

# Assessment of cancer registries (CR) in low- and middle-income countries (LMCs)

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## Abstract

**Background:** CRs are crucial for cancer control, yet few global standards exist. This study identifies characteristics of quality CRs in LMCs and globally. **Methods:** A Medline search was conducted in PubMed to identify peer-reviewed articles describing: 1) CR development and functionality 2) types of CRs and 3) implementation, development and utility of CRs in LMCs. We examined articles describing CRs and assessed benchmarking data that could be used to define quality characteristics. Full-text, English-language articles were reviewed. References cited were searched for additional articles. We categorized characteristics into 4 domains: comparability, completeness, validity and timeliness. **Results:** The literature search yielded 16 key characteristics within 4 domains that may define high quality CRs. In the “comparability” domain, the key characteristic was use of standard definitions. CRs in the US, Europe and China generally adhere to the International Classification of Diseases for Oncology and histological verification of disease; in 2007 only 40% of African registries did so. In the “completeness” domain the key characteristic was population coverage. African CRs monitor 8% of the population, the Costa Rican registry covers 90%, US and Madras cancer registries reach 96%. In the “validity” domain the key criterion was pathologic diagnosis confirmation. Most LMC CRs are not pathology-based. CRs in wealthier settings like Hong Kong report histologic

confirmation in >85% of cases. In the “timeliness” domain standards for timely data reporting are largely undocumented. **Conclusions:** No consensus exists on characteristics of quality CRs in a global context. The current study provides an initial set of metrics. A Delphi panel of international experts is planned to further address this. Based on this literature review, CRs in LMCs have limited reporting, validation and regional population coverage.

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