

The background of the entire page is a repeating pattern of a white ECG (heart rate) line on a light blue grid. The text is centered and reads:

**HYPERTENSION  
INDICATORS  
FOR IMPROVING  
QUALITY  
AND COVERAGE  
OF SERVICES**

**Virtual meeting,  
1-2 March 2021: REPORT**



# **HYPERTENSION INDICATORS FOR IMPROVING QUALITY AND COVERAGE OF SERVICES**

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Hypertension indicators for improving quality and coverage of services, virtual meeting, 1-2 March 2021: report

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# EXECUTIVE SUMMARY

Hypertension is a major cause of cardiovascular deaths, affecting more than one billion people around the world with two thirds of them in low- and middle- income countries. Delays in diagnosis and incomplete and interrupted treatment of hypertension can lead to poor health outcomes and premature deaths. The World Health Organization (WHO) and partners developed the HEARTS technical package to provide a strategic primary health care approach to improve cardiovascular health in countries. It is composed of six modules, including a HEARTS Systems for Monitoring module (HEARTS-S) that contains five indicators for health facility, subnational and national monitoring.

On 1-2 March 2021 WHO convened countries, experts and partners to review implementation of data collection for hypertension with a focus on HEARTS-S and other related hypertension indicators. Countries updated on their implementation of hypertension indicators such as those listed in the HEARTS-S and related patient and programme monitoring systems, while experts provided their assessment of utility of HEARTS-S and quality metrics for clinical indicators.

Countries are at different phases of HEARTS technical package implementation, from pilot phase to nationwide roll-out. These are set up as a national hypertension programme or integrated into existing national noncommunicable disease (NCD) programmes such as country WHO Package of Essential NCD interventions

(PEN), where components of HEARTS are adapted to national guidelines. Six countries shared their experiences in implementing HEARTS-S and hypertension indicators. Countries found the HEARTS-S module to be useful in designing forms and developing indicators for clinical management. They adapted indicators according to national protocols and information needs. Indicator modifications included revised blood pressure targets, age groupings, time frame of indicators and frequency of reporting. Not all hypertension indicators in HEARTS-S are reported by all countries and countries also use other indicators to monitor hypertension programmes at various levels, from health facility level to district, province, state and/or to national or central levels.

Countries also vary in their levels of adoption of digital technologies in their patient and programme monitoring systems. One country reported non-use of digital applications while some countries have used electronic health records and digital patient tracking applications. Despite their transition to digital systems, countries continue to face issues in data sharing across facilities and across levels of care in private and public sector. Other challenges identified by countries include high patient load, low capacities for monitoring, and ineffective incentivized mechanisms for reporting of programme goals.

Experts agreed that the HEARTS-S module provides a simple, focused and practical framework for monitoring at health facility, subnational and national levels in resource-

constrained settings. It includes highly useful tools for recording and reporting that can be easily adapted by countries and a set of standardized indicators that track achievement of major goals of the hypertension programme. All HEARTS-S indicators are considered relevant but lack socio-economic aggregation to reveal inequalities in health care access, specifically among vulnerable populations and fail to identify critical gaps along the cascade of care that should be overcome in order to optimize patient outcomes. Variable measurement of indicators exists due to differences in control targets, denominators and multiple sources. Experts recommended further standardization of indicators, inclusion of additional indicators, subgroup analyses, conduct of subnational surveys and application of digital technologies to address limitations of HEARTS-S indicators.

With consideration of clinical information needs, desirable qualities of indicators and existing patient and programme monitoring capacities, participants gave specific recommendation for the improvement of hypertension indicators and inclusion of additional feasible, practical and statistically sound indicators for monitoring quality and coverage of

services. General recommendations on monitoring included harmonization of hypertension, diabetes and other NCD comorbidity monitoring frameworks, development of simple tools for digital data entry and calculation of indicators, adoption of unique health identifiers for longitudinal monitoring, and implementation of clinical audits and supportive supervision. The group proposed a revision of HEARTS-S hypertension indicators and development of additional indicators to address the following:

1. Inclusion of equity measures such as socio-demographic dimensions of the population with hypertension.
2. Alignment with country-specific clinical protocols and targets.
3. Estimation of the population with hypertension along the cascade of care.
4. Assessment of comorbidities and complications.
5. Long-term tracking of patients, minimizing losses to follow-up.
6. Continuous improvement of quality of clinical programme.

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