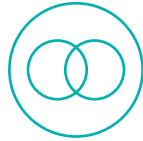


Healthcare for the Emerging Middle Class

Type 2 diabetes care design in India

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continuuminnovation.com

 Jana Care



Shifting markets.

Healthcare in the United States is changing more rapidly than ever before. From rising costs, evolving policy and reimbursement environments, changes in patient access and infrastructure, and a greater focus on clinical outcomes, it's clear that this continual market disruption is leading to mounting pressure on incumbents to maintain their ability to drive revenues and, in turn, attractive returns for their shareholders.ⁱ

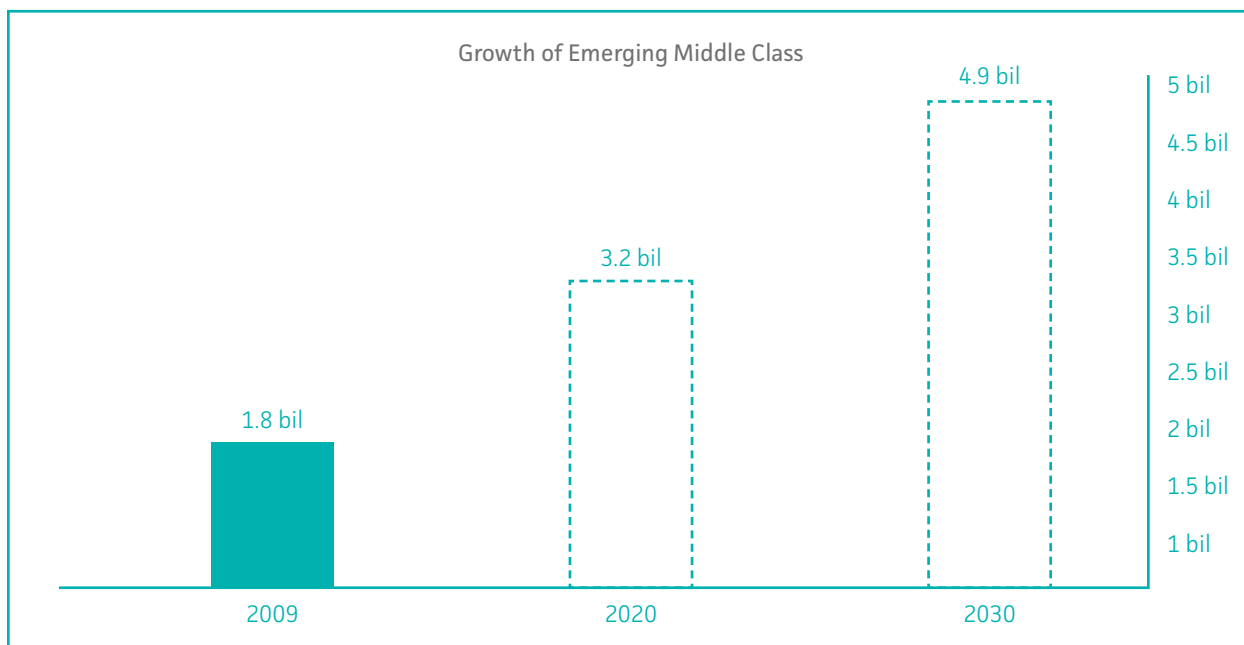
In emerging markets, however, members of the rapidly growing middle class have significant unmet healthcare needs, which represent a compelling opportunity for innovative companies to fuel future growth.

Often, established companies attempt to target these opportunities by repurposing existing solutions for a new audience, but effective design requires a deep contextual understanding—and a different approach. When looking for healthcare opportunities in emerging markets, project teams on the ground are less susceptible to preconceived notions and are more in tune with local needs than organizations that seek to repurpose existing solutions created for established markets. Those viewing these new markets from a distance should take notice.

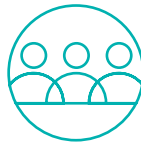


Emerging markets are growing.

The United States will always be a major market for healthcare, but the booming emerging global middle class is becoming harder and harder to ignore. Not convinced? A recent study by Goldman Sachs indicates this group is expected to reach a staggering 4.9 billion people by the year 2030, a near threefold increase from the estimated 1.8 billion already measured in the year 2009.ⁱⁱ In other words, today's emerging middle class is already a whopping six times larger than the entire population of the United States. With such striking populations in countries like China, India, and Brazil, greater accessibility to disposable income for this growing group will have significant implications for the global healthcare economy.



In terms of healthcare around the globe, focus has been shifting away from treating infectious disease and more towards management of chronic disease as this emerging middle class adopts a more sedentary lifestyle, accompanied by a consequent rise in obesity, cardiac disease, and diabetes. Over 60 million people are currently diagnosed with diabetes in India alone, with another 77 million already in a “pre-diabetic” stage.ⁱⁱⁱ While striking in terms of the number of people affected, this demographic provides an open door for affordable, accessible, and effective healthcare provision. Additionally, the lack of legacy healthcare infrastructure, the prevalence of self-paying patients, and less burdensome regulations provide an attractive new market opportunity for established companies and start-ups alike.



Understanding differences.

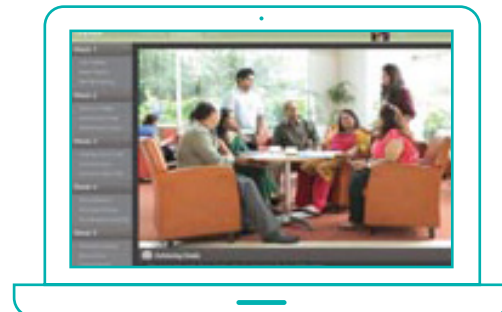
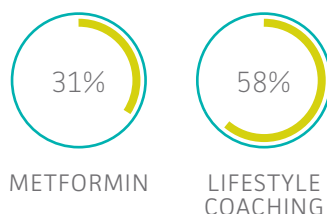
In order to succeed in these new healthcare markets, companies must no longer re-align existing solutions and offer these as cut-down versions to a patient demographic with unique needs. Effective design must recognize significant differences in infrastructure, culture, and constraints, and deliver even more on access, outcomes, and value to better align with new customers. In this day and age, teams with feet on the ground and local networks are well-positioned to deliver solutions with the speed and flexibility to support rapid pilot deployment, clinical testing, and early ROI validation.

Jana Care is a prime example of how locally-tuned innovation—stemming from cultural insights and fewer constraints—can lead to meaningful solutions to address unmet healthcare needs.

Diabetes Prevention Program

This landmark study—including over 3000 patients split into three groups (placebo, metformin, and lifestyle coaching)—concluded that lifestyle coaching greatly combats the risk of diabetes through weight loss.^{iv}

Risk Reduction vs. Placebo



Jana Care's program approaches lifestyle coaching in the form of a reality TV show called Habits. Patients have the ability to log in remotely to participate in a series of 16 shows.

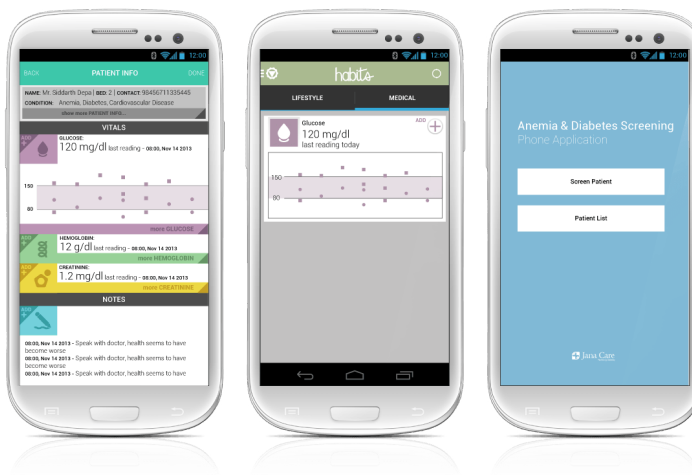
image courtesy of Jana Care

When Jana Care created its Aina device launched in tandem with the Habits program, it set out to develop a type 2 diabetes management system for the urban middle class in India by aligning with local customer needs, leveraging the prevalence of smartphone usage—expected to reach 364 million in India by the end of 2014^v—and incorporating a coaching system based on the landmark *Diabetes Prevention Program*.



Partners in health.

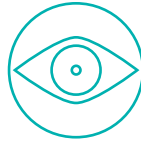
Jana Care approached Continuum to partner on the development of a smartphone-based glucometer designed to work with existing colorimetric test strips, then combined it with an accompanying smartphone app to link in with its coaching and support system. This holistic approach allows patients to track metrics such as glucose levels, weight, food, and physical activity and receive custom intelligent feedback on diabetes management, delivered as a series of sixteen interactive video sessions complete with daily lifestyle tips to promote healthier day-to-day behavior. And since the system was designed to be simple and scalable, it can be supported by India's existing infrastructure of nurse educators, bypassing the major limitation of bandwidth in a country with just one endocrinologist for every one hundred thousand diabetics. This coupling of accessible and affordable diagnostics with clinically-proven coaching methodology has allowed Jana Care to create a high value system focused on clinical outcomes.



Aina Device

Clinically validated to ISO 15197 accuracy standards required for FDA and CE approvals.

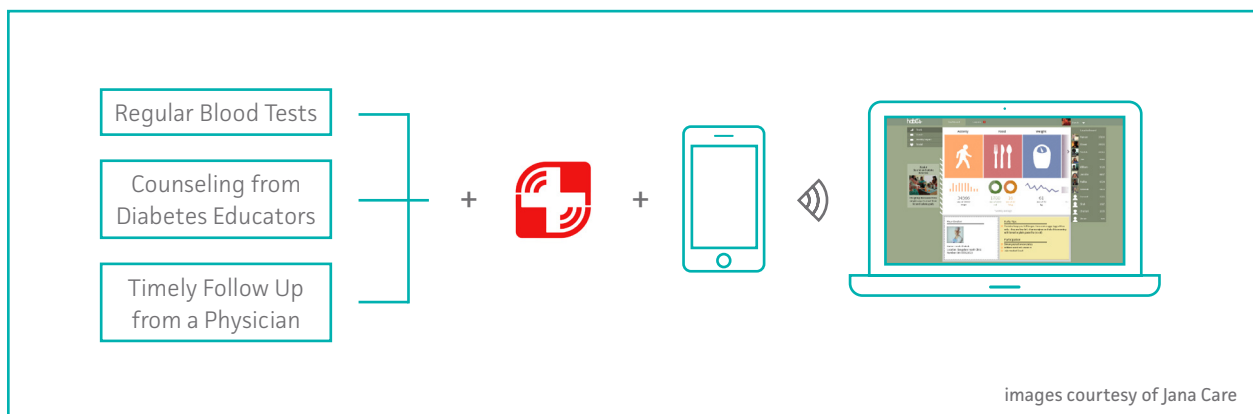
images courtesy of Jana Care



Focused on outcomes.

Jana Care's offering is enabled by the flexibility and agility of a locally-based team rather than a larger, more traditional company viewing their customers from afar. Starting with a small, dedicated team, Jana Care chose to focus its resources on the core user experience and clinical deployment, and developed a platform technology with the potential for new applications in the areas of HbA1c, lipids, creatinine, and hemoglobin testing.

With Continuum's support, in less than eight months, Jana Care has demonstrated accuracy matching strict ISO standards required for CE and FDA approval, is moving quickly towards clinical trials, and is gaining commercial traction with its first pharmaceutical partner.



Through its focus on clinical outcomes, convenience and overall value and by designing for the local opportunity rather than stripping cost out of an existing solution, Jana Care has created a system that offers significant benefits to patients while positioning itself for rapid growth. Companies—large and small—must be prepared to invest in a similar way if they are serious about new growth in emerging markets.

Citations

ⁱ Ernst and Young Pulse of the Industry Medical Technology Report 2013. Current revenue growth for US public companies currently runs in the single digits, compared to double digit growth pre financial crisis.

ⁱⁱ Gertz, Geoffrey, and Homi Kharas. "The New Global Middle Class: A Cross-Over from West to East." Brookings Institute, n.d. Web. 20 Mar 2014. <http://www.brookings.edu/~media/Research/Files/Papers/2010/3/china_middle_class_kharas/03_china_middle_class_kharas.pdf>.

ⁱⁱⁱ Anjana, RM, et al. "Prevalence of Diabetes and Prediabetes (impaired Fasting Glucose And/or Impaired Glucose Tolerance) in Urban and Rural India: Phase I Results of the Indian Council of Medical Research-INDia DIABetes Study." *National Center for Biotechnology Information*. U.S. National Library of Medicine, n.d. Web. 05 May 2014. <<http://www.ncbi.nlm.nih.gov/pubmed/21959957>>.

^{iv} "Diabetes Prevention Program." National Diabetes Information. US Department of Health and Services, 09 Sep 2013. Web. 20 Mar 2014. <<http://diabetes.niddk.nih.gov/dm/pubs/preventionprogram/>>.

^v Arthur, Charles. "Smartphone Explosion in 2014 will see ownership in India pass US." . The Guardian, 13 Monday 2014. Web. 20 Mar 2014. <<http://www.theguardian.com/technology/2014/jan/13/smartphone-explosion-2014-india-us-china-firefoxos-android>>.



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