

# Point-of-Care Healthcare Technologies: A Paradigm Shift in Affordable Quality Global Healthcare

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Twentieth century has witnessed a technology revolution in medicine and health through electronics, instrumentation, computing, and information and communication technologies. This revolution is continued in 21<sup>st</sup> century with new smart trans-disciplinary technologies and innovations directly impacting medical practice and healthcare delivery. As the overall life expectancy across the globe is increasing for good, the global community is now facing new challenges maintaining quality of life and healthcare at an affordable cost. The exponentially rising cost of healthcare is a priority challenge in developed nations. On the other hand, providing minimal quality healthcare to all, specifically large and sparsely distributed rural communities, is the critical challenge to developing economies. The point-of-care (POC) technologies have a potential to provide global healthcare at affordable costs through personalized, preventive and précised medicine. Though the challenges of providing high-quality healthcare in developing countries are different than those in developed countries, there is a common goal to provide access to health monitoring and assessment technologies to people with limited or no healthcare facilities. Furthermore, the POC technologies are re-defining relationships between patient and healthcare providers with health monitoring information for early diagnosis and therapeutic intervention protocols. This talk will present an overview of POC sensor, computing and information technologies addressing the global challenge of providing quality healthcare at affordable costs towards preventive and evidence-based medicine.