Title: Application Virtualization for Healthcare in Nigeria.

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Abstract: Information technology has improved operations management globally. The health sector has benefited from this revolution through the introduction of eHealth solutions. The cost-effective utilization of Information Technology and flexibility in adapting and adopting organizational changes has posed some challenges to health institutions in developing countries. In the case of Nigeria, the implementation of the National Health Policy entails the delivery of a full-packaged health care system; this package includes health education, maternal, newborn and child healthcare, nutrition and immunization. All these, require record keeping and data storage. The management of massive data storage and its availability on-demand has been sources of concern to health institutions in the country. This has brought about a slow rate in hospital-to-hospital collaboration, insecure information exchange between and across institutions and lack of proper accountability in the health sector amongst other challenges.

In this paper we propose a Cloud computing infrastructure which will adopt application virtualization to address the challenges in health care delivery in the country. This is an emerging technology that will provide eHealth solutions as services to tenants; a process known as Software-as-a-Service (SaaS). The infrastructure should deliver a single application through the browser to thousands of clients or stakeholders using scalable multitenant architecture. This will help to minimize cost, manage healthcare resources effectively, and help with the realization of the Millennium Development Goals (MDGs) on healthcare.