

CASE STUDY

Linking public and private health care providers to improve noncommunicable disease services in Pokhara Metropolitan City, Nepal



Basic information

WHO Region SEARO

City or Country Pokhara Metropolitan City, Nepal

Timeline 2022 - ongoing

Type of intervention Governance; health care

Primary level of City

implementation

Primary sectors involved Health; pharmacy; data; municipal governance

Primary health outcomes

or challenges

Hypertension; diabetes; service access; continuity of

care

Case description

Pokhara Metropolitan City is experiencing rapid urban growth, with expanding informal settlements and increasing pressures on primary health services. Residents frequently rely on private pharmacies as their first point of contact for care, particularly in lowincome areas where public services are overstretched. Assessments undertaken by the municipal health division and HERD International showed that many pharmacies provided initial screening and advice for hypertension and diabetes, yet operated without standard protocols, consistent referral pathways, or formal connections to public facilities. These gaps limited service quality, follow-up, and continuity of care for major noncommunicable diseases.

Beginning in 2022, Pokhara Metropolitan City and HERD International initiated a cocreation process to strengthen NCD service delivery by improving linkages among private pharmacies and public health facilities. Stakeholders from municipal authorities, public hospitals, health information systems, and private pharmacies jointly identified local challenges, including limited client awareness of the risks associated with hypertension and diabetes, inconsistent adherence to treatment, misconceptions about the need for sustained medication, and the absence of standardized, system-linked screening and referral practices within pharmacies, despite their central role as a first point of contact. The process highlighted the need for shared protocols and clearer roles across providers to improve screening, referral, and long-term management.

The intervention introduced a series of implementation strategies designed to link pharmacies formally with the public health system. The municipal health division established a technical committee to guide the intervention and endorse a customized



Supportive supervision team orienting pharmacy personnel about appropriate recording of patient information. Pokhara Metropolitan City: 2024. © HERD International / Sujan Paudel.

adaptation of Nepal's Package of Essential NCD Interventions (PEN protocols) for use in pharmacies. This included materials and guidance for screening, counseling, referral, and record-keeping, aligned with national standards. Capacity-building activities provided pharmacy personnel with training on screening adults aged 40 and older, use of blood pressure and glucose measurement tools, CVD risk charts, and dissemination of health information materials.

A strengthened information system supported the intervention. Pharmacies were provided with standardized registers based on the national Health Management Information System (HMIS), and their case data were incorporated into the HMIS through a dedicated login, accessible by the metropolitan health division. Monthly data collection allowed for monitoring of screening, referrals, and service uptake. Regular coaching, mentoring, and supportive supervision from HERD International and

municipal staff helped reinforce adherence to protocols and identify areas for improvement.

To improve coordination of care, the intervention also established a structured referral mechanism linking pharmacies to Shisuwa Hospital and to nearby public primary health care facilities. A standardized referral slip system was introduced to facilitate two-way communication, ensure completion of referrals, and support follow-up management. Public facilities received refresher training on the PEN package and guidance on integrating referrals from pharmacies into routine practice.

The intervention's early implementation has strengthened coordination between municipal authorities, public facilities, and private pharmacies. Pharmacies have adopted more standardized screening, counseling, and referral practices, and public facilities have developed clearer systems for receiving and managing referred clients. The technical committee's regular review processes and periodic meetings with pharmacy and facility personnel have created a platform for continuous improvement. Data from the strengthened HMIS linkage are beginning to provide a more coherent picture of NCD service needs and care practices across the catchment area.

Continued work will focus on assessing the intervention's effectiveness, refining the referral mechanism, and strengthening long-term sustainability. Opportunities remain to broaden coverage to additional pharmacies, enhance municipal capacity for data use, and integrate lessons learned into the city's wider NCD management strategy.

Strategic Highlight

Efforts in Pokhara Metropolitan City illustrate how expanding the scope, quality, and integration of local health data can create new pathways for addressing complex urban health challenges. Prior to this initiative, information about hypertension and diabetes services was dispersed across private and public providers, with limited visibility into how clients moved among them. Pharmacies – although a frequent first point of contact – did not consistently record screening outcomes, referrals, or follow-up. Public facilities similarly lacked systematic information on individuals who had been advised to seek care after initial screening in the private sector. These information gaps limited decision-makers' ability to understand patterns of service use, identify inequities, and plan more coordinated responses.

The intervention addressed this challenge by aligning data systems across providers. Pharmacy registers were adapted from national HMIS tools, and a process was established to integrate pharmacy-generated data directly into the metropolitan reporting system. This created a more complete account of screening, referrals, and NCD-related service utilization within the catchment area. Regular review meetings enabled municipal authorities and health workers to assess trends, discuss bottlenecks,

and consider adjustments to training, supervision, or referral arrangements. Over time, the emerging dataset has provided a basis for identifying populations at higher risk, understanding barriers to follow-up, and refining the distribution of responsibilities between pharmacies and public facilities.

This experience reflects a broader principle of strategic urban health practice: decision-makers need integrated, locally relevant data that capture interactions among diverse service providers. Urban health care systems often rely on a mixture of public, private, and informal actors; without comprehensive, interoperable data, opportunities for targeted action remain obscured. By investing in data linkage, Pokhara Metropolitan City has strengthened its ability to take a systems-oriented approach, using evidence to guide improvements in continuity of care, quality assurance, and service planning.

Other cities facing fragmented service delivery and rising NCD burdens can draw from Pokhara's example. Establishing shared data standards, building capacity for routine reporting across provider types, and creating structures for regular review can help bring clarity to complex service landscapes. When decision-makers can see how clients navigate the system, where service gaps emerge, and how interventions perform across contexts, they are better positioned to design coordinated, equitable responses.

Further Information

- Blog: Introducing Pokhara Metropolitan City: The urban poor and the local health system
- Health Profile Pokhara
- <u>Building linkages between private pharmacies and public facilities to improve diabetes and hypertension care in urban areas of Nepal: a protocol for implementation research</u>
- A quantitative assessment of current practice in diabetes and hypertension services in pharmacies in urban Nepal
- Strengthening public-private partnerships to address NCDs: a case from Pokhara Metropolitan City of Nepal
- Implementation research: What works and what does not
- Nepal CHORUS co-designing [video]