# Availability of essential diagnostics in the Philippines

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Diagnostics are central to achieving universal health coverage and are fundamental in any healthcare system, with approximately 70% of health decisions being leveraged by laboratory results.<sup>1</sup> However, the availability of essential diagnostics remains a challenge in many lowand middle-income countries (LMICs).<sup>2</sup> In the Philippines, a lower-middle-income country in Southeast Asia (SEA), this inequity has been highlighted by COVID-19, as limited testing capacity continues to hamper a timely and effective pandemic response.

Under the Primary Care Benefit Package of the national insurance program, Filipinos are entitled to the following: complete blood count, urinalysis, fecalysis, sputum microscopy, fasting blood sugar, lipid profile, and chest x-ray.3 These tests, along with primary preventive services such as regular blood pressure assessments, are provided with the objective of diagnosing and treating leading causes of morbidity and mortality, including anaemia, dengue haemorrhagic fever, pneumonia, urinary tract infection, infectious diarrhoea, pulmonary tuberculosis, diabetes mellitus, coronary heart disease, and pneumonia.<sup>4</sup> Despite this coverage, primary care facilities, especially outside urban cities, are ill-equipped to provide diagnostic services because of a logistically-hampered distribution of diagnostic equipment and supplies around the archipelago, the lack of medical and radiation technologists in far-flung areas, and inadequate infrastructure to properly house, power, and maintain diagnostic equipment.

Diagnostic imaging is key to prompt diagnosis, treatment, and long-term surveillance of malignant neoplasms and various infectious diseases, which are rising causes of morbidity in the Philippines. Currently, there is a critical need to increase imaging capacity and address the uneven distribution of diagnostic imaging equipment. Patients residing in Luzon, where threequarters of the country's tertiary care facilities are located,<sup>5</sup> have better access (41.6 units per I million population) to x-ray machines compared to those residing in Visayas (28.7 units per I million population) and Mindanao (26.0 units per I million population).<sup>6</sup> The inaccessibility of healthcare facilities effectively precludes access to essential diagnostics, especially for geographically isolated areas in the Philippine archipelago.

Improving national health financing is key to increasing diagnostic availability and accessibility. The prohibitive cost of diagnostics is a significant barrier to access, and consequently, to the diagnosis and treatment of the country's priority diseases. This financial handicap is compounded by limited and variable coverage from the national health insurance program, resulting in high out-of-pocket expenditure. The current health budget only accounts for 1.2% of the country's GDP, far less than the WHO-recommended 5%.<sup>7</sup>

Inadequate procurement and operational budgets for diagnostics resulting from weak or absent governance mechanisms hint at the non-recognition of medical devices as essential. Moreover, financial incentives that encourage overdiagnosis and the lack of a national price monitoring mechanism continue to hinder the fair pricing of diagnostic tests and procedures.<sup>8</sup>

To address this, Administrative Order 2021-0038 entitled "Framework for the Philippines Essential Medical Devices List and Price Reference Index"9 was drafted to provide procurement guidance, price transparency, and price consolidation for essential medical devices in government health facilities. This is a substantial step forward as the first national framework on essential diagnostics in the Philippines. However, the paucity of relevant data regarding diagnostics in the Philippines will continue to deter the appropriation of funding and the creation of inclusive health policies catering to disadvantaged regions of the country. An accurate evaluation of diagnostic capacity will inform financing, infrastructure development, and policymaking to ensure the availability and affordability of essential diagnostics.<sup>2</sup>

SEA is composed of several LMICs with similar limitations in diagnostic capacity. With a population of 655 million comprising almost 9% of the world's population,<sup>10</sup> the collective regional inadequacy in diagnostics is one of the most substantial contributors to global morbidity and mortality. International collaboration must be encouraged and incentivized to strengthen regional diagnostic capacity. Creation of global networks for health research and capacity-building would spur innovations to address unique and unmet needs in the Philippines, with implications that may benefit other nations in SEA and other LMICs. The Lancet Regional Health - Western Pacific 2022;19: 100375 Published online xxx https://doi.org/10.1016/j. lanwpc.2021.100375

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## Declaration of interests

JPAC currently serves as the vice president of the Philippine Radiation Oncology Society. All other authors declare no competing interests.

### Author contributions

Project administration - NRIA; supervision - NRIA, JPAC; conceptualization - NRIA, IRIA, MABE, ECD; writing (original draft), writing (review & editing) -NRIA, IRIA, MABE, ECD, JPAC.

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