PRE-READ BRIEF

Unlocking Hypertension Control Through Reliable Access to Medicines

Cardiovascular Health Partner Convening 2026

This brief is a pre-read for the **hypertension control: increasing access to medicines** breakout group during the Write the Headline: Co-Creating the Future of CVH session, on May 7th. It sets out why reliable access to medicines is so critical to hypertension control, where the key gaps still lie, and what strategies hold the greatest promise for the next phase of CVH partnership work.

1. Why Medicine Access Is the Foundation of Hypertension Control

In 2020, hypertension affected an estimated 1.4 billion people worldwide. Uncontrolled blood pressure is a leading risk factor for of heart attacks, strokes, and kidney failure. The good news is that safe, effective, and affordable medicines exist. When patients take medication regularly, major cardiovascular events can be prevented. The challenge is not whether treatment works — it is whether patients can access it consistently, day after day, year after year.

1.4 B+ People living with hypertension worldwide	**30–50%** Non-adherence rates in low- and middle-income countries
35–40% Reduction in stroke risk with regular treatment	**$5/yr** Approximate cost of preventing a major cardiovascular event

Three things make medicine access especially important:

Daily adherence is non-negotiable. Blood pressure control is fragile — even short gaps in medication can reverse hard-won gains within days or weeks and sharply increase the risk of complications.

- Reliability builds trust. When quality assured medicines are consistently in stock, patients stay in care, providers deliver better treatment, and confidence in the health system grows.
- It is one of the most cost-effective investments in global health. For roughly $5 per person per year, a cardiovascular event can be prevented — saving far more than years of medication cost.

Medicine shortages have long been seen as the main barrier to hypertension control. We should increasingly view reliable medicine availability as the strongest enabler. When medicines are consistently available, adherence improves, providers perform better, and better outcomes follow.

Ensuring sustained access to hypertension medicines requires coordinated action across multiple health-system functions from market authorization to patient use, and where bottlenecks may arise.

2. Where the Gaps Still Are

Hypertension management could be predominantly delivered at the primary health care level. Significant progress has been made across many HEARTS program countries — governments and partners have introduced treatment protocols, strengthened procurement, and expanded coverage.

Strengthening access to medicines must therefore align with primary health care principles, including equity, continuity of care, standardized treatment protocols and integrated service delivery.

But critical gaps remain at three levels:

Supply-Side Gaps

Many primary care facilities continue to experience shortages, stock-outs, driven by:

- Weak forecasting and quantification systems
- Fragmented procurement cycles with long delays
- Inadequate budgets and competing health priorities
- Poor last-mile distribution and inventory management
- Heavy reliance on a limited number of suppliers or imports

These are not failures of medicine availability globally — they are systemic inefficiencies that can be fixed.

Patient-Level Gaps

Even when medicines reach facilities, patients face real barriers:

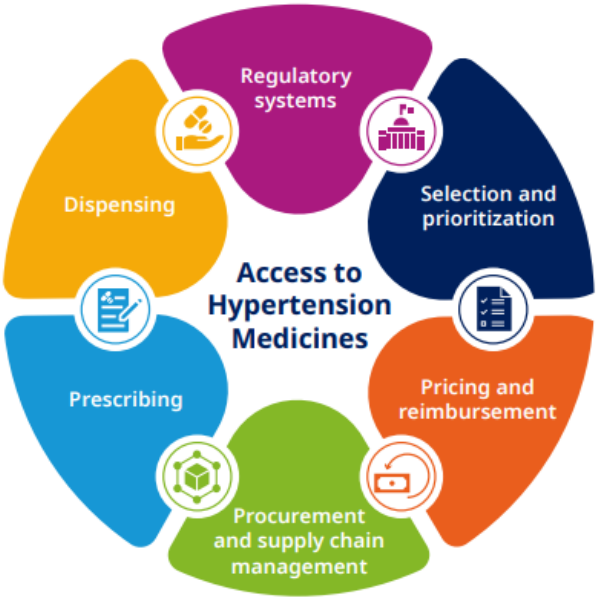
- Out-of-pocket costs that make treatment unaffordable – unless available free of charge
- Complex multi-pill regimens that are hard to adhere to
- Limited awareness that hypertension requires lifelong treatment
- Distance and travel burden to reach health facilities, more so in case of prescription and dispensing for shorter duration.

Non-adherence rates in low- and middle-income countries can be as high as 30–50%, and most of this is driven by structural barriers — not patient unwillingness.

Market and Financing Gaps

- Medicine prices vary by as much as 40 times across countries for the same product
- Single Pill Combinations (SPCs) — recommended by WHO guidelines — remain poorly available in most settings: Not included in Essential Medicine List (EML) and treatment protocols
- Fragmented demand signals reduce supplier engagement and drive-up prices
- Domestic funding for hypertension medicines is often insufficient and deprioritised

Fig. 1. Pharmaceutical value chain for access to hypertension medicines



3. Strategies for the Next Phase

The next phase of work is not about starting from scratch. It is about building on what is already working — and scaling it smarter, faster, and more sustainably. Nine priority areas offer the greatest potential for impact.

3.1 Reduce Out-of-Pocket Costs

Strong policy action is needed to ensure that medicines are available free or at minimal cost to patients. This means:

- Advocating for free medicine initiatives where governments absorb the cost
- Ensuring hypertension medicines are included in national insurance and benefit packages

3.2 Treatment Protocols — A High-Impact Opportunity

Standardised treatment protocols are in place in most HEARTS countries — but they need to be rolled out beyond project sites to the full health system. The other most important step would be to include Single Pill Combinations (SPCs) in the treatment protocol. Protocol updates should also integrate statins for high-risk patients, where evidence of additional cardiovascular benefit is strong.

What are SPCs? Single Pill Combinations combine two or more antihypertensive medicines in one tablet. They reduce pill burden, improve adherence, simplify prescribing, and streamline supply chains. Despite strong evidence and WHO recommendations, SPC adoption remains limited in most countries — making this one of the clearest breakthrough opportunities for the next phase.

3.3 Strengthen Procurement and Supply Systems

- Shift to morbidity- and program-target-based forecasting and quantification
- Reduce procurement delays through timely tendering, longer-term rate contracts, and multiple suppliers
- Use ready-reckoner tools to set inventory levels and prevent stock-outs
- Invest in last-mile distribution and digital monitoring tools for real-time action

RTSL and partners have already demonstrated that these changes can rapidly improve medicine availability at scale.

3.4 Shape Markets and Reduce Prices

- Promote regional demand aggregation to generate sustainable market volume and increased bargaining power
- Improve price transparency and benchmarking across countries
- Engage global procurement agencies and negotiate with strategic suppliers
- Support long-term framework agreements to stabilise supply and reduce cost

3.5 Expand and Sustain Financing

- Build the evidence base by analysing current budget allocations for antihypertensives
- Advocate for increased domestic government investment in hypertension medicines
- Integrate medicines into insurance and reimbursement schemes
- Explore innovative mechanisms such as revolving funds and co-financing models
- Mobilise donor and development bank support where needed

3.6 Bring Care Closer to Patients

- Introduce multi-month dispensing (2–3 months of supply per visit) to reduce facility visits
- Expand community-based distribution through community health workers
- Scale task-sharing models to extend the reach of trained providers

3.7 Strengthen Monitoring and Accountability

- Establish systems to routinely track medicine availability, consumption, procurement, and prices
- Build action-oriented dashboards to flag and address gaps quickly
- Link supply chain data with patient registers to understand real-world impact
- Make medicine availability a headline indicator in programme reviews

3.8 Ensure Medicine Quality and Build Trust

- Access only delivers impact if medicines are safe, effective, and trusted

- Strengthen national regulatory systems across the full supply chain, including inspection of manufacturers, distributors, and retail outlets
- Scale post-market surveillance through risk-based sampling, testing, and clear recall mechanisms
- Mandate WHO-prequalified products and quality-assured generics in public procurement, with pathways for locally produced medicines
- Harmonise regulatory requirements and mutual recognition frameworks to accelerate access to priority hypertension medicines, including SPCs

3.9 Optimise Local and Regional Manufacturing

- More resilient and responsive supply chains require reduced dependence on concentrated global production to ensure continuity of care and strengthen health commodity security.
- Invest in local manufacturing capacity for antihypertensives and SPCs, including infrastructure and technical expertise
- Advocate for enabling incentives such as tax relief, duty exemptions both for finished cardiovascular products and active pharmaceutical Ingredients.
- Ensure strict compliance with WHO GMP and other international quality standards in addition to country of manufacture regulatory certification
- Facilitate technology transfer and partnerships between global and local manufacturers

4. The Way Forward

Over the past decade, partners and governments have achieved real, measurable progress: millions of patients initiated on treatment, stronger supply systems, and evidence-based protocols adopted across contexts. These successes are the foundation for the next phase. But sustaining and scaling impact requires a deliberate shift — in ambition, in approach, and in how we work together. The shared priority agenda for the next phase centres on five commitments:

- Making medicines available free of charge for patients at public healthcare facilities
- Expand SPC and statin adoption as standard of care across all HEARTS countries
- Sustain and scale reliable medicine supply systems
- Strengthen financing and procurement mechanisms to reduce cost and improve availability
- Leverage partnerships for coordinated global action and shared learning

Closing thought: Hypertension control does not fail because medicines do not exist. It fails when medicines do not reach patients consistently, affordably, and simply. The good news: this is solvable. By working together — governments, partners, and global agencies — we can ensure that medicines move from packages to patients, and from access to impact.

RTSL Medicine Access: Evidence and Lessons

2017–2026 | Partner Meeting Reference Sheet

1. Surveys on Medicine Access and Affordability

Under Pressure: Antihypertensive Medicine Prices in LMICs — *Global — Nigeria, Philippines, Brazil, South Africa, Lebanon.* HTN medicines cost up to 41× the estimated cost-based generic price; SPC-based dual-combination protocols are cost-competitive with single-agent protocols at lowest public-sector prices; most national EMLs exclude SPCs.

Source: RTSL, 2022. resolvetosavelives.org/under-pressure

RTSL Medicines Access & Affordability Survey — *Global — 14 RTSL-supported countries.* Patients spend avg. 13 days' wages/month on CVD medicines (public sector), rising to 33 days (private). Fewer than 1/3 of public facilities were adequately stocked for a 30-day supply. SPCs absent from all 14 insurance formularies; on EML in only 2 countries. 'Adequacy' (not just 'availability') adopted as the new WHO HEARTS monitoring standard.

Source: *RTSL Medicines Survey Report, 2025 (draft). Available from RTSL.*

Global Systematic Review and Appraisal of Hypertension Treatment Protocols — *Global — 50 STPs, 46 countries.* Only 16% of protocols recommend FDC/SPC at first treatment step; 56% still start with monotherapy. All 17 top-scoring protocols (≥90%) are HEARTS clinical pathways from Latin America. No protocol globally enables non-physician medication titration.

Source: Satheesh G et al. J Hypertens. 2024;42(5):902. doi.org/10.1097/HJH.0000000000003680

2. Simple HTN Treatment Protocol Implementation Including Initial FDC Protocols

HEARTS in the Americas: Clinical Pathway QI Intervention — *Regional — 16 Latin American & Caribbean countries.* Structured QI raised median protocol quality from 65% to 93%; all 16 countries now combine two drugs at step one. Only 3 of 16 use an FDC pill — LMIC market unavailability is the primary barrier. Cuba Matanzas: population HTN control rose from 29% to 58% within one year.

Source: Rosende A et al. Front Cardiovasc Med. 2023;10:1102482. doi.org/10.3389/fcvm.2023.1102482

India Hypertension Control Initiative (IHCI) — *India — 26 districts, 5 states.* 3-drug protocol enabled accurate forecasting and bulk procurement, reversing stockouts; free generics (<USD 3/patient/year) with decentralized 30-day refills achieved 43% avg. clinic BP control in 570,000 patients. Scaled to 100+ districts nationally.

Source: Kaur P et al. J Hum Hypertens. 2022. doi.org/10.1038/s41371-022-00742-5

NHCI Cluster-Based Performance Reviews — *Nigeria — Kano and Ogun States, 104→596 PHC facilities.* Bi-monthly DHIS2 cluster reviews with embedded drug availability monitoring improved BP control 28%→58%, loss-to-follow-up 47%→25%, and data completeness 60%→90% within 6 months.

Source: *NHCI/RTSL Abstract, 2025. Available from Resolve to Save Lives.*

3. Interventions to Improve Medicine Inventory, Forecasting, Supply Chain, and Procurement

RTSL–CHAI Supply Chain Strengthening: Forecasting, DRF, and Pooled Procurement — *Nigeria — Kano and Ogun States.* RTSL/CHAI sub-grant (2022–2025) built state forecasting capacity, established Drug Revolving Fund governance, and piloted multi-month dispensing. Pooled procurement cut amlodipine 5mg price 30% in Kano (26% overall saving ≈ NGN 27M); BP control reached 73% in patients with consistent access. Ogun DMA passed into law in 2023, creating a permanent procurement framework.

Source: *RTSL–CHAI Sub-Grant Final Report, 2022–2025. Available from Resolve to Save Lives.*

Ogun State Drug Revolving Fund and Pooled Procurement Scale-up — *Nigeria — Ogun State, 12→236 PHC facilities.* DRF + pooled procurement via state DMA + HIV/malaria supply chain integration cut amlodipine 10mg price 47% and stockout rate 13%→2.8%; BP control 20%→43% in 10,747 patients. DRF is self-sustaining through seed-stock revolving.

Source: *NHCI/RTSL Evaluation Report, 2024–2026. Available from Resolve to Save Lives.*

Philippines Healthy Hearts: Decentralized vs. Pooled Procurement Costing — *Philippines — Iloilo Province, 7 Rural Health Units.* PPPI national pooled procurement cut medication costs 68% vs. local LGU purchasing (USD 9.1→2.9/patient/year); BP control saves USD 28/patient/year in provider time. Optimal model: pharmacy outsourcing + PPPI via province-level UHC fund pooling.

Source: Lam HY et al. BMC Primary Care. 2025;26:80. doi.org/10.1186/s12875-025-02758-5

4. Interventions to Provide Free Medicines or Lower Out-of-Pocket Costs

IHCI Free Generic Medicines Model — *India — public sector, nationwide.* Free generics procured at <USD 3/patient/year with 30-day refills at decentralized Health and Wellness Centres. By 2025, India achieved ≥80% public-sector availability across all four major antihypertensive classes (CCBs 93%, ACEIs 90%, ARBs 86%, diuretics 83%).

Source: Kaur P et al. J Hum Hypertens. 2022. doi.org/10.1038/s41371-022-00742-5

Bangladesh HEARTS Free Medicines Program — *Bangladesh— public sector, 44 Districts in 8 Divisions, 310 UHCs.* Generic protocol medicines provided free of charge to patients. Expanded prescriptions from 1-2 weeks to 30-day prescriptions and then 60-day prescriptions. Work with government to overcome medicine supply shortages that arose as the program expanded.

Source: *Bangladesh HEARTS: Lessons Learned from a National Hypertension Control Program, 2018–2024*, manuscript under review

Kano State Health Insurance Enrollment for NHCI Patients — *Nigeria — Kano State, 44 LGAs.* Liaison officers used DHIS2 to identify and enroll NHCI patients in KSCHMA; 1,631 of 14,433 (11.3%) enrolled in 6 months, 98% actively using benefits; insured patients: +5% BP control, −5% loss-to-follow-up. Model is replicable across Nigerian states.

Source: *NHCI/RTSL Case Study, 2025–2026. Available from Resolve to Save Lives.*

RTSL–CHAI Multi-Month Dispensing (MMD) Pilot — *Nigeria — Ogun State.* 6-month MMD reduced patient travel, out-of-pocket logistics costs, and facility workload; improved adherence through fewer supply interruptions. Dispensing interval is itself a medicine access lever.

Source: *RTSL–CHAI Sub-Grant Final Report, 2022–2025. Available from Resolve to Save Lives.*

5. Interventions to Strengthen Local Manufacturing Capacity and Improve Quality

QC/GMP Preparedness Training for CVD Medicine Manufacturers — *Nigeria — 12 manufacturers, Lagos (virtual + onsite).* RTSL/QUAMED/PSNF delivered 6-day blended QC-GMP training covering quality management systems, data integrity, OOS management, and equipment qualification. Builds the capacity base required for WHO prequalification and access to donor-funded markets.

Source: *GMP Training Report, RTSL/QUAMED/PSNF, July 2025. Available from Resolve to Save Lives.*

Manufacturer Registration Gap: Quality-Assured SPCs Not Reaching LMICs — *Global — 19 manufacturers, 18 LMICs.* <50% of SRA-registered antihypertensive formulations were also registered in any of 18 LMICs surveyed (e.g., Aurobindo: 16/28 SPCs SRA-registered, only 7 in any LMIC). Streamlined NMRA approval pathways and mutual recognition of SRA registrations are key solutions.

Source: RTSL Under Pressure Report, 2022. resolvetosavelives.org/under-pressure