CARDIO approach – quality of Care

Highlights from recommended interventions
Quality of care

Goal
Lower the main cardiovascular risk factors at the population level by improving quality of care. This is achieved by standardizing cardiovascular (CV) risk factor management aligned with existing evidence, and by optimizing primary healthcare performance with task shifting and sharing.

Contents
Key interventions to improve quality of care (slides 3-11)
Simplify guidelines for hypertension in primary care

Translating lengthy hypertension guidelines into practical decision support for primary healthcare in São Paulo

- Guidelines: 103 pages
- Decision support: 81 pages
- Training: 11 pages
- Care coordination

7th Brazilian Cardiology Society Guideline

City of São Paulo Recommendation for Hypertension and Diabetes Care in Primary Care

Review of international guidelines (AHA/ACC)

Simplified Protocol: Taking Care of your Heart
Standardize hypertension management at primary healthcare level

Simplified and standardized algorithms and clinical decision support systems are essential to improve quality of care – followed by training of health workers on their use (supplemented by online continuing medical education when possible) and adherence monitoring.

Learn more about this:

A Practical Guide informed by the Hypertension Canada Guidelines for the Prevention, Diagnosis, Risk Assessment, and Treatment of Hypertension (PDF)
Ensure quality of blood pressure measurement

### Six steps for accurate blood pressure measurement

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>Step 1</td>
<td>Prepare the patient: relax &gt;5 minutes, sit in chair, no caffeine, empty bladder, no talk</td>
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<tr>
<td>Step 2</td>
<td>Use proper technique to measure blood pressure (see illustration)</td>
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<td>Step 3</td>
<td>Take the proper measurements needed: record blood pressure in both arms on first visit, repeat measurements 1-2 minutes apart</td>
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<td>Step 4</td>
<td>Properly document accurate blood pressure readings: note the time of the most recent blood pressure medication taken</td>
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<td>Step 5</td>
<td>Use the average of multiple readings</td>
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<td>Step 6</td>
<td>Provide blood pressure readings to patient</td>
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### How to measure blood pressure

1. Don’t have a conversation – talking or active listening adds 10 mm Hg
2. Empty bladder first – full bladder adds 10 mm Hg
3. Support back/feet – unsupported back and feet adds 6 mm Hg
4. Keep legs uncrossed – crossed legs add 2-8 mm Hg
5. Support arm at heart level – unsupported arm adds 10 mm Hg
6. Put cuff on bare arm – cuff over clothing adds 5-50 mm Hg
7. Use correct cuff size – cuff too small adds 2-10 mm Hg

Source: American Heart Association, hypertension management flyer for Better Hearts Better Cities
Brazil, Mongolia and Senegal introduced a cardiovascular risk score into the evaluation of hypertensive patients (based on international guidelines and contextualised to each city).
Strengthen capacity of nurses and community health workers

A range of activities can be used to train and empower nurses and community health workers, i.e., educational materials, tailored trainings, role play and tools that can be applied in daily interactions with communities and patients.

The video shows an activity from the 2019 Day of the Community Health Worker that brought together for the first time the district’s community health workers to exchange, learn, celebrate and test their knowledge (Portuguese with English subtitles):

National Day of Community Health Agents
Make task shifting possible amongst levels of health providers

Provide clear guidance on the role and responsibility of each category of personnel, protocols for screening and further assessment, criteria for diagnosis, and recommendations for treatment and management.

Patient 

CHO
Blood pressure screening

Patient referred to nurse (if SBP ≥ 120, DPB ≥ 80)

Follow-up referral

Patient

Community checkpoint
Blood pressure screening, management, monitoring and follow-up

Nurse
Screening, diagnostic evaluation, management, monitoring and follow-up

Referral

Physician
Diagnostic evaluation, management, monitoring and follow-up

CHO: Community health officers; SBP: Systolic blood pressure; DPB: Diastolic blood pressure
Optimize primary healthcare performance with task-shifting and task-sharing

Optimize performance of primary health centers through task-shifting and task-sharing in managing CV risk factors – this empowers nurses and community health workers to play a bigger role.

Read more about this work in Dakar:

www.intrahealth.org
Systematically measure health outcomes

Cascade data are key to:

- Regularly **monitor progress** on health outcomes
- Understand **system performance**
- Identify areas requiring **priority focus** (e.g., early detection versus long-term retention)
- Redesign CARDIO interventions accordingly

**Estimated prevalence rate 83.3%**

- 17% of respondents aged 15-64 in a national STEPS survey reported their knowledge as “never heard the term before” – indicating no health knowledge with regards to blood pressure
- 53% of those diagnosed are treated
- 47% of diagnosed people are not on treatment either due to lack of adherence or due to lack of knowledge about the condition

**Our field assessment**

1. **Lack of awareness** on triggering factors and consequences of uncontrolled hypertension
2. **Low knowledge base** among healthcare providers regarding diagnosis and treatment guidelines
3. **Lack of affordability** for those with co-morbidities or not with regular employment (most nomadic population)
Map the patient journey

Learn more about the patient journey in Brazil that was created through a design thinking process:

Patient and care journey map (PDF)