

The Bright Path Forward: Enhancing Radiology Access for Underserved Communities in Jamaica

Author: Danielle Ebhohimen, MBBS
University of the West Indies



Bridging Gaps
Building Capacity
Improving Outcomes

1. BACKGROUND / PURPOSE

- Access to radiology is essential for diagnosis and treatment.
- Jamaica houses a population of over 2.8 million people and experiences a substantial geographic inequity in imaging distribution
- Urban areas are concentrated with public and private radiology facilities, leaving 42% of rural residents with limited access.



AIM:

To present the first nationwide data-driven assessment of radiology infrastructure, workforce, and training capacity across Jamaica to inform equitable imaging, effective outreach, and strategic planning.

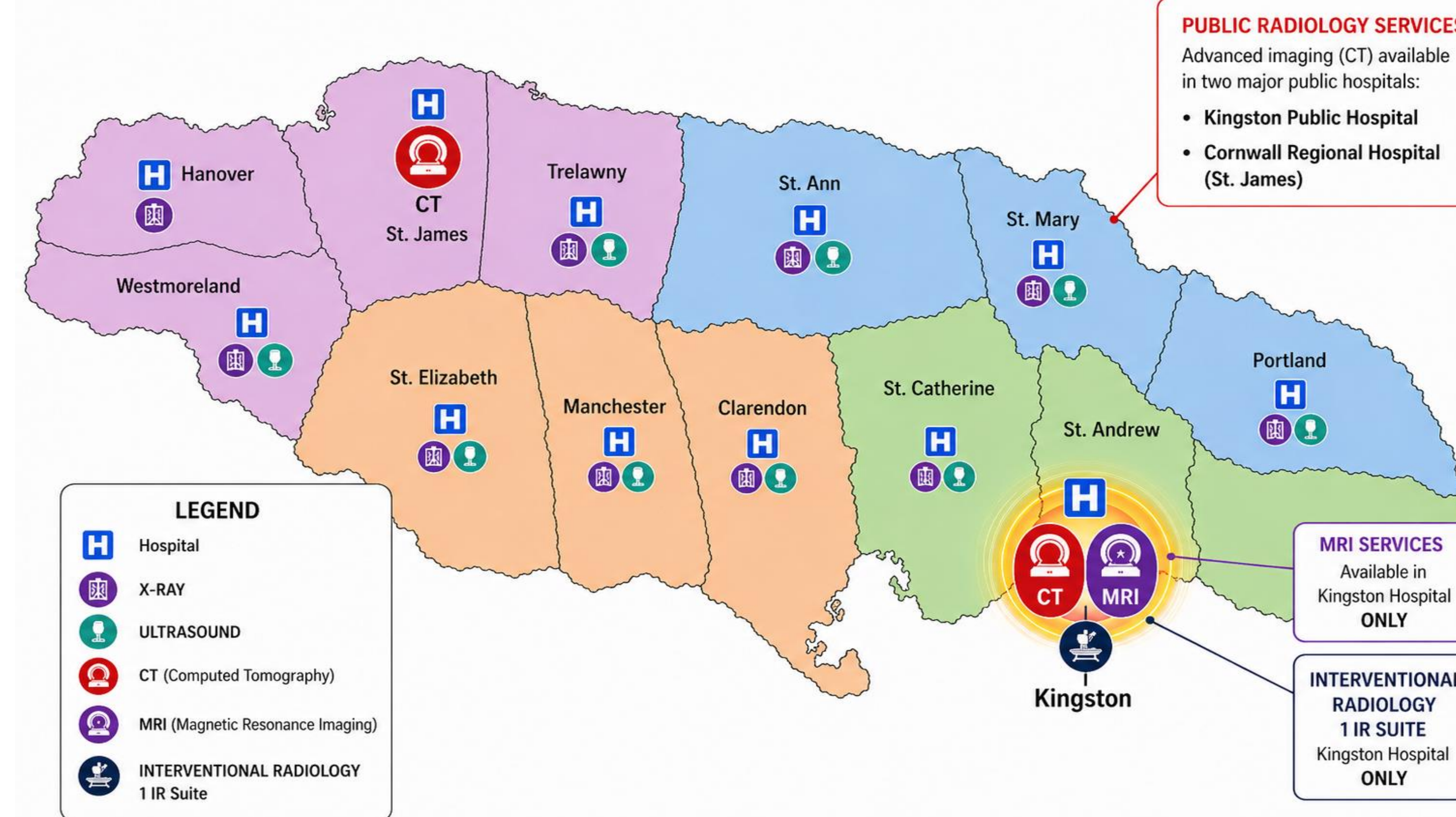
2. METHODS



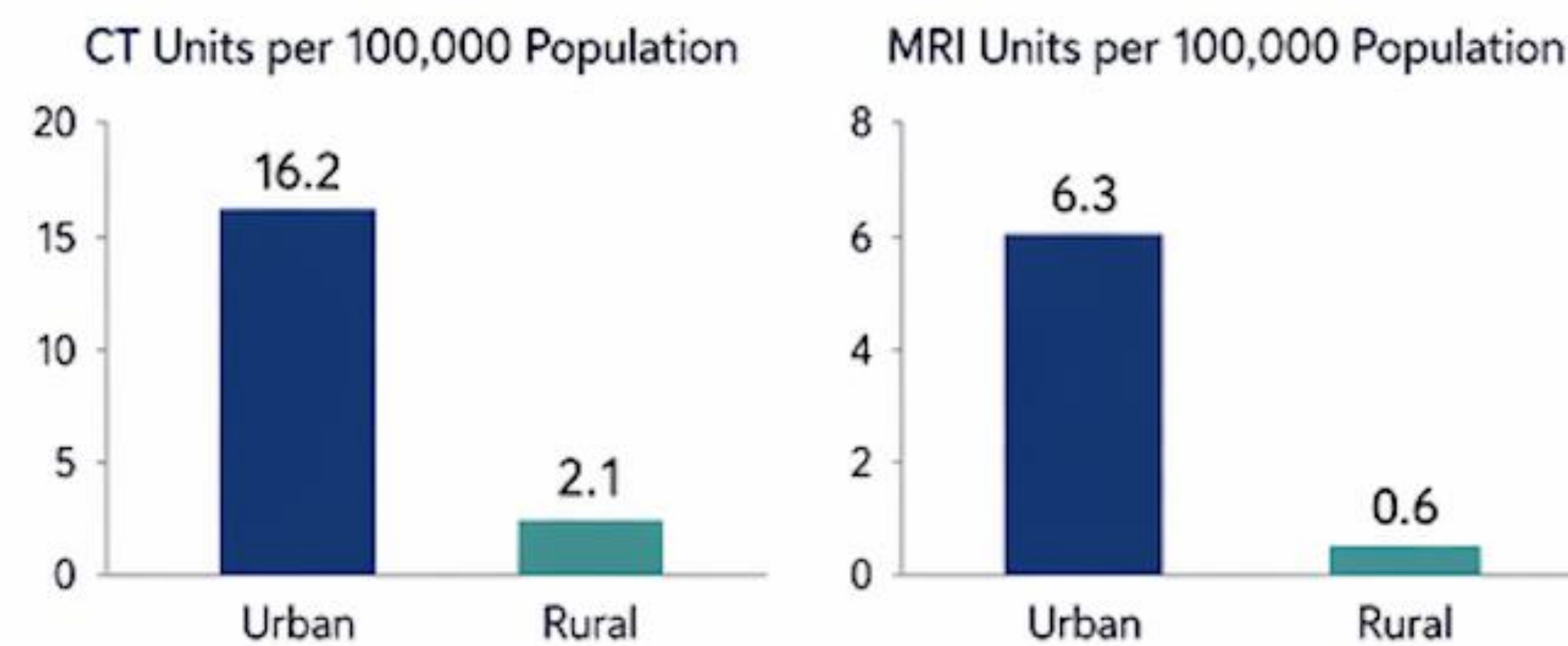
- A Multisource analysis using the WHO and World Bank databases
- Key metrics: distribution of hospitals & clinics, availability of radiology equipment (CT, MRI), and imaging workforce
- Population-weighted geographic analysis applied to identify urban and rural disparities in radiology access.

3. RESULTS

Geographic Distribution of Radiology Services across Jamaica



Per Capita Access to Advanced Imaging



Urban areas demonstrate substantially greater per capita access to CT and MRI compared to rural populations.

National physician density is **~5.5** physicians per 10,000 population.

ACCESS DISPARITY (Urban vs Rural)

CT Units **7.7x** greater in urban areas
MRI Units **10.5x** greater in urban areas

4. DISCUSSION / KEY INSIGHTS



- Significant disparities exist between the urban and rural populations.
- The concentration of services in urban centers affects the timeliness of diagnosis and intervention.
- Workforce data gaps and limited training capacity, with only a single residency program in the country, constrain growth and distribution.



5. CONCLUSION

- Expanding access will require decentralization of imaging services, particularly CT and MRI, to underserved regions
- Workforce development, including increasing radiology training positions and retention strategies are critical for growth
- Public and private partnerships and mobile imaging initiatives can improve rural access.