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Ethnography Is the Pathmaker to Better Care: Paving the Way to a Patient-centric Healthcare Model

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This paper presents a clear and flexible model for understanding the concept of patient-centricity. This model emerged from our own ethnographic work in healthcare contexts, and was tested and strengthened with a literature review and interviews with experts and thought leaders in the healthcare industry. Our model posits that patient-centric care should be Personalized, Hassle-free, Active, Collective and Transparent (PHACT). Hospitals, payers, clinicians, Pharma and MedTech divisions (among others) can use these pillars as a guide to drive their transition to patient-centricity. The underpinning principle for the PHACT model is that ethnographic inquiry is the necessary path-maker for each stakeholder to understand the best ways to implement and maintain these five pillars of patient-centric care in their particular healthcare context.

INTRODUCTION

Patient-centricity has been a buzzword for the healthcare industry since the 1980s. It is comprised of those medical practices that focus on the relational aspects of care and the need to fully inform patients and involve them in decision-making (Gerrits 2014). While the desired outcomes of patient-centeredness are both 'ethical' and 'economic', or 'value' and 'evidence based', patient-centricity is linked to concrete and measurable healthcare quality improvements. With the unprecedented scale of the challenge facing the global healthcare delivery system, the patient-centric approach would undoubtedly lead to a more rational use of collective resources, which in turn could help societies and the organizations within them tackle critical issues such as the rise of ageing populations and increasing long-term care needs. Rethinking and restructuring healthcare systems to innovate in favor of patient-centricity has been estimated to be able to save entities like Britain's NHS £4.4bn per year (Bland 2015). An IBM report claims that every segment of the US health industry could benefit from following a patient-centric approach: patient health, payers' costs, providers' safety and industry's financial burden (IBM 2006:4). At the same time, there is a growing acknowledgement of patient experience and patient-reported outcomes as being valuable in themselves, regardless of whether they also have a positive impact on cost and quality.

Throughout anthropological literature, there is considerable ambiguity concerning the exact meaning of the term and the optimum method of measuring the process and outcomes of patient-centered care (see Mead and Bower 2000 for a review). Key dimensions of patient-centered care include sharing and redistributing power and responsibility in the patient-practitioner relationship (Parsons 1951), as well as gaining a fuller understanding of the patient's experience of their illness, as it relates to their own concepts of personhood (Armstrong 1979). The utility of any measure of patient-centricity is also highly dependent on the context in which the measure is being used (Mead and Bower 2000:1106).

When speaking to a number of thought leaders and experts in the healthcare industry (see acknowledgements), we found understanding of 'patient centricity' to be both broad and varied. Similarly, throughout policy literature, we found that definitions of patient centricity shift along a spectrum. More traditional descriptions, such as the 1987 Picker/Commonwealth Program on Patient-Centered Care (Millenson and Berenson 2015), place the patient at the hub of delivery services, though the energy and decision making is still reliant upon the expertise of the 'spokes' (CDRH 2010). In this scenario, paramount principles such as respect for patients' values and physical comfort place the patient at the centre of everyone's attention, though he or she is still a fairly passive actor. At the other end of the spectrum, we find descriptions of patient-centricity which envision a more empowered and participatory e-patient. In this view, patients not only take a more active and collaborative role in their relationship with healthcare providers, but are also entrusted with the care of others (Nesta 2015). Doctors shift away from being the core locus of expertise to a safe and welcoming actor who can help interpret and give meaning to the overwhelming information available to the patient.

This lack of precise and agreed-upon definition results in both excitement and skepticism about the value of patient-centricity for healthcare. Its meaning becomes diluted, while conceptual and empirical developments are hampered (Mead and Bower 2000:1088). This fluidity creates tensions and problems at an organizational level when it comes to defining a course of action and setting success metrics. How might we deliver on a term which has myriad and conflicting definitions?

While there have been many attempts to identify key indicators of patient centricity, healthcare organizations are limited in their pursuit by the lack of a clear pathway to achieve such indicators in varying contexts. The need for a model of patient-centricity extends to the need for a method for understanding what it could look like across cultures. Patients are not homogenous. The goal of 'collaboration' with patients voiced at policy conferences may not resonate with underserved minorities who harbor a deep mistrust of 'the system'. Different indicators of patient-centricity may mean different things to different individuals, communities and collectives of people.

Ethnography and Clarity

In the complex and rapidly changing healthcare ecosystem, ethnographic methods are uniquely able to illuminate not just how individuals act and why they choose particular courses, but also how actors' interactions are shaped by context (Harple et. al 2013). Thick description, a term developed by Clifford Geertz (1973), is a way of explaining both human behavior and the context in which it is studied, so that the behavior becomes more meaningful to an outsider. Big data explanations for behaviors need to be supplemented

with ‘thick data’, which reveals the social context of the connection between data points (Wang 2016). Ethnographic enquiry allows researchers to take advantage of relative immersion in a particular context in order to obtain this kind of thick description.

Ethnography is about discovering cultural patterns and developing models to explain those patterns. As a design consultancy, Experientia has used ethnographic methods such as participatory observation, shadowing and interviews in healthcare contexts to illuminate how individuals act, what motivates them, why and how they feel what they do, and how their interactions are shaped by their contexts. Our work in healthcare contexts is not just about understanding the systems and tools in use but about the emotional states of patients and professionals (Harple et. al 2016:134). As noted by Hammersley and Atkinson, Ethnography is ‘inescapably a textual enterprise’, in that it is ‘widely recognized that the ‘ethnography’ is produced as much by how we write as by the process of data collection and analysis’ (2007:191). Though, in addition to this, our research activities have also created spaces for active participation of users and given them voice for the direction of further research and design.

Throughout Experientia’s own ethnographic work in the healthcare domain, we have found confusion regarding how to implement patient-centric policies and programs. We recognized the need for a plain framework on how to discover and understand what patient-centricity meant in any particular context. To further investigate and test our ideas on a model for patient centric-healthcare, we carried out interviews with several influential thinkers and experts in the healthcare industry as well as a review of both academic and policy literature on the term. Out of this three pronged approach - ethnography, expert interviews, and a literature review - a clear and memorable framework for patient-centricity has emerged, recognizing that rather than converging to a single definition or approach, facets and interpretations of patient-centricity can be clustered into several complementary categories.

The PHACT Model for Patient-Centric Healthcare

Our model posits that patient-centric care should be Personalized, Hassle-free, Active, Collective and Transparent (PHACT). Hospitals, payers, clinicians, Pharma and MedTech divisions (among others) can use these pillars as a guide to drive their transition to patient-centricity. The underpinning principle for the PHACT model is that ethnographic inquiry is the necessary path-maker for each stakeholder to understand the best ways to implement and maintain these five pillars of patient-centric care in their particular healthcare context.

The model both emerges from ethnographic research, and requires sustained ethnographic enquiry by stakeholders. It guides organization to adopt an ethnographic perspective on people and social contexts in order to define patient-centricity for their population. We are aware, for example, that the changing age structure of the population will affect the landscape and priorities of private and national health services (Wanless 2002). However, the PHACT model is afforded both stability and flexibility in that it must be underpinned by a deep understanding of each relevant healthcare context and its unique stakeholders. While the nuances will shift based on the patient population and contexts, the questions within the framework will remain valid.

In Singapore, Experientia was asked to conduct the “Design for Ageing Gracefully” project to explore current healthcare experiences of the ageing population in Singapore,

identifying trends, behaviors and gaps in the interaction between elderly people and the healthcare system (DesignSingapore Council 2015). We carried out ethnographic research - interviewing and shadowing elderly users of the healthcare system and their caregivers, and observing their experiences. We carried out an extensive research and analysis project, including a workshop with participating public agencies and services from the Singapore healthcare system. The learnings from this project will be used to highlight in-context examples of the pillars of the PHACT model.

PERSONALIZED

'Evidence-based medicine provides diagnosis and instructions on the basis of percentage of patients instead of individuals. More personalized treatment is needed for individual patients.'

—Jody Ranck, analyst, startup executive and author of Connected Health

The meaning of 'personalized' medicine is as context specific as defining the quality or condition of personhood in any particular culture. In the age of the genome, there is a growing demand for healthcare to be more individualized to the specific biogenetic conditions of patients. In this context, medicine needs not just to be powerful, but predictable, as it tailors care to an individual's own genetic make-up. The goal of personalized medicine from a biogenetic perspective is to streamline clinical decision-making by distinguishing in advance those patients most likely to benefit from a given treatment from those who will incur cost and suffer side effects without gaining benefit (FDA 2013).

However, personalization of care is also associated with other, softer, variables that strongly influence the way in which different patients react to therapies. These include lifestyle, personality, family context, cultural background, general and technological literacy, and other socio-economical and psychological variables. A meta-ethnographic study by Franzel et al. demonstrated that patients' notions of individualized medicine should include the humanistic approach of individualization as expressed in concepts such as 'personal growth', 'holistic' or 'integrative care', doctor-patient 'alliance', 'self-activation' and 'wellbeing' needs (Franzel et al: 2013).

Such a varied approach to what it means to be personalized presents a challenge to healthcare providers. As asserted by Gibbon, the 'dream' of genomics as 'personalized' medicine now sits alongside and somewhat in tension with the goals of 'public health' (Gibbon 2009). Gibbon's comparative ethnographic perspective of the emergence of 'breast cancer genetics' in the different cultural contexts of the UK and Cuba, illuminated the context-specific ways that technologies, subjectivities and more particularly socialities are being aligned in relation to genomic medicine in Cuba. The tasks of ethnography include finding out how people view the situation they face, how they regard one another, and how they see themselves (Hammersley and Atkinson 2007), thereby making it an indispensable tool to adequately investigate the aspects of personhood that engender ideas of personalization in any particular context. Ethnographic methods can also help discover which are the softer (behavioral, motivational, cultural, etc.) variables that influence the way patients experience different diseases and the care they receive, and how these affect the success of treatment of different diseases in different contexts and locations.

DesignSingapore Council came to us with a concern over low healthcare access by a climbing elderly population, and questions on how best to serve this population. We found

personalization to be a key concern of the elderly in Singapore, with little to no mention of genetics. Observing people in their everyday contexts, such as their work or leisure, or socializing with their families, enabled an understanding of people's sense of their own body and how they related to the healthcare system. A key theme to emerge from this research was elderly people's feeling that the healthcare system simply was not made with them in mind. The majority of elderly participants we spoke to had a holistic view of healthcare that includes body, mind, and soul. When medical practitioners did not acknowledge the relevance of alternative medicine for a patient, it left them feeling as if their long-established beliefs were wrong. We found the resulting defensive approach to be not only with doctors, but with the healthcare system in general, causing them to turn to it only as a last resort. Presenting these insights to key stakeholders in the Singaporean healthcare system in the form of stories, themes and short ethnographic films helped impart empathy and influence strategic direction on what personalized healthcare could mean for the elderly in Singapore.

HASSLE-FREE

'User experience needs to be more than single person focused, it needs to look at the whole system.'
—Nancy Vuckovic, Director of User Experience and Design, Intel Corporation

Making healthcare hassle-free is about addressing and assessing barriers to care and how these impede basic access. Barriers to meeting needs for care can take different forms, including not perceiving a need for care when there is an objective need for it (unperceived unmet need), not seeking attention when a need is perceived (subjective, chosen unmet need), and getting inadequate treatment when care is received (subjective, non-chosen unmet need) (Garcia-Subirats et. al 2014). Such barriers may not act as initial blockers to access, such as long waiting times, but may have a significant effect on dissuading individuals from seeking care in the future, thereby increasing the amount of chosen, unmet needs in any population. A cross-sectional study by Garcia-Subirats on the barriers to accessing healthcare in municipalities of central Colombia and north-eastern Brazil revealed individual factors to be less important than those related with the design and organization of the health system, including shortfalls in infrastructure and the organization and quality of services (Garcia-Subirats et. al 2014). This resonates with Rhodes' investigation of reasons why Korean Americans are less likely than other Asian Americans to access and utilize healthcare services, regardless of their insurance status. The Koreans interviewed for the study perceived complication and hassle to be an inevitable part of accessing care in the United States, thus discouraging them from seeking attention when a care need was perceived. One participant noted that 'it's very difficult and complicated to know where to go for your symptoms. When you see a doctor, it's common to hear that you have to go see another specialist' (Rhodes 2015:488).

Without a patient-centric model for healthcare systems, patients' experiences are fragmented and complicated. A deep understanding of patients' healthcare journeys, touchpoints and pain points discovered through ethnographic research is essential to removing these frictions. While Rhode's (2015) and Garcia-Subirat et. al's (2014) studies were comprehensive, both lack a documentation of the complex factors that influence and motivate patients' behaviors or a description of people's emotional responses to barriers to access. Participant observation allows researchers to understand how people solve their

problems with the tools they have, and would therefore be the most comprehensive path maker to understanding what could demotivate or impede patients from seeking access to care.

Joining elderly patients on their routes to healthcare appointments in Singapore revealed many practical obstacles when aiming to access care. Inaccessible routes would cause people to take long detours in order to avoid overpasses with many steps, or buses that have slippery floors in the rain. Entering into hospital with patients revealed the number of touchpoints individuals would need to interact with before meeting with a healthcare professional, and the potential for confusion, such as signage in hospitals being inconsistent and contradictory to a previous hospital experiences. We observed patients needing to walk long routes in order to pay for and collect their medication after appointments. Being such a multi-cultural society, we observed elderly arrive at an appointment to find the one nurse who spoke their dialect was not there that day, resulting in further delays and discomfort. Most importantly, reflecting with the elderly on these experiences revealed the emotional effect and loss in confidence as a result of the hassle involved when seeking care. This was in addition to the stigma often felt by being perceived as both elderly and unwell. Zamrud, a 67-year-old Malay carer, avoided using a walking stick other than when she was seeing her doctor, as she didn't want to enhance any visible signs of her age or health state. She couldn't allow her neighbors to see if she was unwell or seeking care, in case they judged her badly. This was even though being able to walk and move freely is so closely related to feelings of choice and empowerment.

The trouble we found the elderly faced when trying access care left them feeling they were at fault and that the healthcare system simply 'wasn't made for them'. Such hassle inevitably led to people feeling they would rather avoid accessing care unless it was an emergency, resulting in them being left with unmet care needs. Visually documenting these stories in the form of customer journeys allowed us to communicate these findings to leading stakeholders in the healthcare industry in Singapore. Rather than simply building empathy, these clear and tangible examples of failures within the system helped clarify a perspective on patient-centricity.

ACTIVE

'Whether I like it or not, I'm the expert, not the medical professional.'
—Tim Omer, Diabetes sufferer and advocate, hacker

Active healthcare is about treating patients-as-assets, in terms of their knowledge and experience, rather than just sources of need. NHS England has recognized the benefits of patients having motivation to innovate by providing support for regular NHS hack days, which bring together people with problems and IT experts in an attempt to find digital solutions. However, these days don't target the more personal health hackers such as Tim Omer, a British Type 1 diabetes sufferer we interviewed, leaving much to be desired in the way of harnessing the talent of those patients with crucial user insight and a sophisticated understanding of technology. Such incidences resonate with extensive academic and policy literature on patient empowerment, a concept that has clearly been extremely influential in discourses of healthcare reforms and health promotion in Australia, Europe and the US (Chiapperino and Tengel 2015:210).

Empowerment is about a redistribution of power between patient and physician (Roberts 1999), though the term itself posits a sense of autonomy on the part of the patient, free from the controlling influence of others. Factors such as compliance and elitism have acted as obstacles to the inclusion of a patient point of view in the healthcare landscape. While patient-centered medicine may liberate the medical encounter from paternalistic power (Mead and Bower 2000:1089), at the same time it introduces a new complex of power relations between doctors and patients (Gerrits 2014). For this reason, we have focused on the active participation of the patient as the central focal point of this pillar for patient-centric care. This pillar does not suggest that patients must be encouraged to be more active in order for patient-centric care to be achievable. Rather, this pillar emphasizes the need to harness patients' own knowledge and insight, existing political energy and technological expertise that patients use to create innovative healthcare solutions (All Party Parliamentary Groups on Global Health 2014).

Interviews with patients such as Tim Omer revealed the frustrations patients have with using healthcare devices, the economic and social challenges they face, and the motivation of certain patients to design innovative solutions for theirs and others' unmet healthcare needs. Tim Omer's homemade Continuous Glucose Monitor and smartphone application bypassed those manufacturers who had so far failed to provide an affordable solution to those who require CGM data. Mr. Omer's activity as a 'health hacker', along with others from patient advocacy groups such as #wearenotwaiting, have been widely recognized in media as examples of patients taking 'the failure of major companies to develop cheaper, more accessible devices' (Darzi 2015) into their own hands.

Both Mr. Omer and Dr. Lee, an American doctor and pioneer of the maker movement for healthcare, feel that the role of the manufacturer is shifting. In the past, manufacturers had a technical point of view and exclusive access to hardware. Now, patient-driven innovation opens the door to a future in which an educated and technically-savvy general public is able to compete with manufacturers. However, both Mr. Omer and Dr. Lee acknowledge that we don't currently have 'the infrastructure, methodology or culture to facilitate human-centered design yet in healthcare'. Patient led-innovation needs recognition, a pipeline and assistance to make it available to a larger population.

Significant power and cultural dynamics affect patients' inclusion in their own treatment decisions and in the design of new products - they may be perceived as uneducated or needing protection from unregulated experimentation. Patients may have no other option but to be more active in the way they take care of their health as the healthcare system does not have enough funds to provide services like before. Ethnographic approaches are crucial in identifying opportunity spaces for how patients can play an active role in the improvement of healthcare provision. In order to understand patients-as-assets, organizational approaches must ensure they can respond rapidly to learning from local contexts and work from the bottom-up.

COLLECTIVE

'Collective movements can do justice to the complexity of diseases. Sometimes a single device cannot do that.'
—Stefana Broadbent, Head of Collective Intelligence at NESTA

'Collective' focuses on the wider plethora of stakeholders that form a whole in contributing to healthcare provision. Focusing on the collective pushes patient-centric care to go beyond patient's active engagement with their own care and providers, to include a wider inclusive perspective of the needs of other actors involved. From both our own ethnography and our interviews with healthcare thought leaders, it is clear that in order to meet the needs of a patient, medical device companies and service providers need to learn how to design for the whole experience, which includes medical staff, caregivers, pharmacists and communities. From an organizational perspective, focusing on collectivity redefines the problem of patient-centricity. First, how do we shift systems that protect privacy and individuality, and second, how do we think about health problems/solutions in radically different ways that might not have direct 'health' solutions?

Nesta's vision for healthcare in 2030 envisages a landscape where new digital technologies will allow people to track and analyze their own health data, and to share this and other health knowledge with others in ways that will aid prevention and management of long-term illnesses (Bland 2015). Experts we spoke to expressed concern that the most popular wearables are not capturing the relevant biometrics for healthcare practitioners to utilize, and lack efficient feedback mechanisms. True innovation in wearables would directly address the issues that patients are facing. Such technology is also unsurprisingly more scarce in poorer communities, where their target as a preventative health measure may in theory provide some of the most value (Elias 2015). Illness itself would also affect the ability for an individual to capture and manage data, while the ability of a physician to sit and manage increasing amounts of incoming data is also unlikely.

Truly collective healthcare design would ensure that the data patients generate is targeted also at what is most useful and actionable for all stakeholders involved in a patients' care. In regards to data management, the ethnographic challenge is to identify the most relevant data and metrics for both patients and healthcare professionals, and the related design challenge is to develop the right tools and applications to facilitate the production and use of newly available data. Greater theoretical ideas related to privacy, trust and power would be crucial to ethnographic investigation.

Ethnography itself can be the starting point for a collective focus. Ethnographic techniques such as participant observation in patient organizations could explore ways to collaborate spontaneously throughout their networks, and to design ways to foster collaboration with stakeholders in online and offline practices. In-depth interviews and shadowing of patients' could help deepen our understanding of where shortfalls exist in the ecosystem of their healthcare support. Ecosystem maps and service journeys, based on ethnographic enquiry, could help to understand different scenarios of engagement for people with long-term illnesses.

Our work in Singapore identified that supporters of the elderly — social workers, caregivers, family, domestic employees, friends and even neighbors — find they are caught between the elderly's struggles and the way the system is implemented, making them feel as if they are fighting an uphill battle. Caregiving overwhelmed all the participants we interviewed. For family members who become caregivers, having responsibility for someone else's health and well-being is disruptive, with them often receiving little gratitude. We found a deep sense of guilt and worry for the elderly clouded relaxation time, such as massage or meeting with friends. They don't have many opportunities to speak about their stress, or they are presented to people of a similar or lesser expertise level and so the advice received is

usually unhelpful. We found stress management techniques included “downgrading” one’s own job/employment position, hiring part-time help or taking on a part-time job as a “de-stressing” physical activity. The elderly’s first touchpoint, before accessing most other services and programs, is usually volunteer caregivers and social workers. These wider considerations and challenges are crucial to organizations that want to focus on more patient-centric healthcare provision.

TRANSPARENT

Transparency is a comparatively new, though increasingly integral tool for public service reform. In terms of healthcare, it is often used to refer to making information available about providers, outcomes and costs, as well as making patient’s own data more available and accessible. The origins of transparency can be found in theories of civic responsibility in the 1980s (Henke, Kesley and Whately 2011:65), and it is now often used as a key measure for corporate reputation (Mack 2015). Transparency is critical to the concept of patient centricity because it is a tool to attempt to correct ‘the democratic deficits of existing forms of law, bureaucracy, and even subjectivity’ (Ballesterro 2012:160). Both value and evidence based, transparency aims to improve patients’ opportunities for choice in healthcare, and at the same time reduce errors and increase quality of care. A report by Health International revealed a number of successful projects in the UK’s NHS service. In an area of the UK in 2008, a local NHS payer gave quality awards to 14 GPs for meeting certain professional standards. Over the next three years, about 4,500 patients changed their registration to the practices with quality awards. Similarly, the NHS ‘choices’ division publishes comparative data and reviews on local services. Evidence shows that the choices division of the NHS has reduced the number of unnecessary visits. The research is clear, across industries, that peer scrutiny is a strong means to incentivize behavioral change.

Complex information system design requires profound understanding of which information needs to be analyzed and exchanged and through what channel. Ethnographic research can help healthcare stakeholders understand what the patient’s needs for information are, and how to deliver it in a way that is not just transparent, but is also informative and accessible. Whether it is data being provided about providers and services, or patient-to-patient data sharing, when are these data actually used? What do people do with the data? Who actually reads the data? A patient’s relationship to the data could be problematic. Ethnographic investigations into transparency have viewed it as recognizable across contexts, but something which can create new subjects and objects in unpredictable ways (Hetherington 2012).

From our expert interviews, we found concerns about privacy are sometimes viewed as an excuse to prevent progress. Clinicians may feel threatened at the thought of patients making their own judgments and decisions, while others may feel excited and respectful about what people are doing. How does a focus on transparency sit with the idea of the doctor as expert? A major organizational challenge would be to shift this perspective on control. What tools would manage issues of disagreements and decision making? Such collaboration has to be part of changing the paradigm away from the medical expert as a holder and sole guardian of medical knowledge and expertise, to a more democratic system that acknowledges people’s ability and right to be informed about their own health, and about the available choices for better quality of care. These interviews highlighted clear

issues for investigation in the pursuit of transparency in the healthcare industry. What risks are perceived by the stakeholders involved and how could these concerns be mitigated and managed? What does transparency 'do' to relationships between patients and clinicians? Ethnographic methods can help healthcare providers to understand how to offer information that is transparent, can be interpreted easily, and is the right information to the right stakeholder at the right time.

CONCLUSION

The PHACT model is a distillation of the current consensus on patient-centric healthcare. The value of the PHACT model for patient-centric healthcare is flexibility, clarity and simplicity. This model funnels the breadth of interpretations of the term 'patient-centricity' through a clear framework, with a pathway of investigation to help the framework adapt to varying contexts through ethnographic enquiry. Patient centricity is vital for healthcare due to its clear measures of healthcare quality improvements, as well as the value-based arguments of increasing patient experience. For each pillar of the framework, we have devised guiding questions that can be addressed through ethnographic investigation.

Personalized

- What are the existing healthcare personalization practices in the context of the study? How are they perceived?
- What conditions of personhood comprise this patient group? To what extent do these vary within the group?
- What variables influence the way patients experience different diseases and illnesses?

Hassle-free

- What are the obstacles experienced by individuals when trying to access care?
- To what extent do they influence future efforts to meet care needs?
- How and to what extent does access vary within the group of patients? What are the relevant variables?

Active

- How do patients perceive their knowledge of their own health conditions in relation to care providers?
- What are the existing shared or private, low- or high-impact DIY and/or innovative practices in the domain of interest?
- What structural support do patients have (or lack) to channel their ideas into solutions for healthcare?

Collective

- How do we think about health problems in the context of the wider plethora of stakeholders that surround a 'patient'?

- What are the shortfalls in support of the wider ecosystem of actors in the healthcare landscape?

Transparent

- What risks and barriers to information sharing are perceived by those involved and how could these be mitigated?
- How do cultural aspects influence these perceptions?
- What are the perceived conditions for establishing trust and reliability?

Essential to this model's success is that these pillars should not be addressed as separate entities, but as a group of guiding principles that intimately depend on each other in order to move towards patient-centric care. Transparency is a conduit for effective collaboration between patients, clinicians and the wider collective of stakeholders; seeing patients as active assets for innovation requires hassle-free access in order for them to become integrated into the system that is trying to support them. Personalization of care is dependent on individual understanding of people's demands of transparency and ideas of how to be active agents in their own healthcare, and so on.

The PHACT model for healthcare gives a clear framework of definition and method of discovery to a concept which has suffered from a diluted meaning. Insights gained through ethnography will allow organizations to integrate these pillars into systems, services and devices, according to the unique and complex context of the healthcare environment they are innovating for. Giving organizations a set of complementary categories through which to focus when innovating for today's market will allow them to focus and streamline their efforts in a systematic and functional way.

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NOTE

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