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# Patient centricity

Transforming care.  
Improving outcomes.

Product Engineering Services



The healthcare industry is undergoing a transition from institutional-driven healthcare (fee for service) to outcome-based healthcare (pay for performance). It rewards care providers for raising care standards and for demonstrating evidence-based service goals. The model typically evaluates provider performance by examining key activities that lead to improved patient outcomes and patient satisfaction.

The patient/individual centered care is expected to consider patient's desires, expectations, values, family and social circumstances, beliefs, lifestyles and future ambitions. Integrating this into patient care provides a more collaborative, respectful, personalized and holistic approach to medical practice across the ecosystem.

There are gaps in traditional medical practice that are driving these changes: health decisions are generally taken by health professionals, while patients are mostly passive participants as they are not actively involved in the decision-making<sup>i</sup>; the cost of treatment has been going up without an equivalent improvement in value delivered; patients are being subject to unnecessary tests and treatments; and dangerously enough, patients

sometimes receive incorrect treatment<sup>ii</sup>.

Technology can help overcome many of these imperfections. As an enabler, it can motivate and support more optimal practices. Care givers can leverage a vast amount of digital data from numerous connected sources (devices, trials, research, best practices, training and patient data) and strengthen this by tapping into cross-functional skills to take day-to-day decisions. This brings about a significant change by turning point-of-care into evidence-based practice.

All the players in the healthcare ecosystem, including medical device OEMs, pharma companies and insurers, who do not become patient centric will remain vulnerable to compliance risk, loss of revenue through lowered reimbursements from insurers, brand erosion and patient attrition.

### The nuts and bolts of becoming patient centric

What will it take to deliver patient centric care? There are three critical vectors that need to be addressed (see illustration **Moving closer to patient centricity** for details).

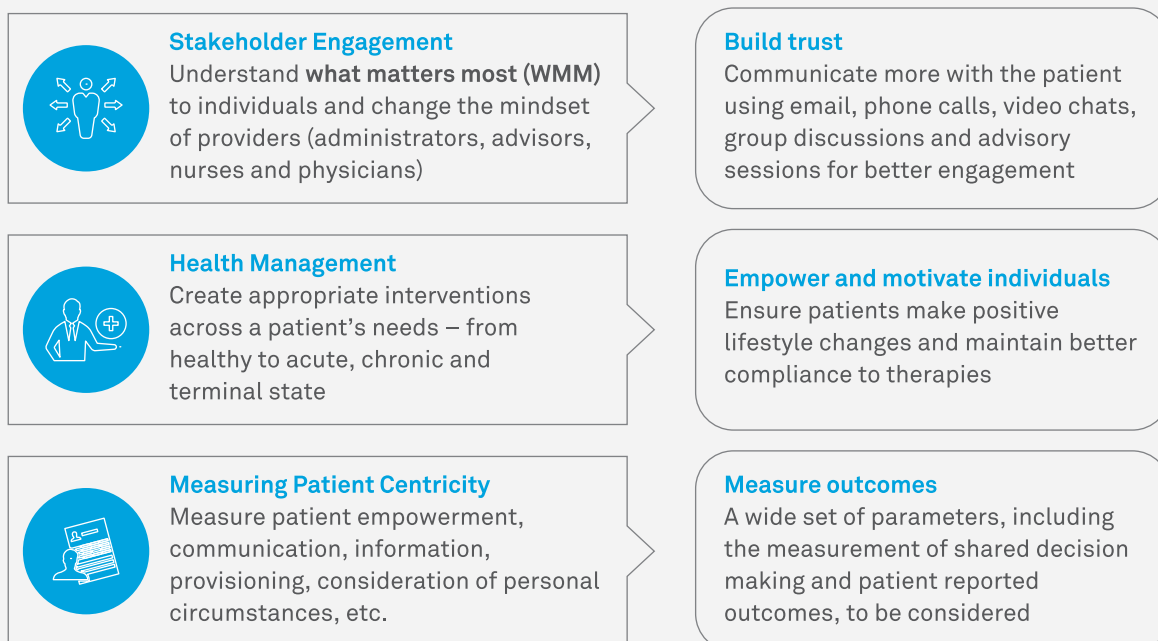


Figure 1: Moving closer to patient centricity

<sup>i</sup> <https://hbr.org/2016/11/giving-patients-an-active-role-in-their-health-care>t

<sup>ii</sup> <http://www.forbes.com/sites/leahbinder/2013/02/21/the-five-biggest-problems-in-health-care-today/#3378be5316e2>



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**Stakeholder engagement:** Patient centricity is about understanding what matters most (WMM) to individuals, their perceptions of care

outcomes and engaging them in the planning, delivery and evaluation of the healthcare support (see illustration **WMM Areas** below).



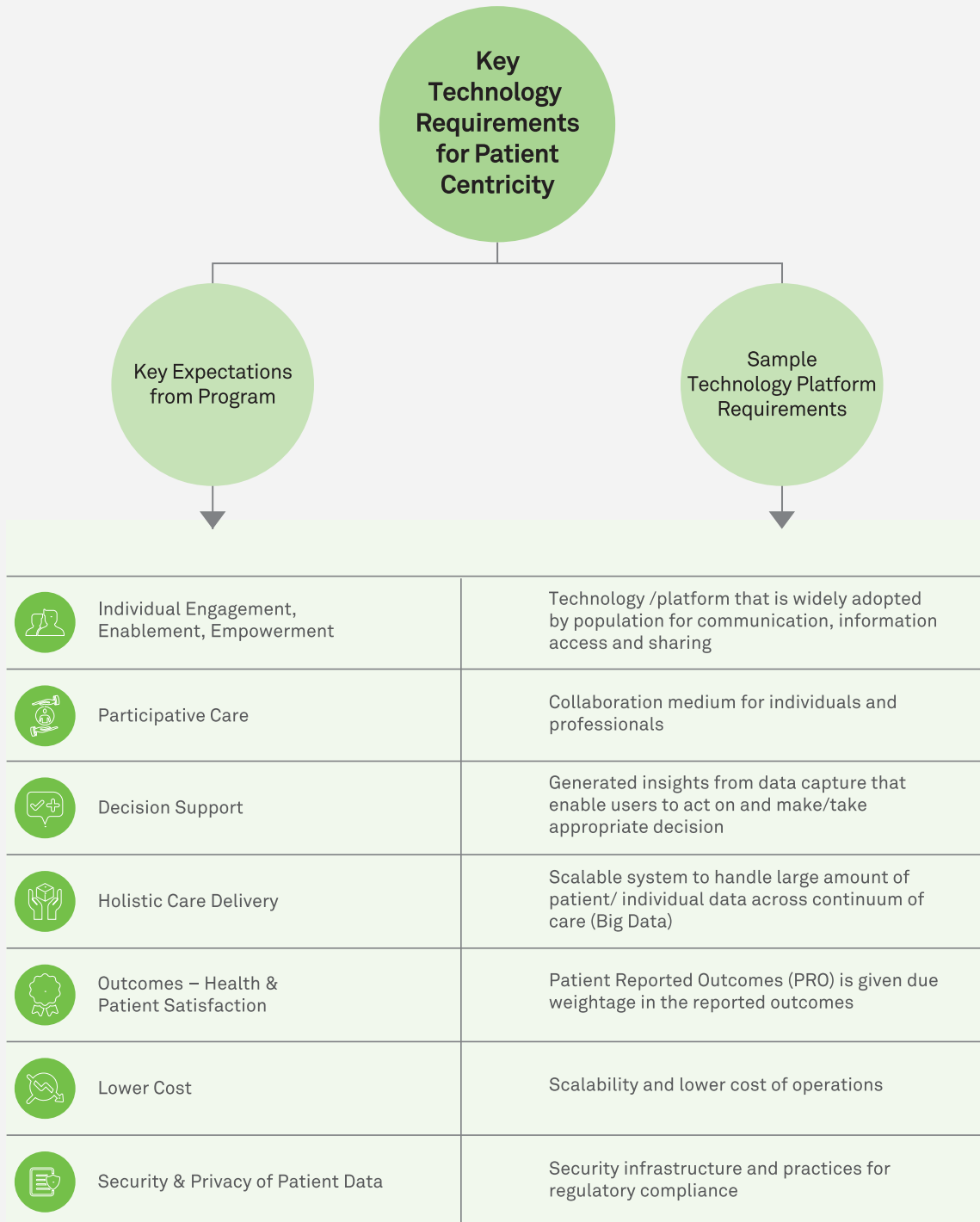
**Health management:** This would involve defining and adopting an appropriate clinical pathway to support care delivery. Health insurance companies have reported that more than 80% of healthcare costs are a result of managing chronic conditions and serious illness. Appropriate management can help bring down this cost.

**Measuring patient centricity:** Generally, clinical outcomes gets reported. However, patient centricity requires measurement and reporting many non-clinical parameters and is generally done through Patient Reported Outcome Measures (PROM).

## Using technology to deliver patient centric care

Technology today is making patient centric care programs possible by extending the reach of care organizations to larger society. It is multiplying the effectiveness of a limited

number of skilled professionals, driving affordability and improving decision-support through evidence-based practices (see table **Key Technology Requirements for Patient Centricity** for details on patient/caregiver expectations and the supporting technologies).



More specifically, a combination of Cloud, Cyber Security, Social Media, Analytics and Mobile (C2SAM) technologies are creating ever larger waves of patient centricity. C2SAM merits a

closer examination from a patient centricity perspective (for details see illustration **Perspective on the Technology Stackup**).

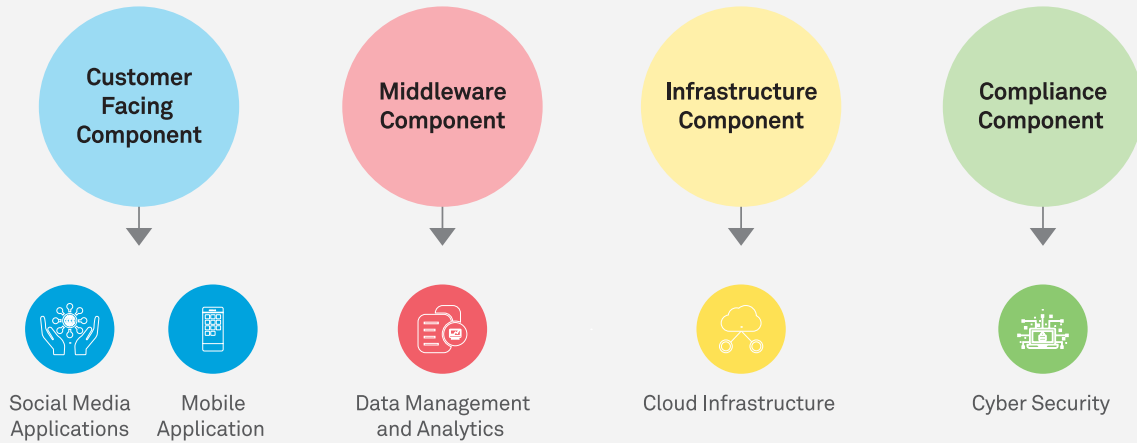


Figure 2: Perspective on the Technology Stackup

**Cloud:** With an exponential increase in data and new applications being made available to end users, storage and computing power need to scale. The Cloud component provides a way to host application and data that can scale quickly to changing needs. The global patient engagement solutions market is expected to reach USD 16.39 Billion by 2020 at a CAGR of 19.7% (USD 6.68 Billion in 2015). Cloud-based solutions are expected to witness the highest growth rate, owing to the higher flexibility, scalability, and affordability offered by these solutions<sup>v</sup>.

**Cyber Security:** In the connected digital world, information security is going to be the top priority of all the healthcare organizations as connectivity (internet connected systems) opens vulnerabilities. This leaves care providers vulnerable to penalties from regulators and lawsuits from patients. Adherence of data management processes to meet protection and compliance requirements of the FDA and others such as HIPAA therefore becomes a critical component of patient centric objectives.

**Social Media:** A study found that social media affects over 40% consumers in the way they deal

with their health<sup>iii</sup>. As many as 60% of doctors said that exposure to social media improved the quality of care delivered to patients<sup>iv</sup>. This means social media can be an effective tool on either side of the care equation. The challenge comes from having to manage appropriate information security measures that meet compliance expectations of regulators.

**Data Management and Analytics:** This component helps collect, manage (exponentially growing) and generate insights from patient and business data – from devices, lab tests, diagnosis, patient observations, billing – and helps determine how, who, when, where and what services can be delivered to the patient.

**Mobile:** There are more than 165,000 mobile health apps on the market with more than 4m free downloads every day. Some of the mobile apps use the mobile platform’s built-in features such as light, vibrations, camera, or other sensors to perform medical device functions (for example, measuring pulse rate) while others help apps control the functions of medical devices. These devices and apps are capable of capturing, storing, analyzing, displaying and communicating patient vitals and environments

<sup>iii</sup> <https://getreferralmd.com/2013/09/healthcare-social-media-statistics/>

<sup>iv</sup> <http://thesparkreport.com/infographic-social-mobile-healthcare/>

<sup>v</sup> <http://www.marketsandmarkets.com/PressReleases/patient-engagement-solutions.asp>

that provide caregivers better insight into patient needs. Patient diary, Patient Registry, Patient Outreach solution, Patient Engagement, Tele-Health, Self-management, eLearning Solution, Advocacy application – Virtual Coach, Decision Support and Analytics and Care Co-ordination are some of the focus areas that are being targeted using above technology stack.

## Shift – into the future

The challenges to becoming patient-centric exist, but are not insurmountable. Driving change in mindset, alignment of priorities and close collaboration between different stakeholders of the healthcare ecosystem are essential towards defining and adopting the following strategies:

**A “pay for performance” or “outcome based pricing”** business model rather than fees for service (consulting, tests, hospitalization, etc.)

**Consumer driven health plans:** Availability of health plans that can be customized to address emerging health needs of the individual across care continuum.

**Primary Care Physicians (PCPs) as care coordinators:** By virtue of PCPs being the first

touch point for the individual for any healthcare needs, they are in the best position to support & help individuals navigate through the complex healthcare ecosystem through care coordination and provide advocacy in recommending & enrolling into appropriate health plans.

### **A “solution selling” from “product selling”**

**mode:** Medical devices and pharma companies will be required to develop solutions (with & around their products) that drives best practices, address patient problems and enables better outcomes.

### **Wearables and non/minimal-invasive solutions:**

Development & adoption of technologies in sync with times, which are convenient, easy to use, personalized & non-lifestyle intrusive driving improved compliance and enhanced care.

These shifts and models are inevitable as they benefit all stakeholders. Early adopters of C2SAM will demonstrate a differentiator, enable their users perform their activities efficiently towards delivering person centered care and be compliant to regulatory norms. These are the organizations that will expand their markets and establish their dominance.

## About the author

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He has over 16 years of industry experience across healthcare segments. He doubles up as a consultant on eHealth space and has supported multiple rollout of eHealth initiatives for healthcare customers in addition to driving the Connected Health Initiative within Wipro. For more information, reach out to Mukund at [mukundakumar.krishnan@wipro.com](mailto:mukundakumar.krishnan@wipro.com)

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