

Digital Health – The Solution to Scalable Healthcare Quality

By Don Ross

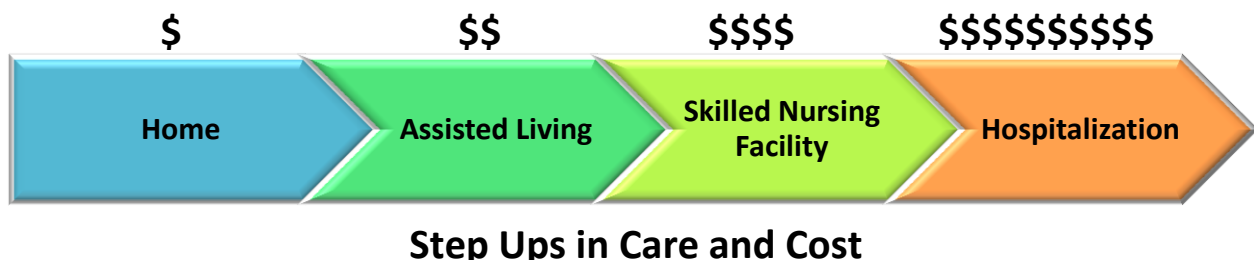
Improve health while reducing costs—these are the overarching, sometimes conflicting, US healthcare goals. To realize these goals, modern information technology must leverage scarce clinical resources while engaging and empowering patients. Digital technology is the key to achieving personalized, scalable, cost-effective healthcare. Connectedness through Digital media, mobile devices, telemedicine, and eHealth services, is the foundation upon which to build new healthcare solutions. These solutions lie at the core of Digital Health.

Life Science Angels recognizes and supports Digital Health innovations as a critical component in the transformation of the US healthcare system.

Government-driven reforms are relying on digital tools to help remake the payment environment. Accountable Care Organizations (ACOs), bundled payments and other reimbursement models are starting to address access and affordability. In a tectonic shift, the US healthcare system is moving away from volume-based reimbursements and toward value-based care and population health management. Value-based care can be achieved only with information gained from data analytics and other digital technologies.

Population health management maximizes the health of a patient population while minimizing the need for expensive interventions. This not only controls costs, but also redefines healthcare to include proactive preventive care as well as sick care. To effectively support patients in taking control of their own health, providers must know what’s going on with their patients both during and between encounters with the healthcare system. Digital technology is the key to making population health management feasible, scalable and sustainable.

Digital Health companies are transforming the delivery of care and reducing healthcare delivery “hassles.” Care is moving away from hospitals and into more accessible and less costly settings, such as your local pharmacy, workplace, and even at home. Thanks to new digital monitoring and communications, seniors are remaining in their homes longer and “aging in place.” This can slow the progression to higher levels of care and cost (see Figure below). At each step, patients will benefit from the ability of medical professionals to share experiences over time and across populations. Only through Digital Health supported by big data analytics can we reduce our reliance on the costliest and most acute health care resources.



Employers are deploying digital solutions to help keep their employees healthier and thus reduce costs. As healthcare costs continue to pressure profits, many employers have expanded wellness budgets and actively promote preventive measures. Still, executives increasingly are demanding hard data and an ROI analysis to demonstrate the effectiveness and impact on the company's bottom line. Beyond direct cost savings, wellness perks also may increase productivity, reduce absenteeism, and attract new employees in tight labor markets.

Pharmaceutical companies are delving into digital technologies, with several moving into comprehensive disease management. They are establishing direct connections to consumers through mHealth applications and are using social media to assist clinical trial recruitment. Medical device companies are beginning to embed digital monitoring in their products. Diagnostics are moving to point-of-care and data analytics are providing new insights and clinical decision support.

Big healthcare challenges respond to data-driven solutions, and the tech giants are responding with their core strengths—computing power, artificial intelligence, cloud computing, and more. Meanwhile, they are partnering with major healthcare players who bring scientific expertise and knowledge of the sometimes arcane regulatory process and complex commercial environment. Better outcomes and cost reductions are being driven by real-time data analysis that transforms raw data into reliable anticipatory actions and predictions.

Digital Health solutions are destined to become a seamless part of our everyday lives. As we live longer and once-fatal diseases become chronic illnesses, digital tools will help monitor and manage the health of our aging population. The promise for providers and patients alike is effective and affordable personalized healthcare that incorporates genetics, patient behaviors, and environmental factors with traditional healthcare data.

Don Ross is Board Director and Managing Partner Digital Health at Life Sciences Angels. He also is a member of Sierra Angels and Sand Hill Angels, and was co-founder a group of private investors dedicated to investing in digital health. Mr. Ross serves on several company boards and is a frequent speaker on entrepreneurship and startup investing. He pioneered software development for psychological testing, anxiety intervention, health risk appraisal, health behavior change, and blood pressure monitoring. Mr. Ross is a published author and has two textbooks currently in 6th editions.