility-based monitoring guidance* for primary care with the national NCD programme and review processes
- Select indicators according to priorities and capacities
- Set baseline values and targets for each indicator
- Address major gaps in health service data sources using innovative methods and digital technologies
- Strengthen capacities for data analysis, interpretation and dissemination
- Conduct regular reviews to guide decisions and actions
 World Health Organization



Thank you

For more information, please contact:

Leanne Riley Head of Surveillance, Monitoring and Reporting Noncommunicable Diseases Department World Health Organization, Geneva, Switzerland email: <u>rileyl@who.int</u>



16