



Mapping a moving city: participatory healthcare facility mapping in rapidly urbanizing Grand Conakry, Guinea

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As cities across sub-Saharan Africa grow and transform at speed, health systems struggle to keep pace. In Grand Conakry, rapid urban expansion has widened a governance gap: the city now spans 13 administrative communes, up from 5, while the health sector remains divided into 7 districts, leaving health area boundaries imprecise and equitable service planning difficult. Mapping a city in motion requires more than static data. Through the Discontinue Cities research project, we developed validated maps of healthcare provision via participatory and iterative process co-designed with district health management teams across three stages. (1) Facility census: cross-referencing Ministry of Health and district sources yielded an initial list of 460 facilities, expanded to 796 public and private facilities through Kobo Collect field surveys (July 2025). (2) Map production: facility locations and health area boundaries were mapped using ArcGIS Pro. (3) Participatory validation: a validation workshop informed joint field visits with GPS data collection for contested boundaries, remote sessions for typology corrections, and direct map adjustments, followed by final validation by district authorities. Eight validated maps were produced, covering 39 health areas across 7 districts. Private clinics constitute the predominant category, accounting for 596 of 796 facilities, with spatial disparities between center and periphery, a reflection of uneven urban growth and its consequences for health equity. As African cities continue to expand and transform, health planning cannot afford to stand still. This participatory and iterative approach offers a reproducible framework for cities navigating the widening gap between urban growth and health system capacity.

