

## PD95 Enhancing Clinical Practice Guideline Development In Brazil: A Tutoring Program For Health Technology Assessment Centers

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**Introduction:** This study outlines a tutoring program supported by the Brazilian Ministry of Health (MoH), which aimed to develop clinical practice guidelines (CPGs) through Health Technology Assessment Centers (Nuclei of Health Technology Assessment or NATS) for the Brazilian Unified Health System (SUS). It emphasizes the integration of CPGs into health technology assessment development processes, focusing on methodological rigor, reproducibility, and reliability.

**Methods:** The program combined face-to-face and virtual meetings and engaged MoH representatives, methodologists, and researchers. It focused on the MoH Methodological Guideline for Developing Clinical Guidelines, which follows the Guidelines International Network and United States Institute of Medicine recommendations. This approach facilitated planning and creation of CPGs across diverse NATS.

**Results:** Between 2021 and 2023, 60 professionals from 10 NATS participated, aiding in developing or updating 16 CPGs. These CPGs addressed 93 research questions. The CPG development phase averaged 317 days (interquartile range [IQR] 252 to 402), while the MoH assessment and public consultation took about 63 days (IQR 45 to 94). Additionally, nine *Protocolos Clínicos e Diretrizes Terapêuticas* (official guidelines from the Brazilian MoH) required technology assessments for SUS reimbursement, leading to 14 HTA reports. Eight technologies were favorably reviewed and recommended in the CPGs.

**Conclusions:** This tutoring program significantly improved the development of CPGs in Brazil, enhancing their methodological rigor and standardization. It also effectively integrated HTA into the CPG development process, addressing clinical needs and enriching public health decision-making.

## PD96 Are Continuous Noninvasive Blood Pressure Monitoring Devices Accurate Enough To Replace Invasive Monitoring? A Rapid Review

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**Introduction:** The intra-arterial catheter (invasive method) is the clinical and reference standard for continuous blood pressure (BP) monitoring. Continuous noninvasive blood pressure (CNBP) monitoring methods, for example applanation tonometry, volume clamp, and cuffless BP monitoring devices are gaining popularity. This review clarified the evidence on the accuracy of CNBP monitoring devices, which could potentially replace invasive monitoring in clinical care.

**Methods:** A systematic search was carried out to look for systematic reviews with the following elements:

- Population: patients needing continuous BP monitoring;
- Intervention: CNBP monitoring devices;
- Comparator: intra-arterial BP monitoring; and
- Outcomes: accuracy of BP monitoring.

The databases searched included PubMed (MEDLINE), Epistemonikos, and the Cochrane Database of Systematic Reviews. Two reviewers independently reviewed the search results and shortlisted relevant articles for retrieval of full texts. Included reviews were critically appraised with the AMSTAR 2 instrument and the findings were summarized in a narrative synthesis.

**Results:** Three systematic reviews with meta-analyses of fairly good quality were included. The included primary studies were conducted in perioperative or critical care settings. Subgroup analyses by CNBP monitoring method were included in each meta-analysis. The findings from the systematic reviews were consistent. On average, CNBP devices consistently measured lower systolic BPs than the invasive method (mean difference <0) and measured higher diastolic BPs and mean arterial pressures than the invasive method (mean difference >0), with wide ranging 95 percent limits of agreement. It was evident from subgroup analyses that the measurements obtained from different CNBP methods varied significantly.

**Conclusions:** This rapid review found the accuracy of CNBP monitoring devices to be suboptimal in comparison with invasive monitoring. CNBP devices should not be routinely used but may be considered when there is difficult arterial access, or in patients who do not require arterial puncture for other purposes.