Scaling-Up NCD Interventions in South-East Asia

Policy Brief

Scaling-up strategy for non-communicable diseases

1 July 2023

Scaling-Up NCD Interventions in South-East Asia (SUNI-SEA) was a research consortium project delivered through a collaboration of 10 consortium members. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825026, under the Global Alliance for Chronic Diseases.

Scaling-Up NCD Interventions in South-East Asia (SUNI-SEA)

The increasing prevalence of non-communicable diseases (NCDs) and their high impact on mortality, morbidity and public health, particularly in low- and middle-income countries, prompted the launch of the implementation research project Scaling-Up NCD Interventions in South-East Asia (SUNI-SEA), implemented in Indonesia, Myanmar and Vietnam. This four-and-a-half-year initiative began in 2019 and is a collaboration between 10 consortium members, namely University Medical Center Groningen (Netherlands); Faculty of Economics and Business, University of Groningen (Netherlands); University of Passau (Germany); Trnava University (Slovak Republic); HelpAge International; Age International; Sebelas Maret University (Indonesia); Thai Nguyen University of Medicine and Pharmacy (Vietnam); Health Strategy and Policy Institute (Vietnam); and Vietnam Association of the Elderly (VAE).

The SUNI-SEA project aims to identify the best and most affordable ways to expand programmes that prevent and control diabetes and hypertension in Southeast Asia. The project investigates which interventions work effectively and are worth the investment in other low- and middle-income countries.

Disclaimer

Overview

This brief includes:

- an introduction to the importance of finding solutions to address non-communicable diseases (NCDs)
- a summary of the SUNI-SEA project design and methods, including similarities and differences between countries
- lessons learned from implementation
- lessons learned from scaling-up strategies used
- conclusion and call to action based on the evidence and findings of SUNI-SEA.

The findings and learning from SUNI-SEA contribute to this overall conclusion and call to action:
At a global, regional, national and local level, it is high time to implement two paradigm shifts:

- Give NCDs the greater priority in healthcare, recognising the mortality and morbidity burden of NCDs and the greater impact they have on the poorest people in the poorest countries.
- Give the greater priority to prevention and early detection of NCDs to reduce human suffering, prevent complications of NCDs, promote healthy ageing, and reduce costs.

The importance of addressing noncommunicable diseases

Noncommunicable diseases, including diabetes, cancer, cardiovascular disease, chronic respiratory diseases, and mental illnesses, account for 74% of all deaths worldwide, and make a large contribution to ill health and disability worldwide, responsible for 63% of global disability adjusted life years (DALYs) in 2019.12 NCDs are both a cause and an effect of poverty, with people living in low- and middle-income countries disproportionately affected. Addressing NCDs and ensuring access to NCD prevention and care is crucial for attaining the health-related Sustainable Development Goals and universal health coverage (see box below).

Many countries, including Indonesia, Myanmar and Vietnam, have put in place strategies, policies and plans to address the growing burden of NCDs. However, implementation is extremely challenging. In these countries, there is insufficient funding and expertise to address NCDs. Awareness of NCDs among the population is low and not many people know whether they run the risk of getting an NCD. Few people with NCDs are diagnosed, and few with a diagnosis get the appropriate treatment. [3]This requires innovative approaches to drive impact on prevention, early detection and treatment of chronic disease. To reach more people it is essential to reach out to communities. Strategies for addressing NCDs include community-based screening, periodic health check-ups, health promotion, treatment in primary healthcare facilities, and provision of NCD medicines as part of essential health benefit packages.

[1] NCD Alliance, *Why NCDs*, 23 April 2023, https://ncdalliance.org/why-ncds.
[2] WHO (2023) World Health Statistics 2023. https://www.who.int/publications/i/item/9789240074323
[3] SUNI-SEA (2019) Retrospective research studies report. Unpublished.

The link between NCDs and the Sustainable Development Goals

Addressing NCDs is an important part of attaining Sustainable Development Goal 3: *Ensure healthy lives and promote well-being for all at all ages*. Successfully scaling up NCD interventions can contribute to achieving SDG targets by increasing access to services. This supports the achievement of SDG3 target 3.4: *by 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being*. Successfully scaling up NCD interventions also aligns with SDG3 target 3.8: *achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all*, and its two related indicators, namely coverage of essential health services (SDG 3.8.1) and catastrophic health spending (SDG 3.8.2).[4]

Scaling-up NCD Interventions in South-East Asia: An overview

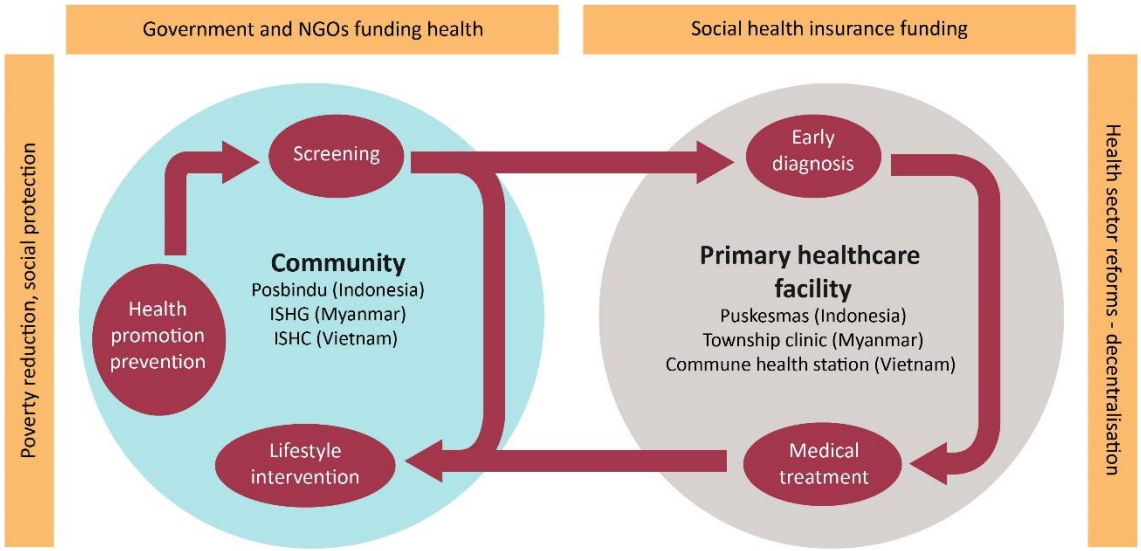
Scaling-Up NCD Interventions in South-East Asia was a 4.5-year research project delivered through a collaboration of 10 consortium members in Europe and Southeast Asia,[5] and funded by the European Union. Since its inception in January 2019, SUNI-SEA worked to better understand effective scaling-up strategies for existing NCD interventions in Indonesia, Myanmar and Vietnam. The project performed action research in strengthening the provision of services for the prevention and management of diabetes and hypertension. It covered both community-based activities and primary healthcare services, aiming for synergies between the two for increased health impact. The approach is summarised in Figure 1.

SUNI-SEA took the existing and ongoing activities around hypertension and diabetes prevention and management as its starting point in Indonesia, Myanmar and Vietnam. It looked for ways to enhance ongoing programmes and monitored the effectiveness and cost-effectiveness of scaling-up, to produce recommendations for similar scaling of NCD programmes worldwide.

[4] United Nations Department of Economic and Social Affairs, Sustainable Development, SDG 3: Ensure healthy lives and promote well-being for all at all ages, United Nations.

[5] University Medical Center Groningen, Netherlands; University of Groningen, Netherlands; University of Passau, Germany; Trnava University, Slovak Republic; HelpAge International; Age International; Thai Nguyen University, Vietnam; Health Strategy and Policy Institute, Vietnam; Sebelas Maret University, Indonesia; and the Vietnam Association of the Elderly.

Figure 1: Project interventions at the PHC facility and in the community, and the synergies between them

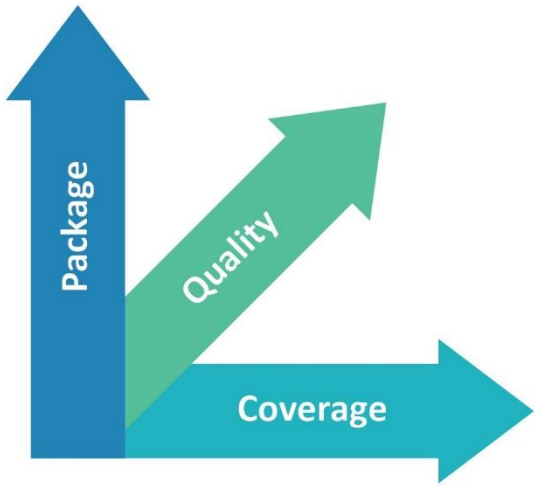


Analysis

The first phase of the project was a retrospective study to take stock of ongoing initiatives in communities and primary healthcare facilities, to reduce the burden of disease due to hypertension and diabetes. In the retrospective phase of the SUNI-SEA project (year 1), contextual factors for scaling-up were analysed and the most important barriers and facilitators identified.[6] Literature reviews of community-based interventions in NCD prevention and control in Southeast Asia were conducted and field research performed in Indonesia, Myanmar and Vietnam. Based on the analysis, the SUNI-SEA project saw the necessity to add a third dimension to the traditional model of vertical and horizontal scaling-up, namely quality improvement (Figure 2). The SUNI-SEA project planned the scaling-up strategy in the following way:

[6] Pardoel ZE, Reijneveld SA, Lensink R, Widyaningsih V, Probandari A, Stein C, Hoang GN, Koot JAR, Fenenga CJ, Postma M, and Landsman JA. 2021. Core health-components, contextual factors and programme elements of community-based interventions in Southeast Asia – a realist synthesis regarding hypertension and diabetes. *BMC Public Health*, 21(1), 1–14. https://doi.org/10.1186/s12889-021-11244-3

Figure 2: SUNI-SEA scaling-up strategy planning



- Increase the package of services in the existing community programmes or in the primary health facilities in the research area, for example, by making NCD screening and counselling available to all adults.
- Increase the quality of service in communities or health facilities to achieve more sustainable impact.
- Increase the coverage of services, for example, by training staff in new health facilities or initiating more community groups, reaching more people in more geographical areas.

"I have made positive changes in my lifestyle since participating in the project. I quit smoking and chewing betel nuts. I prioritise my health, manage my time effectively, and consume healthy and nutritious food. These changes have contributed to my overall well-being."

U Maung Kyi, Chairman of Tet Nay Lin Inclusive Self-Help Group, Kyuu Taw village, Myanmar

Intervention research

At the beginning of the second phase, a baseline survey was conducted of communities in areas where the interventions would be implemented and in control areas. Due to the COVID-19 pandemic, this survey took from 2020 to 2021. The next phase, a prospective study, brought researchers, communities and primary healthcare facilities together to collaboratively explore the scaling up of the most viable interventions and programmes identified in the retrospective phase.

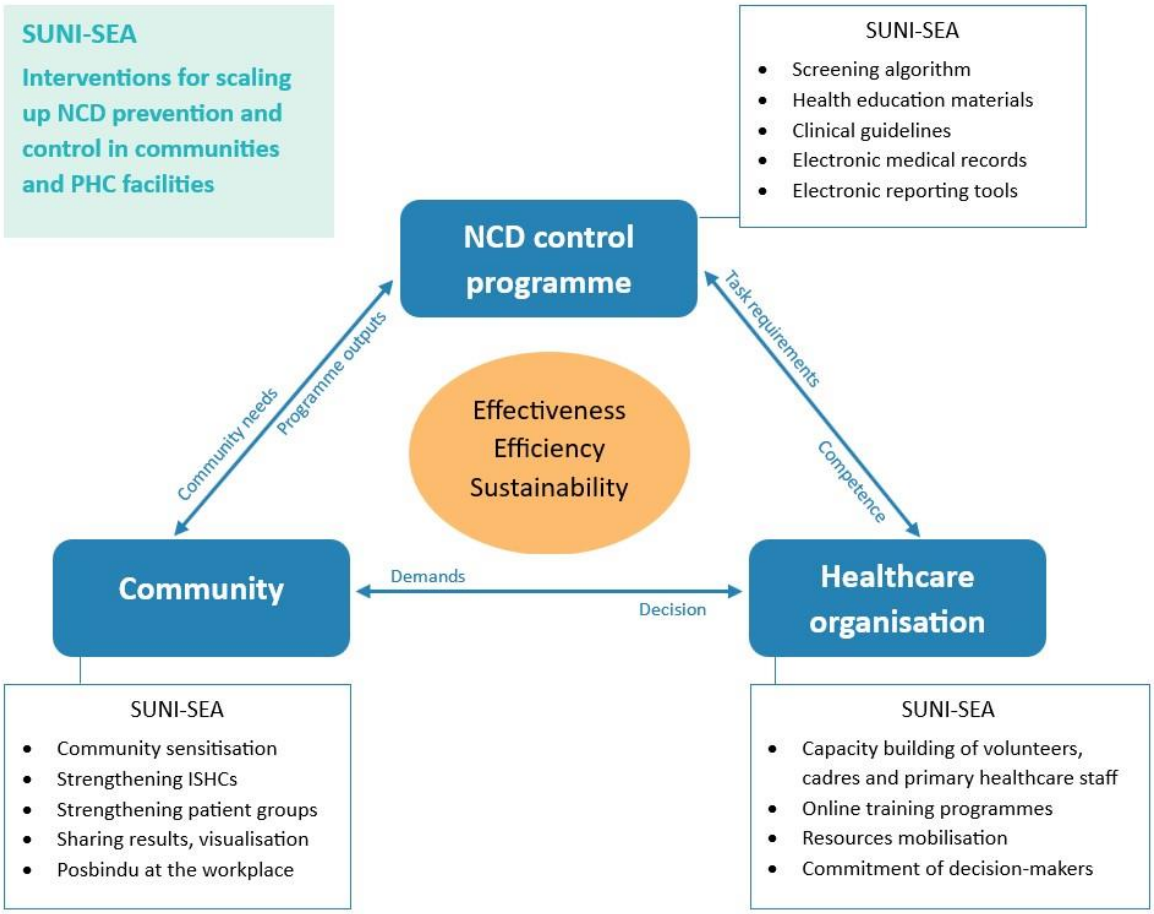
SUNI-SEA's conceptual framework draws on World Health Organization (WHO) guidelines for scaling up health service delivery,[7] with three main, interrelated elements that should be in balance: the community, the healthcare organisation and the NCD intervention programme (Figure 3). The capacities in the **community** were determined by its social capital, including formal local government authorities, community-based organisations, older community members, and religious leaders. The community demands services, but it can also perform health-related activities. In the **healthcare organisation**, professionals operate in the context of the existing structures, policies, protocols and

[7] Simmons R, Fajans P, and Ghiron L. *Scaling-up health service delivery: From pilot innovations to policies and programmes*, World Health Organization, 2007. WHO-EXPANDNET, *Practical guidance for scaling-up health service innovations*, World Health Organization, 2009.

resources, as well as the prevailing socio-cultural beliefs.[8] Healthcare organisations interact with communities. In the **NCD control programme**, the epidemiology, the increasing need for NCD services, and social and cultural factors determine how primary healthcare organisations can address the needs of the population. The healthcare organisations must have the capabilities to implement the NCD programme and deliver quality.

Based on the analysis, each of the countries in which SUNI-SEA was working developed priority interventions to strengthen communities, healthcare organisations and the NCD control programme (Figure 3).

Figure 3: Priority intervention plan developed within SUNI-SEA project



All interventions aimed to increase the package of services (vertical scale-up), increase the coverage of services (horizontal scale-up) and improve service quality.

[8] Barker PM, Reid A and Schall M, 'A Framework for scaling-up health interventions: lessons from large-scale improvement initiatives in Africa', *Implementation Science* (2016)11:12 DOI 10.1186/s13012-016-0374-x.

At the community level, the project teams worked on community sensitisation on NCDs using health education materials, health messages via social media or traditional media, and regular meetings with community groups. The project strengthened the health component of the community-based organisations – intergenerational self-help clubs in Vietnam and inclusive self-help groups in Myanmar – and helped to introduce NCD screening using an android application in these groups. In Indonesia, community engagement was stimulated through NCD outreach clinics (*posbindu*) organised by primary healthcare facilities (*puskesmas*) and delivered by community health volunteers. The project also supported patient groups in the three countries to enhance peer support for lifestyle changes and treatment adherence. In Myanmar, an android application was introduced for self-assessment and self-help of individuals and groups for improving physical and mental health. In Indonesia, *posbindu* were introduced in the workplace, to improve access to services.

In healthcare organisations, capacity building took place to improve the capabilities of healthcare staff and volunteers through online courses and in-person training events. Training materials were developed and adapted to the local context in participation with community groups. The project also helped organisations with advocacy for resource mobilisation and building the commitment of decision-makers to sustain NCD interventions.

For the NCD control programmes the project designed screening tools and protocols, clinical guidelines and instruments. The project introduced an electronic medical record system and electronic monitoring system to follow up those screened through community-based screening.

SUNI-SEA developed a scaling-up advocacy plan to build collaboration and commitment from local, district, regional and national stakeholders for community-based interventions for NCD prevention and control.

Evaluation

In March and April 2023, the project conducted an endline survey to assess the changes in communities and individuals to measure the effects of the interventions. In the final phase of the project, lessons learned were drawn up for policy, and learning materials and instruments were packaged to enable their use to improve global NCD prevention and care.

Below, the most important lessons learned for communities, healthcare organisations and NCD control programmes are presented.

Lessons learned from implementation

Communities

Communities at the centre. Community participation is key to the SUNI-SEA's approach. The research undertaken in this project was conducted together with existing community-based structures. By using a participatory approach throughout, the project teams engaged these groups directly in the research, for example, in developing health education materials, and piloting the

mobile application and screening tools. The two main models used differed according to context. In Vietnam, independent community organisations, known as intergenerational self-help clubs (ISHC) – which are nested under the mass organisation, the Vietnam Association of the Elderly – were linked to primary healthcare services. In Indonesia, community outreach occurred through the primary healthcare level of the health ministry via *puskesmas*, government-mandated community health clinics, through clinics for NCDs called *posbindu* and community health volunteers (*cadre*). Local authorities collaborated in community mobilisation and contributed to resource mobilisation for *posbindu*. In Myanmar, community-based organisations supported online tools for self-help resilience for stress and other NCD risk factors.

Co-ownership by and the commitment of communities are conditions for sustainability. In Vietnam for example, the ISHC model was adopted by other communities because they noticed a positive health impact on members. Newly established clubs are provided with initial funding for startup and later ISHCs are sustained by communities without external financial support. In Indonesia, community participation in and commitment to *posbindu* contributed to a change in the health behaviour of entire families and neighbours.

In the SUNI-SEA project communities, ISHC members attend monthly or quarterly meetings during which they take part in physical and cultural activities facilitated by health volunteers. These meetings have been well-received and health literacy among community members has improved.

"The Commune Association of the Elderly and the Commune Health Station worked together to support the intergenerational self-help club activities with enthusiasm, especially on the screening of club members. The club model and its initiatives greatly strengthen solidarity in the community."

Nguyen Quang Giang, President of the Tien Thang Commune Association of the Elderly, Hai Phong, Vietnam

Decentralised control. In most countries, the responsibility to provide community-based health services is decentralised and local authorities allocate budgets for community development, including health. Communities must advocate directly to their local authorities for the funding of community health activities rather than receiving funding from a centrally controlled national initiative. Communities or groups need to have awareness of their rights and entitlements to advocate and be supported to take ownership of their health activities. Communities have demonstrated that they can team up with primary healthcare services, and the funding to enable this is locally controlled.

Healthcare organisations

***Training*.** SUNI-SEA analysis shows that training materials were critical to the quality of scaling up the comprehensive community-based and primary health facility-based programmes. Developing and implementing training became an important part of the implementation research. SUNI-SEA produced several publications on the experience of training. An important finding was that one-off training did not result in the improvement of the knowledge, attitudes and practices of volunteers and professionals. Mentoring, refresher courses and continuous support are essential for them to gain and maintain skills. Lifestyle counselling is especially difficult for volunteers. Through good relations between community organisations and primary healthcare staff, it was possible to organise this continuous support. When it was not possible, for example due to Covid-19, community-based programmes suffered.

"Apart from trainings, there was also guidance and assistance for cadres from the SUNI-SEA team or from us as NCD officers. The collaboration was good. We need to apply this learning to all NCD activities."

Imam Maruf, Kediri Public Health Centre, Indonesia

***Human resources for health*.** Human resources are crucial for the delivery of quality services, but primary healthcare facilities do not currently have the training and skills for managing NCDs. In the last decades, the focus of PHC in low- and middle-income countries has been on infectious diseases, and maternal and child health. Most health workers have limited knowledge of NCD prevention and care. Continuing professional development is essential, and health professionals must be motivated and assisted in their careers. SUNI-SEA developed simplified guidelines and training materials suitable for PHC staff. With these tools they were able to improve treatment, counsel patients and achieve better adherence to treatment.

NCD control programmes

***Screening*.** In many ISHCs, health volunteers and CHS staff have built a close relationship. Twice a year, the clubs organise sessions to screen for the risk of hypertension and diabetes via a screening questionnaire, BMI measurement, body weight and abdominal circumference measurement. CHS staff are on site to give medical advice. Those who are identified as being at high risk of hypertension or diabetes are encouraged to visit their local CHS or district health centre for further diagnosis.

In Indonesia, the improved screening protocol for *posbindu* delivered the same type of screening for NCDs as in Vietnam. *Puskesmas* staff often supervise the community health volunteers in *posbindu* and provide medical support on the spot. Health education materials and videos were made available for people visiting *posbindu.*

Guidelines. SUNI-SEA reviewed, adapted to the local context, and updated global international guidelines and tools. Keeping guidelines simple and tailored to the community and primary healthcare level was a good way to increase their efficacy and promote behaviour change. SUNI-SEA published a guide for adapting international guidelines and training materials to local contexts.

However, the lack of local resources was a barrier to implementing guidelines at the primary healthcare level. Often equipment and medicines for NCD treatment were not available in clinics and health stations.

Digital tools and solutions. Digital tools have the potential to strengthen health systems and support NCD interventions (see SUNI-SEA policy brief '*Bridging the digital divide'*). Both Indonesia and Vietnam have enthusiastically embraced digital health innovations in electronic health records to monitor those attending screening and participating in peer support groups. In general, these electronic tools have contributed to better recording, analysis of data, and follow-up. However, it is a long process to get digital tools fully operational. Digital literacy is still low, especially among older volunteers, and thus the potential of the apps has not yet been fully realised. Also, issues such as internet connectivity and device costs are still barriers to full implementation of digital apps. Nevertheless, with swift developments in ICT globally, these tools will soon be an integrated part of community-based health programmes and enhance interaction with PHC facilities. Importantly, the introduction of digital applications should enhance equity and inclusion, and increase the availability of locally generated data for advocacy.

In Myanmar, due to problems of continuing ISHC support following political changes, the team developed a digital application to self-screen for NCDs, including mental health, and self-help tools for behavioural change, including mental resilience. Although the implementation was still in a pilot phase by the end of the project, positive effects could be measured.

"I am a member of a self-help woman's group in my village. I was very interested in using this mobile application once the volunteer introduced it to me. While using this application, I felt like I was taking an exam and waiting for my result. It was such an exciting moment. I am getting used to this app now. I am using it by myself and am more confident when introducing this application to other people in my village. One of the best parts of this application is having a separate section on disease prevention and tips for a better lifestyle. By using this application, we learn more about our bodies, and it provides an early warning alarm to go for early treatment before it is too late."

Daw Khin Mar Htay, community member, Myanmar

Lessons learned from the scaling-up process

Bottom-up and top-down

Many countries have a devolved governance system for social services. This implies that local government authorities are responsible for planning, budgeting and implementing healthcare and social services in their communities. This also applies to community-based health activities. The scaling up of community-based NCD prevention and control is therefore a complex process, with bottom-up and top-down components (Figure 4). In the planning, management and resource mobilisation, local stakeholders play a key role, as national governments have delegated these responsibilities to lower levels of governance.

Community-based organisations play a complementary and essential role in NCD prevention and control, including community mobilisation, health promotion, healthy lifestyle approaches and health monitoring, and cross-sector services. Investing in community-based organisations is an affordable and effective approach to reduce the burden of NCDs.

Local, district and provincial authorities have an essential role in acknowledging and leveraging the effective role of community-based organisations. They provide an extended arm for grassroots health facilities to reach hard-to-reach populations.

Scaling up starts from the bottom up, often spreading slowly from place to place, based on the replication of good practices. Advocacy activities target local stakeholders and build commitment for sustainable investment in health promotion and prevention.

On the other hand, quality assurance comes from the top down, with financial investment, standards, capacity building, supervision, accountability and mentoring. National ministries, and regional and provincial authorities play an important role in advocating for best practices in community-based NCD prevention.

Authorities at all levels need to ensure that CBOs receive technical support and ongoing capacity building, and work closely with primary healthcare providers.

Figure 4: Scaling up community-based NCD prevention and control

The importance of the participatory process

A fundamental aspect of SUNI-SEA was the participatory process to develop the scaling-up strategy. From its initial design phase, the project facilitated collaboration between communities, primary healthcare workers and other stakeholders.

Indonesia's *posbindu* make up an outreach programme of *puskesmas* (PHC centres) and therefore have their roots in the healthcare system. The meetings at the SUNI-SEA research sites were attended not only by health department and primary healthcare officials, but also by community members, particularly the health volunteers involved in *posbindu*. Representatives of local authorities also attended the planning and progress meetings as they can provide resources to community initiatives.[9]

The intergenerational self-help clubs in Vietnam are rooted in the community development perspective, and thus representatives of local authorities, People's Committees, the Association of the Elderly, the Farmer's Union, and the Women's Union were SUNI-SEA stakeholders for these clubs. Provincial health departments, district health centres and commune health stations joined the planning and progress meetings. Eventually, formal contracts were signed between the Association of the Elderly and the Health Department to continue the health promotion and prevention activities in the ISHCs.

The Government of Vietnam has approved the Program on Health Care for Older Persons and the proposal to scale up ISHCs with specific targets. The Vietnam Association of the Elderly will continue to replicate the SUNI-SEA project results nationwide, directing the 63 provinces to prioritise developing and replicating ISHCs and producing guidance documents for this process. The Ministry of Health has also set targets to create linkages between primary healthcare and ISHCs.

"The SUNI-SEA project had a remarkable impact. The cadres who received training have been actively working in the posbindu and have increased skills and knowledge about NCD screening. SUNI-SEA provides training on diabetes and hypertension to cadres in a language that is easily understood. The difference with SUNI-SEA is that it focused on people skills, not only on data collection."

M. Fajri S. Kep, Head of the NCD and Mental Health Section, Batang Health Service, Indonesia

[9] SUNI-SEA, *Kick-off meeting of SUNI-SEA in Central Java, Indonesia*, 2019, https://www.suni-sea.org/en/articles/kick-off-meeting-of-suni-sea-in-central-java-indonesia/

Financing community-based NCD interventions

Financial resources determine to a large extent the package and quality of NCD prevention and control at the community level. The local funding mechanisms through community funds, local government budgets, and other sources should continue contributing. In addition, the universal health coverage policy of countries is vital in this: the package of services needs to be directed towards the country's shifting demographics and epidemiological changes, i.e., the expected increase in NCDs and expanded need for rehabilitation services, including assistive technology, integrated health and social services for long-term care and support, and palliative and end-of-life care. Health insurance should include NCD prevention and care, as well as related medicines in the essential health benefit packages.

The SUNI-SEA research has shown that the investments in communities and PHC facilities pay off. Although big investments are needed to implement the SUNI-SEA model countrywide, the costs are lower than doing nothing and seeing NCDs increase in numbers and complications. The costs for the health sector in the end are lower, and the effect of a healthier population on society are immense.

Conclusion and call to action

SUNI-SEA has provided evidence that community empowerment and close collaboration between PHC facilities and community groups can result in increased knowledge and awareness of NCDs, increased early detection and actions to address risk factors, and improved early treatment of NCDs at the primary healthcare level.

Key policy takeaways

- Many countries, including Indonesia and Vietnam, have put in place strategies, policies and plans to address the growing burden of noncommunicable diseases; however, to reach more people for early prevention and control of NCDs, it is essential to include community-based screening, periodic health check-ups, and health promotion in the basic health benefit package. services.
- Effective implementation of NCD prevention and control strategies demands clearly defined roles and responsibilities for coordination, capacity building and monitoring of primary healthcare, community and cross-sector stakeholders, including the private sector.
- Community-based organisations play an essential role in NCD prevention and control through community mobilisation, health promotion, healthy lifestyle approaches and health monitoring, and cross-sector services. These should be prioritised in national policies and backed up by investment.
- Local, district and provincial authorities all have an essential role in acknowledging and leveraging community-based organisations to improve health outcomes, including by addressing the social determinants of health and through coordination with primary healthcare facilities.

- In a decentralised health system, it is important that national health authorities for NCD prevention take their role in coordination of capacity building for primary healthcare staff and health volunteers.
- Above all, accelerating progress and scale-up of NCD programmes needs adequate investment. Without this, national targets for NCD prevention and control cannot be achieved. This investment should ensure primary healthcare capacity and resources (in human resources for health, monitoring and evaluation, finances, medicines and equipment) is reflected in all policies.

All of these contribute to an overall conclusion: It is time to implement two paradigm shifts globally:

- Give NCDs the greater priority in healthcare, recognising the mortality and morbidity burden of NCDs and the greater impact they have on the poorest people in the poorest countries.
- Give the highest priority to prevention and early detection of NCDs, as this reduces human suffering, prevents complications of NCDs, and reduces costs.

"After the project ends, Department of Health will continue to replicate this model across the province. We will propose to the Provincial People's Committee to implement healthcare programmes for older people on NCDs management. We hope that the government will continue the support for healthcare for older people."

Pham Thi Phuong Hanh, Deputy Director, Department of Health, Ninh Binh, Vietnam