POLICY BRIEF

SCALING-UP INTEGRATED CARE PACKAGE FOR TYPE 2 DIABETES AND HYPERTENSION IN CAMBODIA: EVIDENCE AND POLICY CONSIDERATION

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Prepared by the National Institute of Public Health Cambodia

Key messages

What are the key challenges?

The performance of the current primary care interventions for type 2 diabetes (T2D) and hypertension (HTN)—known as the "Package of Essential Noncommunicable disease interventions" (PEN) at health centers—is low, with a lack of effective support from the community and referral hospitals (diabetes clinics).

The proportion of people with T2D and/or HTN who knew their status was low, with the majority seeking care in the private sector, resulting in poor health outcomes.

What should be the solutions?

1

Effective scaling up of the PEN at health centers, along with support services at referral hospitals and in the community, is necessary to increase access to affordable screening of T2D and HTN.

2 New

The scaling up requires expanding the PEN to new health centers while improving the implementation of the program at existing health centers with the PEN, in parallel.

3

Addressing all the identified issues related to the six components of integrated care package that include identification of T2D and HTN cases, treatment, health education, self-management support, structured collaboration, and service organization can help improve the implementation.

4

Additionally, to effectively foster scaling up the quality and affordable care for people with T2D and/or HTN, a roadmap is required for scaling up the integrated care package for T2D and HTN, which includes key strategies and strategic interventions with a clear timeframe and roles and responsibilities by key stakeholders mapped out.

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Introduction

Type 2 diabetes (T2D) and Hypertension (HTN) are two major chronic medical conditions that often co-exist in the population. They also are critical risk factors for most non-communicable diseases (NCDs) that are responsible for about 41 million deaths (or about 71% of total deaths) worldwide each year (1, 2). Both T2D and HTN disproportionally affect low- and middle-income countries, with approximately 79% of people with T2D and about 66% of people with HTN living in low- and middle-income countries (3, 4).

In 2020, Cambodia had a high prevalence of T2D and HTN of 12% and 27%, respectively, among adults aged 40 years old or older (5, 6).

In the last decade, the Cambodian Ministry of Health (MoH), in collaboration with development partners, has made significant efforts to improve the quality of public healthcare and initiated a few healthcare delivery models for people with T2D and/or HTN in public facilities. These models include hospital-based care, health center-based care, community-based care and a combination of all three models (coexisting care). The health center-based care adopts the WHO Package of Essential Noncommunicable disease interventions (PEN) for primary health care (8), known as PEN at health centers. These efforts might have changed the pattern of the management of T2D and/or HTN services and healthcare utilization and related expenditure among people with T2D and/or HTN.

However, knowledge on the current interventions for T2D and HTN has been limited. In an attempt to address these gaps, the National Institute of Public Health, in collaboration with the Department of Preventive Medicine, MoH, implemented a research project "Scaling-Up Integrated Care Package for Type 2 Diabetes and Hypertension" in Cambodia (7). The project aims to assess the current situation of the three models of care for people with T2D and/or HTN, with a focus on PEN at health centers and support services at referral hospitals and in the community and draws lessons for further scaling up.

Objectives of the policy brief

This policy brief presents to relevant stakeholders the key findings and proposed solutions that can address the issues related to type 2 diabetes (T2D) and hypertension (HTN) in Cambodia.

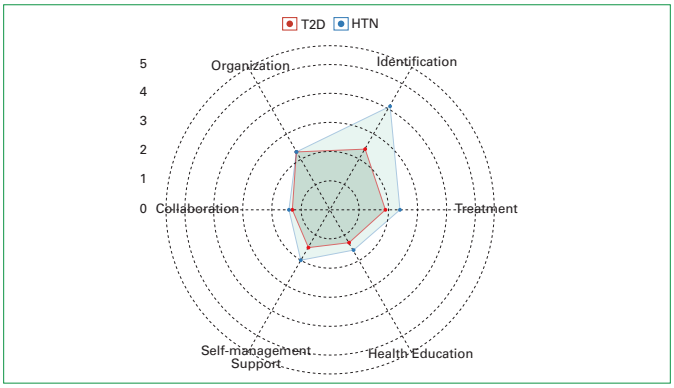
Harnessing evidence approach

- The performance of T2D and HTN services at primary healthcare centers was measured using the Integrated Care Package (ICP) scoring framework, focusing on case identification, treatment, health education, self-management support, structured collaboration, and service organization.
- The cascade of T2D and HTN care, healthcare utilization, and healthcare-related expenditure among people with T2D and/or HTN were obtained from a cross-sectional survey among 5,072 households.
- Key influencing factors—governance, health workforce, medicine, health financing, and health information system—were assessed through analysis of relevant policy documents, in-depth interviews with key informants at national and sub-national levels. Focus group discussions with health center staff, local authorities, and village health support groups were also conducted. Two consultative meetings with relevant stakeholders were held to discuss the findings and inputs from these stakeholders were incorporated into the primary findings.

Primary findings and proposed solutions

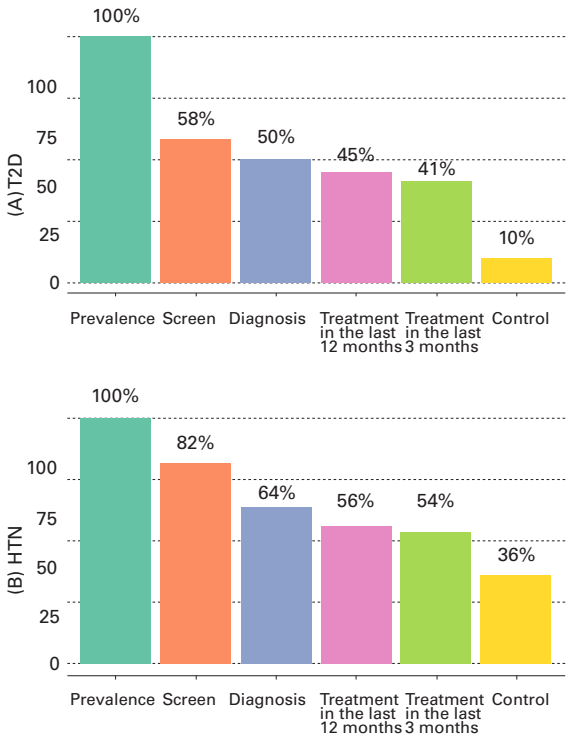
- Our assessment using the ICP scoring framework shows a low score, suggesting poor performance of the PEN currently being implemented at health centers (especially the first-generation ones). This poor performance was driven by the lack of effective support from the community and referral hospitals (diabetes clinics). The overall implementation score was 2 points out of a possible 5 points. Each component of the ICP had a similar score ranging from 1.3 points in the structured collaboration between community, health center, and referral hospital ("Collaboration") to 3.3 points in identifying cases ("Identification") (Figure 1).

Figure 1.Integrated Care Package (ICP) scoring of five operational districts in Cambodia, 2020



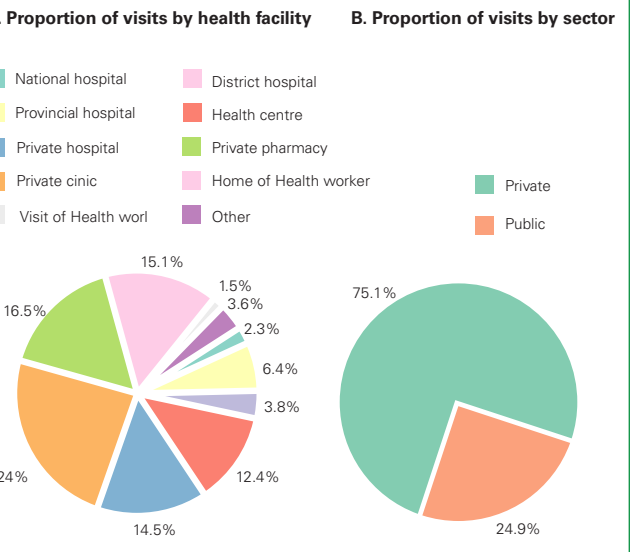
- The results from the cross-sectional, population-based survey show that a low proportion of people with T2D (50%) and HTN (63.7%) knew their condition, while only 10% had controlled blood glucose and 35.8% had controlled blood pressure (Figure 2).

Figure 2. T2D and HTN cascade of care from a household survey in Cambodia, 2020



- Of people with T2D and/or HTN who sought care, a large proportion (75%) sought care in the private sector (Figure 3), resulting in poor health outcomes and high out-of-pocket expenditure.

Figure 3. Proportions of people with T2D and HTN by facility type and sector in Cambodia, 2020



Through our approach, we identified health system cross-cutting issues with some suggested solutions for policy consideration:

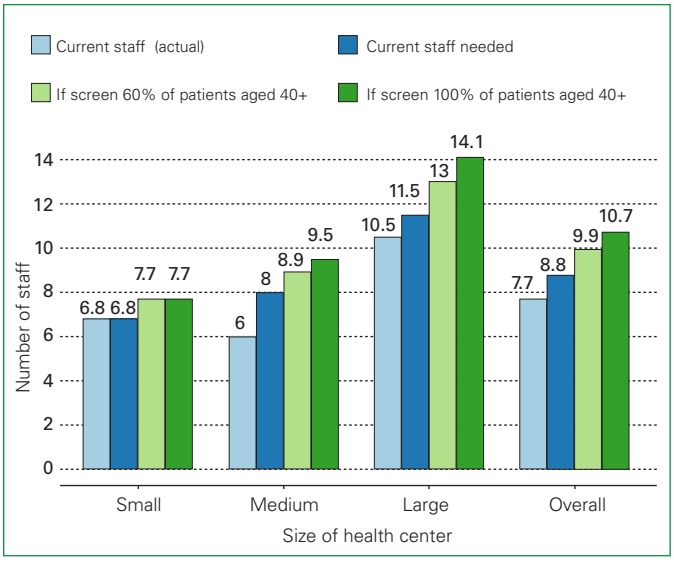
1. Governance

- Some policy documents (e.g., Standard Operating Procedures (SOP)[1] , Minimum package of activity (MPA)[2] guidelines) are not consistent or up-to-date with new evidence and lessons learned and therefore need modification.
- A roadmap to guide effective scaling up of quality and affordable care for T2D and HTN is needed.
- The absence of "effective" field supervision and coaching by central/provincial and Operational District (OD) levels to health facilities appear to be an essential factor affecting the performance.

2. Health Workforce

- The currently available personnel at health centers are not enough to effectively implement the PEN, especially the large centers that cover a population of over 12,000 inhabitants (Figure 4). On average, to fully implement the PEN, a small health center needs one more staff, while medium and large health centers need 3.5 more staff (Figure 4).
- While some health center staff have been trained for implementing the PEN, the staff trained (three persons) are not enough because of staff turnover. A one-off five-day clinical training is not sufficient and requires refresher training. Moreover, program management, including data and pharmaceutical management training, is necessary for health center manager(s).
- Reported low commitment among health staff for CVD risk screening due to no financial incentive and conflict of interest due to dual practice was also observed. A fair facility-based financial incentive system should be considered (See Health Financing below).

Figure 4. Needed staff to fully implement the PEN at health center



[1] National standard operating procedure (SOP) for diabetes and hypertension management in primary care 2019

[2] Minimum package of activity (MPA) guidelines for health center development

3. Medicines

- Insufficient supply of medicines for T2D and HTN according to request—partly linked to inappropriate request, the wrong estimation of drug use and drug needed, and inaccurate consumable report writing due to lack of refresher training and change of personnel are some of the issues that need to be addressed.
- There is also a need to rectify the lack of cooperation, communication and update between the Central Medical Stores (CMS), OD levels, and the NCD program of the Department of Preventive Medicine.
- Health facilities often use a fixed lump sum grant (known as the 62028-government budget line) and user fees to purchase additional medicines to bridge the supply gap. This often creates more of a burden on them and acts as a disincentive to welcome more clients.
- Improvement of supply of medicines is crucial for the success of PEN program. This can be done through a clear and better procurement and supply system with specific monitoring and supported supervisions from OD, PHD and/or central level

4. Health Financing

- While over 60% of deaths are due to NCD-related causes (much more than those of infectious diseases and maternal and child health services), the allocated fund for NCDs, including T2D and HTN, remains relatively low at about 20% of the total budget for all diseases, and is therefore insufficient. Priority should be given to NCDs for government budget allocation. In addition to effective allocation, earmarked taxes such as the Specific Tax (Sin Tax) can be considered to increase funding for NCDs.
- It was observed that only 21.4% of people with T2D and 23.5% of people with HTN were covered by social health protection schemes (either National Social Security Fund (NSSF) or Health Equity Fund (HEF)). The current reimbursement and support offered by these schemes for T2D and HTN may not be enough and may need improvement to remove financial barriers to access.
- Practically, many health centers with the PEN charge a fee of approximately 5,000 Riels (about USD 1.25) for CVD risk screening with blood glucose tests in addition to out-patient service. This fee can impose a barrier to accessing the screening service, especially since such services are not necessarily demanded by the population who come to the health center for other purposes.
- Such user fees should be removed for the population (service users), but the providers should be paid for the service through third-party reimbursement schemes such as NSSF, HEF, and/or other incentive schemes similar to the Midwifery Incentive Scheme.
- NCD (T2D and HTN) performance-based bonus schemes should be considered and perhaps be made an integral part of the performance-based bonuses for quality improvement.

5. Health information system and ICT

- Many data collection systems such as Health Management Information System (HMIS), Patient Monitoring Reporting System (PMRS), Diabetes Clinic Database, Heart-Care, and the MoPoTsyo Database are operational in Cambodia.
- However, none of them are ready to provide relevant and reliable data for effective monitoring and evaluation (M&E)

of the PEN. A cohort data of individual records is needed for M&E, including a cascade of T2D and HTN care.

- An NCD database has been developed, but it was still in its piloting phase. Therefore, it must be carefully integrated with a national health database for future sustainability.
- For the life-long care of T2D and HTN, modern information technologies may help effectively connect the patients with providers and ensure continuity of treatment. Some health wearables can be used for M&E, especially for connecting patients with health facilities. A recent survey in Cambodia showed that a large majority of participants are happy and willing to use a smartwatch (and even pay for it) for monitoring their blood pressure and physical exercise.

6. Service delivery and support services

- Generally, the PEN service delivery at health centers (at least the first-generation ones) is not well organized and does not function well. As presented above, the implementation score was about 2 points out of a possible 5 points. This is probably a result of the identified health system issues and partly linked to the current SOP that may need revision.
- It was also seen that an effective referral system between the community and health centers (less so in areas with Peer Network) and between health centers and referral hospitals (diabetes clinics) is lacking. "Collaboration" was the area that had the lowest score (1.3 points out of possible 5 points) (Figure 1). This may be related to the lack of clear guidance and difference in availability of medicines at both levels and limited awareness and commitment of referral hospitals and perhaps health centers.
- While in some places, the existing Peer Network (of MoPoTsyo) provides community-based support services for people with T2D and HTN in their respective communities and facilitates the linkage with health facilities (referral hospitals), as such, support for the PEN at health centers (CVD risk screening) does not exist. Moreover, most, if not all village health support groups are not aware of CVD risk screening at health centers and have never been involved in any T2D and HTN related outreach activities.
- Community-based support services are a necessary component of the ICP for T2D and HTN. The household survey suggests that the people with T2D had a greater chance of using public health facilities in ODs with the MoPoTsyo network than in those without. Therefore, attention should be given to setting up a functioning community support network for NCDs (more specifically T2D and HTN) along with the introduction of the PEN at health centers. It is worth exploring the possibility to make use of the existing and well-established community support structure for major infectious diseases such as HIV/AIDS for NCDs as they are being (re)integrated into the system.
- Many ODs do not have a referral hospital-based diabetes (NCD) clinic, and many of the available ones do not work well due to several issues, including conflict of interest. Therefore, having an active referral hospital-based diabetes (NCD) clinic in the OD should be a pre-condition for introducing the PEN at health centers within the OD.

Recommendations

We propose three recommendations to address the identified issues that have been presented above:

1. Effective scaling-up of the PEN at health centers, along with support services at referral hospitals and in the community, is necessary to increase access to affordable screening of T2D and HTN as part of the CVD risk screening.
2. Such scaling up requires expansion of the PEN to new health centers and improvement of scope and quality of services at the existing PEN health centers through better design and implementation. This can be achieved by addressing all the identified issues related to the six components of ICP and health system cross-cutting issues.
3. To effectively foster the scaling up of quality and affordable care for T2D and HTN, a roadmap is required for scaling up the ICP for T2D and HTN, which includes key strategies and strategic interventions with a clear timeframe and roles and responsibilities of key stakeholders mapped out.

Coordinator	Por Ir, MD, MPH, PhD
Consortium	Diabetes and Hypertension Care | SCUBY | Belgium, Slovenia, Cambodia
Duration	Four years
Website	https://www.scuby.eu

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