A) IHCI:

1) **Leadership in National Health Initiative**: Led the India Hypertension Control Initiative (IHCI), a 5-year national project involving the Ministry of Health & Family Welfare, Indian Council of Medical Research, State Governments, and WHO-India, launched in November 2017. This initiative is a key component in achieving India's Non-Communicable Diseases (NCD) goals by implementing and enhancing evidence-based strategies for hypertension management and control.
2) **Widespread Project Implementation**: Successfully initiated project activities across 101 districts in 19 states by December 2021. The initiative enrolled almost 21 lakh patients in 13,821 health facilities across these districts, significantly expanding the reach and impact of hypertension control efforts in India.
3) **High Patient Engagement and Care**: Enrolled a million patients across 4,505 health facilities in phase I and II states by December 2020, with 7.4 lakh patients under active care between April 2020 and March 2021. Nearly half (47%) of the registered patients under care had their blood pressure under control during their most recent visit in the first quarter of 2021.
4) **Ongoing Monitoring and Research**: Conducted a follow-up survey in 10 districts across five states (Punjab, Kerala, Madhya Pradesh, Telangana, and Maharashtra) under phase I of the initiative, ensuring continued monitoring and evaluation of hypertension control efforts.
5) **Contributions to Scientific Literature**: Contributed to multiple high-impact journal publications, including:

Kaur, P., Sakthivel, M., Venkatasamy, V., Jogewar, P., Gill, S.S., Kunwar, A., Sharma, M., Pathni, A.K., Durgad, K., Sahoo, S.K., Wankhede, A., Kumar, N., Bharadwaj, V., Das, B., Chavan, T., Khedkar, S., Sarode, L., Bangar, S.D., Krishna, A., Shivashankar, R., **Ganeshkumar, P.**, Pragya, P. and Bhargava, B. (2024) 'India Hypertension Control Initiative: Blood Pressure Control Using Drug and Dose-Specific Standard Treatment Protocol at Scale in Punjab and Maharashtra, India, 2022', Global Heart, 19(1), p. 30. Available at: https://doi.org/10.5334/gh.1305.

Kunwar A, Kaur P, Durgad K, **Parasuraman G**, Sharma M, et al. (2023) Improving the availability of antihypertensive drugs in the India Hypertension Control Initiative, India, 2019–2020. PLOS ONE 18(12): e0295338. https://doi.org/10.1371/journal.pone.0295338

Kaur P, Kunwar A, **Parasuraman G**, Sharma M, et al. India Hypertension Control Initiative—Hypertension treatment and blood pressure control in a cohort in 24 sentinel site clinics. J Clin Hypertens. 2021; 23: 720–729. https://doi.org/10.1111/jch.14141

Kunwar A, Kaur P, Durgad K, **Parasuraman G**, Sharma M, et al. (2023) Improving the availability of antihypertensive drugs in the India Hypertension Control Initiative, India, 2019–2020. PLOS ONE 18(12): e0295338. https://doi.org/10.1371/journal.pone.0295338

2) GACD – Community control of hypertension and diabetes in Tamil nadu

The GACD project, funded by the NHMRC, Australia, and running from 2022 to 2026, aims to scale up interventions to improve the control of hypertension and diabetes in partnership with the governments of Kerala and Tamil Nadu. The project's primary objectives include evaluating the implementation outcomes of a Structured Lifestyle Modification (SLM) program designed to enhance diabetes and hypertension control, identifying and addressing contextual factors within the community and health systems that serve as enablers and barriers to the program's scale-up, and determining the value and return on investment by assessing the program's cost and cost-effectiveness.

Research work in the project:

1) Needs Assessment:

A comprehensive community needs assessment was conducted to implement the Peer Support Group (PSG) approach, which adopts a participant-centric methodology to enhance the overall health impact. The assessment revealed several key findings. Participants in the PSGs understand and value the groups, particularly as facilitated by healthcare workers, although gender imbalances suggest differences in routine integration. Peer leaders demonstrated a strong collective understanding, supporting the development of community-driven leadership. Engagement with PSGs is influenced by participants' schedules, domestic responsibilities, and privacy preferences, while health professionals face time and workload constraints. However, with supportive actions like reminders and effective peer leadership, engagement can be sustained for up to two years with community support. Successful implementation of PSGs requires community-level collaboration, improved communication, and strategic planning to retain attendees, utilizing existing community venues and emphasizing the benefits of PSGs. Continuous evaluation and adaptation of PSG practices are essential for addressing implementation challenges and improving effectiveness.

2) Community Baseline Survey Completion:

The community baseline survey has been successfully completed, providing a foundation for the subsequent intervention. This survey is crucial for understanding the community's initial status and setting benchmarks for evaluating the impact of the intervention.

3) Resource Material Preparation:

Resource materials were developed and reviewed with input from experts in various fields, including the Department of Community Medicine, general physicians, clinical nutritionists, physiotherapists, and community engagement leaders. These materials include training material, job aids, flipbooks, PSG cards, PSG attendance registers, and posters for sensitization and awareness. These resources are designed to support the effective implementation and sustainability of the SLM program within the community.

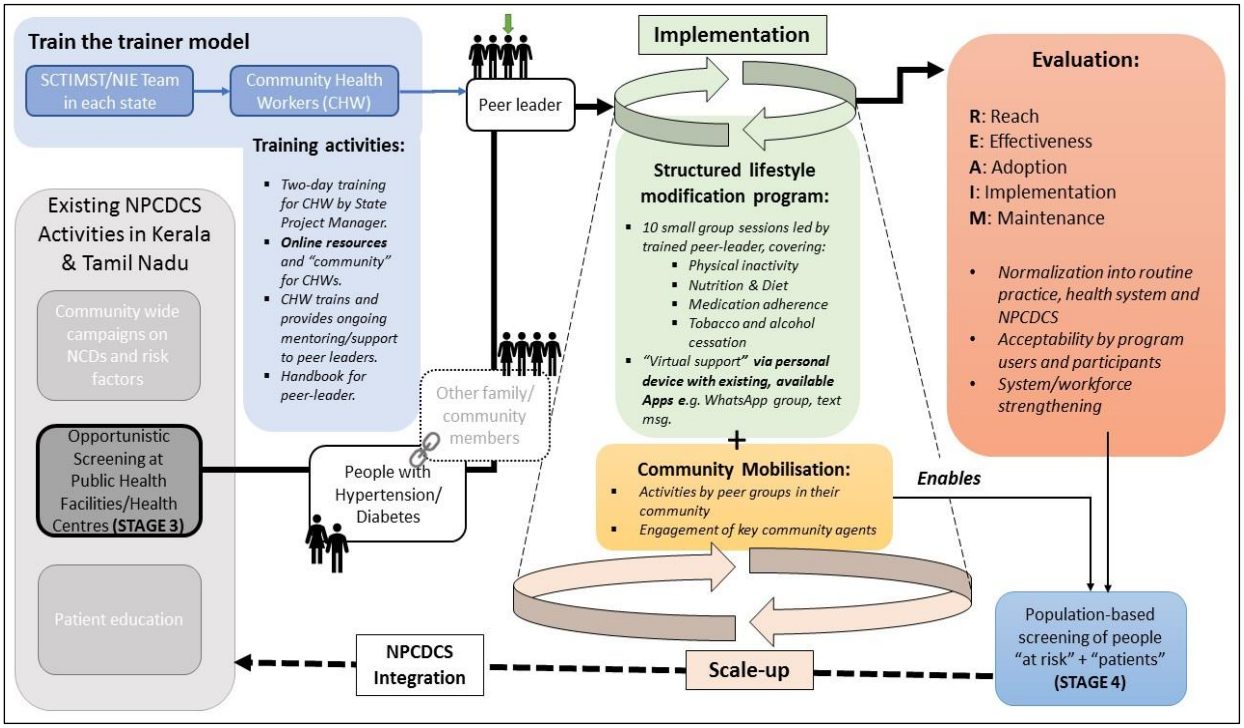
4) Intervention Baseline Survey Completion:

An intervention baseline survey involving 4,200 patients with diabetes and hypertension was conducted to assess their control levels. Control was determined by measuring fasting blood sugar levels and taking the average of the 2nd and 3rd blood pressure readings. This survey provides critical data for evaluating the effectiveness of the SLM program in improving health outcomes among the target population.

Next Steps:

The next step in the project is the implementation of the intervention. This phase will involve putting the structured lifestyle modification program into action within the community, guided by the insights gained from the needs assessment and baseline surveys. The implementation will focus on addressing the identified barriers, leveraging enablers, and monitoring the program's impact on hypertension and diabetes control among the participants.

GACD project flow chart:



Reference:

1) Parasuraman, G., Jeemon, P., Thankappan, K.R. *et al.* Community Control of Hypertension and Diabetes (CoCo-HD) program in the Indian states of Kerala and Tamil Nadu: a study protocol for a type 3 hybrid trial. *BMC Public Health* **24**, 2275 (2024). https://doi.org/10.1186/s12889-024-19746-6