



The Growing Problem of Radiologist Shortage: Thailand's Perspective

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Thailand's population is 66 million, with an estimated life expectancy of 74.9 years in men and 81.1 years in women. The population growth rate in 2023 was approximately 0.2%. Over the past decade, there has been a notable improvement in the doctor-to-population ratio. In 2012, the ratio was approximately one doctor for every 2533 people, which improved to one doctor for every 1680 people in 2021 [1].

Among the medical specialties, radiology constitutes approximately 6% of registered professionals with the Thai Medical Council. This places radiology after orthopedics (7%), obstetrics and gynecology (8%), pediatrics (11%), surgery (14%), internal medicine (17%), and family medicine (17%). Among the radiology subspecialties, diagnostic radiologists were the most common at 87%, followed by radiation oncologists at 9%, and nuclear medicine physicians at 4% [2].

We did not have the current country data on the number of examinations per year. However, the estimated growth in the number of diagnostic radiological examinations stored in picture archiving and communication systems

before the COVID-19 crisis was approximately 8%–12% per year. Determining the optimal number of radiologists is challenging, and using the ratio of radiologist to the population is not easy and proper. Currently, the number of radiologists is mostly adjusted based on service principles, often factoring in examination waiting times [3]. With the investigation growth rate at 8%–12% yearly, the Ministry of Public Health of Thailand (MOPH) has expanded hospital capacities, awarded more scholarships for radiology studies, and increased radiologist positions, giving scholarships to interns to continue studying in the field of radiology in the past decade. Diagnostic radiologists are popular among new graduates. The Royal College of Radiologists of Thailand and the Thai Medical Council have increased their capacity for training. Despite these efforts, the training capacity of diagnostic radiologists in Thailand remains limited to 135 positions per year, falling short of demand. Other radiology fields, such as radiation oncology and nuclear medicine, also struggle because of their lack of popularity and limited job opportunities.

Nowadays, the demand for radiologists is rising similarly worldwide. The collaboration between the Royal College of Radiologists of Thailand, the Thai Medical Council, and MOPH aims to address this challenge through various measures:

- Prioritizing solutions to public health problems by establishing guidelines and processes through service plans.
- Developing a new curriculum for training that aligns with the needs of each service and is flexible.
- Balancing funding and training positions.
- Identifying and adopting new technologies to manage the workload efficiently.
- Encouraging collaboration within and beyond the

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radiology field, including partnerships between government and private sectors.

Addressing the shortage of radiologists in Thailand requires understanding the constraints and risk factors, such as economic status, global trends, crises, technological integration, cultural factors, and geographic considerations. Prioritizing safety, a fundamental principle of radiology can guide efforts to overcome these limitations and bridge gaps in the availability of radiologists.

Conflicts of Interest

The author has no potential conflicts of interest to disclose.

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