## **NCD facility-based monitoring**

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### IMPLEMENTATION ROADMAP 2023–2030 FOR THE GLOBAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NCDs 2013–2030

• Strategic Directions

- 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 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 surveillance system components





#### Facility-based patient and program monitoring in primary care

- Supporting health facility managers to ensure NCDs core medications availability at the facility level
- Supporting health facility managers to ensure technology availability (lab testing/functional equipment) at the facility level
- Supporting health facility and higher levels managers/authorities to ensure accessibility/utilization of healthcare
- Supporting health professionals and managers at the facility/district/national levels to evaluate the outcome of provided services





#### Noncommunicable disease facility-based guidance: scope and development process

Comprehensive monitoring for essential noncommunicable disease interventions at primary care settings

**OCardiovascular diseases including hypertension** 

○ Diabetes

OAsthma 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)

**OProgramme objectives (disease control)** 

A total of 22 core indicators and 59 optional indicators, organized by results chain framework, NCDs and monitoring domains







#### Noncommunicable disease facilitybased monitoring guidance

- Background, Introduction
- Noncommunicable disease facility-based monitoring guidance (Framework)
- List of core and optional indicators and their metadata
- Application of the Noncommunicable disease facilitybased monitoring guidance in country health facilitybased monitoring systems

#### Noncommunicable disease facility-based monitoring guidance

Framework, indicators, and application

LE DISEASE FACILITY-BASED ATORS, AND APPLICATION





PROGRAMME DETERMINANTS	SERVICE DELIVERY	PROGRAMME OBJECTIVES
НҮРЕ	ERTENSION AND CARDIOVASCULAR DISEA	SES
management	OUTPUTS Farly detection and diagnosis	OUTCOMES Disease control
ertension core medicines	<ul> <li>Assessment of cardiovascular disease risk</li> </ul>	Blood pressure control among people with
ctional blood pressure	<ul> <li>Screening for hypertension among adults as part of routine service</li> <li>Hypertension detection from opportunistic screening</li> </ul>	<ul> <li>Blood pressure control among people with hypertension (follow-up)</li> </ul>
	<ul> <li>Complication assessment</li> <li>Assessment for chronic kidney disease among people newly diagnosed with hypertension</li> </ul>	
	DIABETES	
d management	OUTPUTS Treatment	OUTCOMES Disease control
etes core medicines ma glucose testing loglobin A1c testing	<ul> <li>Pharmacological treatment among people with diabetes</li> <li>Statin therapy among people with diabetes</li> <li>Pharmacological treatment for chronic kidney</li> </ul>	<ul> <li>Glycaemic control among people with diabetes</li> <li>Glycaemic control among people with diabetes (follow-up)</li> <li>Chronic kidney disease among people with</li> </ul>
	<ul> <li>Pharmacological treatment for hypertension among people with diabetes</li> <li>Complication assessment</li> </ul>	<ul> <li>Lower-limb amputation among people with diabetes</li> <li>Blindness among people with diabetes</li> </ul>
	<ul> <li>Assessment for diabetic chronic kidney disease among people with diabetes</li> <li>Assessment for diabetic foot among people with diabetes</li> <li>Referral for retinopathy screening among people with diabetes</li> </ul>	
ASTHMA A	AND CHRONIC OBSTRUCTIVE PULMONARY	DISEASE
	OUTPUTS	OUTCOMES
management	Early detection and diagnosis	Disease control
ma core medicines nic obstructive pulmonary cines < flow meter and mouthpiece	<ul> <li>Asthma diagnosis using peak flow measurement</li> <li>Chronic obstructive pulmonary disease diagnosis using peak flow measurement</li> <li>Treatment</li> </ul>	<ul> <li>Astnma control</li> <li>Chronic obstructive pulmonary disease control</li> <li>Emergency visit among people with asthma</li> <li>Emergency visit among people with chronic obstructive pulmonary disease</li> </ul>
	<ul> <li>Treatment among people with asthma</li> <li>Treatment among people with chronic obstructive pulmonary disease</li> </ul>	
	BREAST CANCER	
	OUTPUTS	OUTCOMES
a management	<ul> <li>Clinical breast evaluation for early diagnosis of breast cancer among women aged 30–49 years with signs and/or symptoms associated with breast cancer</li> <li>Timeliness of referral for breast cancer diagnosis among women aged 30–49 years with associated signs and/or symptoms of breast cancer who had suspicious findings</li> </ul>	Disease control
	PROGRAMME DETERMINANTS HYP I management ertension core medicines iovascular disease core ctional blood pressure i management etes core medicines maglucose testing ioglobin Alc testing ASTHMA A I management ma core medicines mic obstructive pulmonary cines k flow meter and mouthpiece	Description         Description         Description           Imanagement strension core medicines iovascular disease core ctional blood pressure         Assessment of cardiovascular disease risk (asged ski) years)           Imanagement strension core medicines iovascular disease core ctional blood pressure         Assessment of cardiovascular disease risk (asged ski) years)           Imanagement strension core medicines iovascular disease core ctional blood pressure         Assessment of cardiovascular disease among part of routine service           Imanagement strension core medicines iovascular disease among people (asternation detection from opportunistic screening)         Diabetts           Imanagement strension core medicines iovascular disease among people with diabetes iovascular disease among people with diabetes (assess among people with diabetes)         Diabetts           Imanagement strension         Outputs         Testment in disease among people with diabetes (assess among people with diabetes)           Imanagement mease core medicines iovascular disease among people with diabetes (assess among people with diabetes)         Assessment for diabetic for conic kidney (assess among people with diabetes)           Imanagement mase core medicines inc obstructive pulmonary clices         Assessment for diabetic for among people (assess among people with diabetes)           Imanagement mac core medicines inc obstructive pulmonary clices         Assessment for diabetic for among people with diabetes (assess among people with diabetes)           Imanagement mac core medicines inc obstructive pulmonary disease diagnosis





#### 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

#### multator metau

#### C2-Availability of plasma glucose testing

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 ÷ denominator × 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-care or laboratory)
Sources of data	Health facility reports, regional logistics information system or survey
Key data elements	Count of number of facilities reporting "test capability"
Frequency of reporting	Quarterly
Users of data	District-, province- and state-level managers to focus supervision on health facilities reporting no lab capability, making facilities capable and strengthening health systems to ensure uninterrupted laboratory services
Limitations/ comments	In some settings the health facilities do not provide laboratory service so the reporting units will need to come from other laboratory service providers
Related links	Harmonized health facility assessment (HHFA): core questions https://www.who.int/publications/i/item/harmonized-health-facility- assessment-(hhfa)



#### Data collection and interpretation tools

- Paper-based tool
- DHIS2 Aggregate (program monitoring)

• DHIS2 tracker (patient and program monitoring)

E-registry (patient management, patient and program monitoring)





India longitudinal monitoring of hypertension and diabetes at the primary health care level



World Health Organization





#### Patient flow at PHC/ SC Level



### — Patient flow at Secondary and tertiary facilities



IHC: India Hypertension Control Initiative

#### **Recommended patient flow: Follow-up patients**





#### **Record Systems**

#### Paper Based System

- Facility Hypertension Register
- Patient Treatment card
- Patient BP Passport/ NCD Card
- Patient Tracking matrix
- Follow up register
- ASHA Line list
- Default retrieval system
- Monthly reporting format

#### **Digital System**

- CPHC NCD IT System / Simple App
- Patient BP Passport/ NCD Card
- Priority follow up list / Overdue list
- Teleconsultation
- Integration of various existing Apps
- Default retrieval system

#### **Paper Based Systems**

#### **Record keeping for HTN registered patients**





Copy name, registration date, and patient ID number from front of the card

Diabetes

Ø

Hypertension

Card

**Ireatment** 

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#### Storage & Retrieval of hypertension treatment cards

**Shelf I**: Arrange cards by unique treatment number at the start of the month/ quarter

**Shelf II**: Move the treatment card to next shelf after giving treatment and marking a tick on the card.



#### End of quarter

- Leftover cards in shelf I at the end of each month means these patients have missed their follow up visit and have not collected medicines. Call up to remind these patients to visit health facility for follow-up.
- 2. If patients have missed a visit for 1 year, move the card to Shelf III.
- 3. If the patient has died, mention date of death in the follow up section of treatment card and move the card to Shelf III.







#### Use of Durg cartons for IHCI cards

storage

**IHCI Cards** storage practices in different states









#### Patient BP Passport

#### Patient NCD Card



#### इस बीपी पासपोर्ट को हर बार अपने साथ लाइए मेरे अपने साथ लाइए

BP Passport Manufacture Control Deletion										
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1.1	/		mg	mg	mg	mg	



Notes





Date of registration	Patient ID number	Name s/o, d/o, w/o	Age	Gender	Phone number	Full address (House no, Name of hamlet/ village/colony/ Nagar/ town, nearest landmark)	Name of HWC	Name of Mitanin

	Monthly Follow up record — Blood Pressure & Blood Sugar value												Quarterly HTN outcome (3-6 months after registration)	Annual HTN outcome
Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023		BP control Y/N/ MV	BP control Y/N/ MV/ Death/Pvt
			Monthly	Follow up r	record – Blo	od Pressure	e & Blood Su	igar value				Medicines	Quarterly HTN outcome (3-6 months after registration)	Annual HTN outcome
Apr 2023	May 2023	Jun 2023	Monthly Jul 2023	Follow up 1 Aug 2023	record – Blo Sept 2023	od Pressure Oct 2023	e & Blood Su Nov 2023	gar value Dec 2023	Jan 2024	Feb 2024	Mar 2024	Medicines provided	Quarterly HTN outcome (3-6 months after registration) BP control Y/N/ MV	Annual HTN outcome BP control Y/N/ MV/ Death/Pvt
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#### Facility Hypertension Register

#### Cohort monitoring

- Follow up register
- Patient tracking matrix
- Decentralization
- ASHA wise line list
- ASHA Home visits
- Default retrieval: Patient Calling or Call to ASHA

- Linking of all sources data
- Sector wise meeting
- Block/district/state level review meetings



- Register developed to use easy tracking of patients' regular visits.
- Monthly visits recorded in the register during patients' follow up visit
- Easily used during sector meeting for sharing missed patients details with ANM/ASHA

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#### @ PHC/CHC/DH level

#### Facility Hypertension Register – Updated format



Summary of report

rate (2 years)

#### **Use of Patient Tracking Matrix**

- Developed for use by the Pharmacists for IHCI patients
- Date of visit + BP reading + Medicines provided mentioned in the format
- Useful when Staff Nurse busy in other activities and unable to update in the treatment card or follow up register or CPHC Portal.
- SN update data on Portal later based on this record





#### **Decentralization of IHCI Services**



- Follow up services and drug refills for Hypertension patients were being provided in 14,326 SC-HWCs by Dec-22.
- All these states have adopted decentralization of service delivery by involving
  Community Health Officers & Auxiliary Nurse Midwives at SC-HWCs



Field work by ASHA: BP checking & Medicine distribution

In the time

#### Decentralization – ASHA Involvement





ASHA carrying BP passport with BP reading taken at home – Pharmacist providing medicines and updating in register/portal, Raipur urban Useful during COVID19 pandemic days

Ghana plan for developing and implementing a nationwide **NCD** e-tracker using its local capabilities



Mubyeyi, Onsa umwana mezi atandatu ya mbere umuvangiye habe n'amal amashereka yonyine intungamubiri zimuhagije, bizatuma agira ubuzima bi akure n ta mu gihagararo n no n

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#### **Spectrum of data collection methods**



#### Implementation steps



## Nepal hypertension initiative using target setting at sub-national and facility

level





Let's save Nepali lives together

## Kavrepalanchok Initiative

# Improve hypertension care cascade

Putting 30,000 hypertension patients on standard care by 2025

17 May 2023

## Heart disease - Leading cause of death also in Nepal

High systolic blood pressure causes 45.5% of cardiovascular deaths in Nepal



Data Sources: Nepal STEPS Survey (2019)Global Burden of disease Study (2020).

# **Start focused.** Create a model of care in Kavre that can be scaled up stepwise to other districts



Data Sources: Nepal STEPS Survey (2019)Global Burden of disease Study (2020).



## What does this mean for Tukuchanala (with 2269 pop from Chaurideurali Gaunpalika) Primary Health Care Centre?



## **Inspiring change**







## Myanmar experience of working with private sector



#### Concerns and challenges

- Standards
- Infrastructure
- Capacity building
- Data for action (service management system)
- Data quality
- Fragmentation







# Thanks!

Do you have any questions?

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