

CIO perspectives on digital healthcare

Brazil

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OVERVIEW

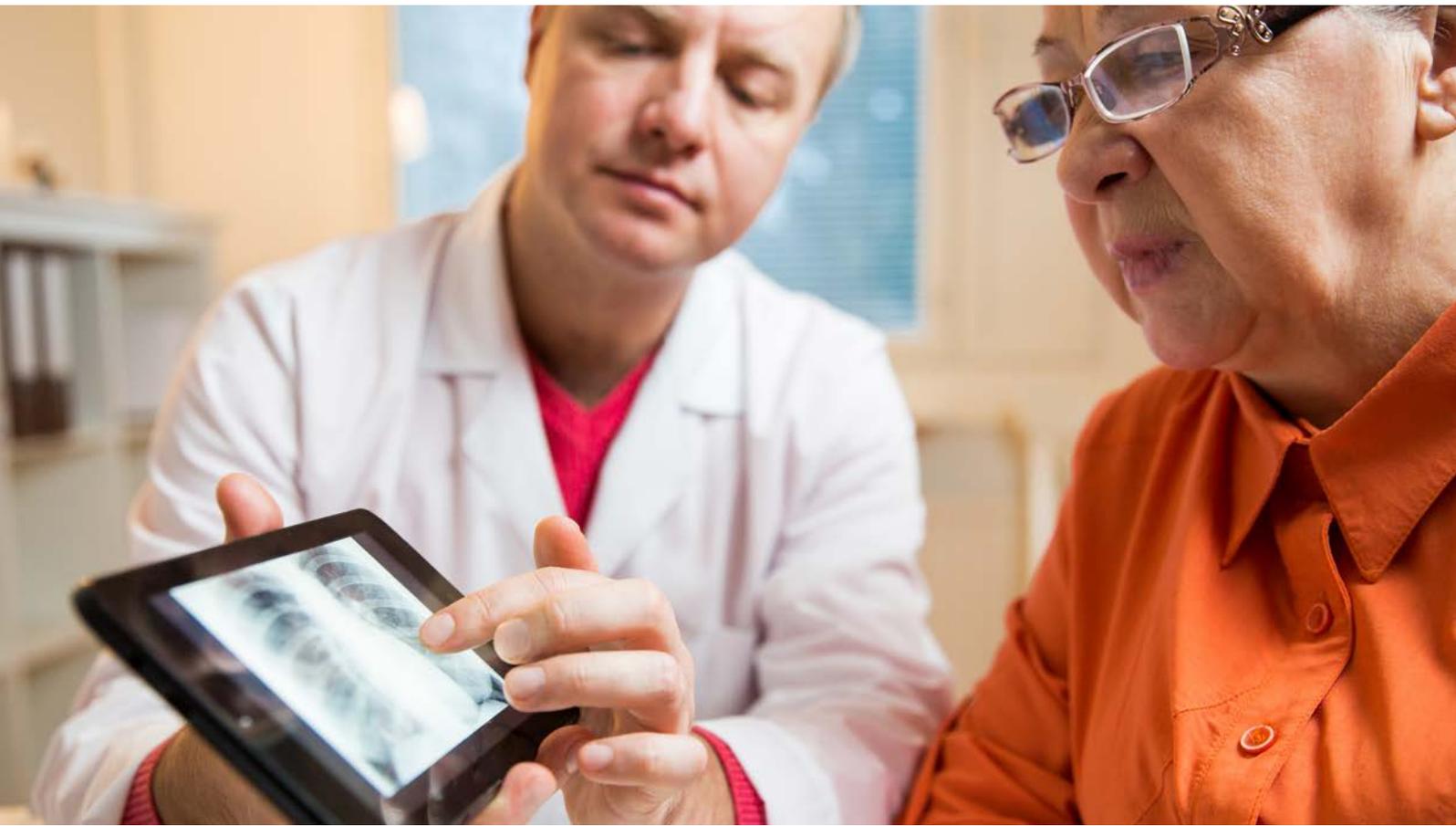


Digital healthcare is underway across Brazil but remains in its infancy; especially when compared to financial services and technology, media and telecoms. However, awareness of its laggard status is propelling the sector to invest heavily in digital development; Chief Information Officers' (CIOs') digital transformation efforts are centred on efficiency and process initiatives, with only a few institutions currently considering the value of digital from a holistic service and analytical management perspective designed to support decision-making.

The Accenture CIO Survey is a multi-country assessment of the digital health transformation across the healthcare ecosystem. The survey as a whole covers seven countries across three continents, and highlights the perspective of the individuals at the forefront of the transformation: the Chief Information Officers.

This part of the survey features the perspective of eight CIOs in Brazil, each of whom we interviewed in the fourth quarter of 2016, and each with a differing view on the challenges ahead. The survey is based on three hypotheses that we sought to prove or disprove:

- Page 4 **CIOs need to transform their organisations to meet consumers' growing demands, and to leverage digital technology to lower operational costs**
- Page 8 **CIOs need to get stakeholders, and especially doctors, on board for digital health**
- Page 10 **CIOs need to take on a new role, adopt new skills and get resources to lead a successful digital health transformation**



HYPOTHESIS 1

CIOs need to transform their organisations to meet consumers' growing demands, and to leverage digital technology to lower operational costs

Finding: The broader digital transformation agenda is pursued by few CIOs, with digitalising healthcare currently focused on efficiency gains.

CIOs' ability to transform is still limited

According to the CIO at a leading diagnostics company, "The vehicles of change across the sector are time and information: digital channels reduce waiting times – on both the patient and medical side – and increase access to available information". Elimination of paper, agility of information and traceability are therefore important day-to-day operational initiatives for CIOs.

These are efficiency-orientated objectives rather than cost- or patient-orientated objectives – it does not matter to the patient whether the internal processes are done with paper or without. As emphasised by another CIO, "In the end, efficiency is more important than cost reduction." Wearables and mobility, as well as efforts to explore patient data, are regarded as areas of innovation and, therefore, non-essential to day-to-day operational needs.

"Elimination of paper, agility of information and traceability are important initiatives among CIOs designed to support day-to-day operational needs."

Figure 1. Digital healthcare initiatives

Initiative	Agility focus	Efficiency focus	Analytics focus
Web scheduling channels	●	●	
Online results for patient and requesting physician	●	●	
Simplification and consolidation of architecture		●	
Patient relationship channels (SMS, email, instant message)	●	●	
End the need for paper		●	
Capture more and better information		●	●
Digital certification	●	●	

CIOs, particularly in the private sector, are concentrated on simplifying and rationalising architecture, which is designed to drive efficiency by:

- improving usability
- promoting value-based purchasing
- increasing ROI

By freeing up cash and internal capacity, technology is regarded as an important lever for growth and, therefore, well-structured projects often gain buy-in. This in part points to why CIOs have so far focused on the low-hanging fruits rather than attempting to jump to innovation; with significant Cloud infrastructure investment currently still regarded as financially unviable. Initiatives include: replacing legacy systems with integrated e-prescription, centralising receptions and call centres, providing online delivery of laboratory tests, and scheduling of exams.

These priorities are internally focused and underline why digital integration between providers is not a CIO priority. Healthcare providers currently view healthcare digitalisation as a tool to enable efficiency gains via internal institutional integration, not healthcare system integration. This approach to digitalisation has created a “product-centric approach” to healthcare, with each provider focused on service delivery in isolation. Thus, digital solutions – except for a few key external partners – are developed in isolation from the rest of the healthcare system.

Its approach has also been lopsided, with both the public and private sector typically only providing doctors with access to digital health records. Nevertheless, both sectors pointed towards upcoming effort to enhance patient access and experience.

Interviewed CIOs seemed unaware or unconcerned about growing consumer demands for better digital access to healthcare services, as expressed in recent consumer surveys, and that can be well explained given aforementioned priorities.¹

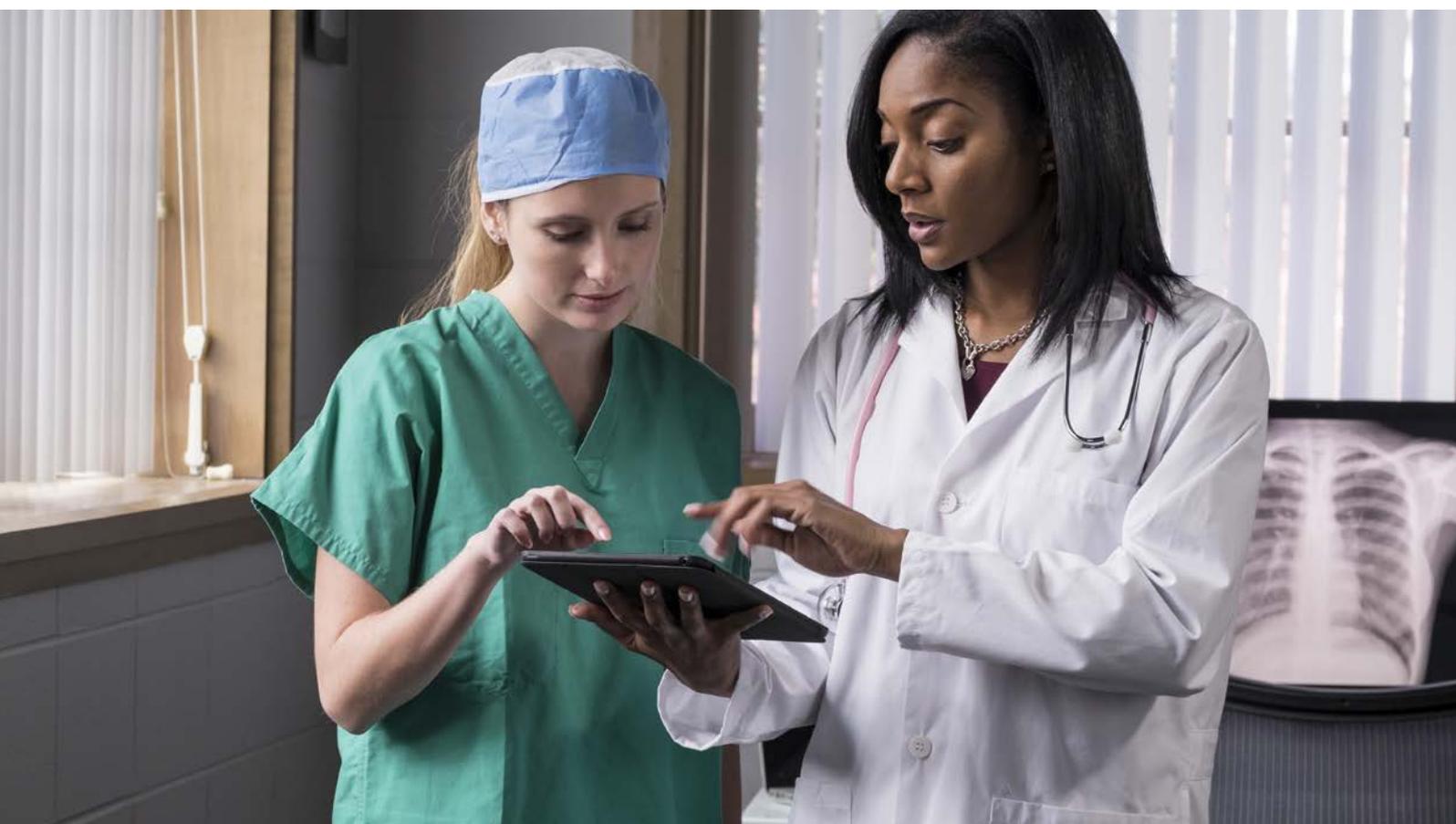
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Interestingly, no CIO identified budget restrictions as an important constraint to achieving stated initiatives. Stakeholder-related engagement was most frequently cited as the primary obstacle for digital initiatives currently underway (see Figure 2). From a patient perspective, Brazilians continue to prefer the delivery of results in-person or via “moto-boy”, including a personal explanation of results; while many doctors also have a preference for physical review and administrative processes.

Figure 2. Digital healthcare obstacles

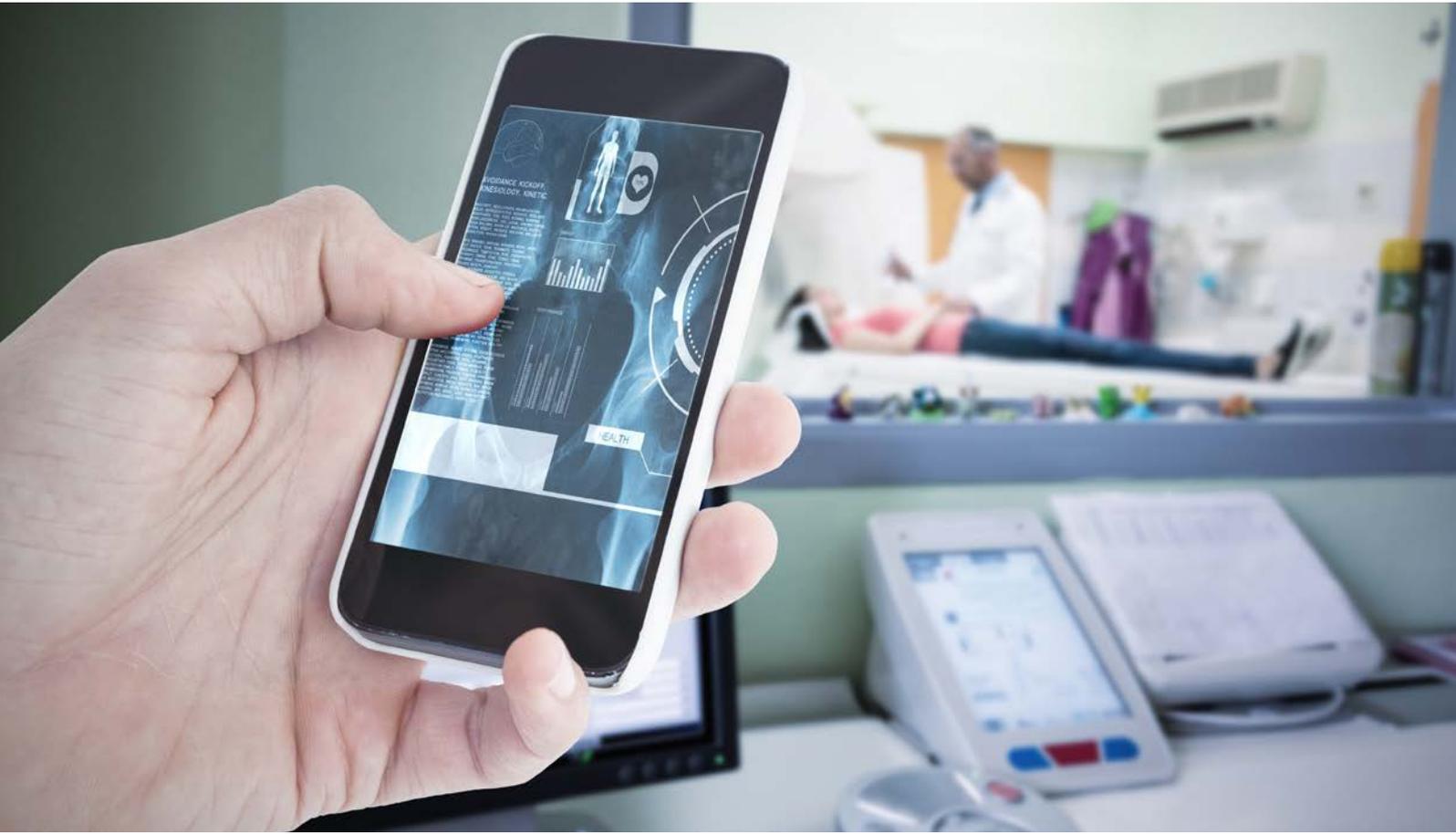
Obstacles	Stakeholder issues	Capacity issues
Low adherence to digital channels, including lack of understanding/comfort	●	
Competition of internal projects and day-to-day operations	●	●
Limited stakeholder interest in sector-wide collaboration (ie, exchanging information with other healthcare providers), especially with diagnostic centres	●	
Preference for paper	●	
Regulatory issues, including remote consultations	●	
Difficulties in using National Health Card as a unique identifier due to distinct national and municipal databases	●	
Data security and digital certification	●	

¹ Accenture’s 2016 Consumer survey on patient engagement in Brazil



Competition of internal projects and limited interest in sector-wide collaboration are identified as the main obstacles to the successful implementation of digital initiatives. This is partly due to the way technology teams are structured, with many responsible for both day-to-day work and innovation. As such, maintaining and upgrading legacy systems often take priority over initiatives that can be regarded as non-core to the day-to-day running of a hospital or clinic.

Such a mentality is similarly apparent in the lack of effort to develop an integrated approach to digital healthcare: a patient is the focus of attention and care only when on-site. Many healthcare providers are therefore uninclined to think beyond their own interaction and responsibilities to the patient.



HYPOTHESIS 2

CIOs need to get stakeholders, and especially doctors, on board for digital health

Finding: Beyond enabling the upgrade of legacy systems and efficiency gains, digitalisation of channels is often regarded as part of an “agenda of innovation”.

Effective stakeholder management is critical to ensure CIOs can move beyond day-to-day operational management

All CIOs confirmed varying levels of authority and independence to pursue their own agendas. Some are part of the management team, and set their own agendas accordingly; others see their role as primarily functional and organisational.

Areas beyond day-to-day responsibility – such as server and system maintenance – can often be regarded as “not mission critical”. As such, the digitalisation of channels is often regarded as part of an “agenda of innovation”. The board’s question with respect to digitalisation is therefore: “What equipment and who pays?” This means that digital solutions often embed significant compromises.

This is also due to limited efforts at effective stakeholder engagement: in the private sector, not enough effort has been made to involve doctors in decision-making, ensure the adoption of new required skills, and provide the board with a clear value proposition for investigating new areas of digital. As one CIO commented, “There is a preoccupation with new services; however, new services without a simultaneous focus on integration and stakeholder management tends to translate into money poorly spent”. This was supported by another CIO observing that, “More than lack of money, our problem is the need to do several relevant tasks at the same time. It is difficult for our stakeholders to define priorities and stick to them.”

This is not to suggest that doctors are not involved in product development. The CIO survey found that small groups of doctors are often involved in product development; however, information sharing between doctors and technology can be poorly structured and lost in translation, while doctors often provide feedback only after the first product iteration. This suggests that digital healthcare will become more effective as the doctor-technology relationship matures. In this sense, the public sector is more advanced. Doctors are involved as partners from conception to clinical systems deployment.

Importantly, doctors seem open to further engagement if solutions are well structured. However, particularly at conception stage, it can be difficult to demonstrate the value of technology; once the value is understood, doctors and patients are open to the use of digital platforms, as also confirmed by other surveys.²

CIOs underscored the need to develop technological skills and capabilities from within the organisation. It is therefore crucial to foster a culture of familiarity among those who use the technology most widely. To this end, having clinicians be evangelists for digital transformation is one of the keys to success. Much of this interaction will pass through the CIO function, which highlights the importance of effective training and stakeholder engagement.

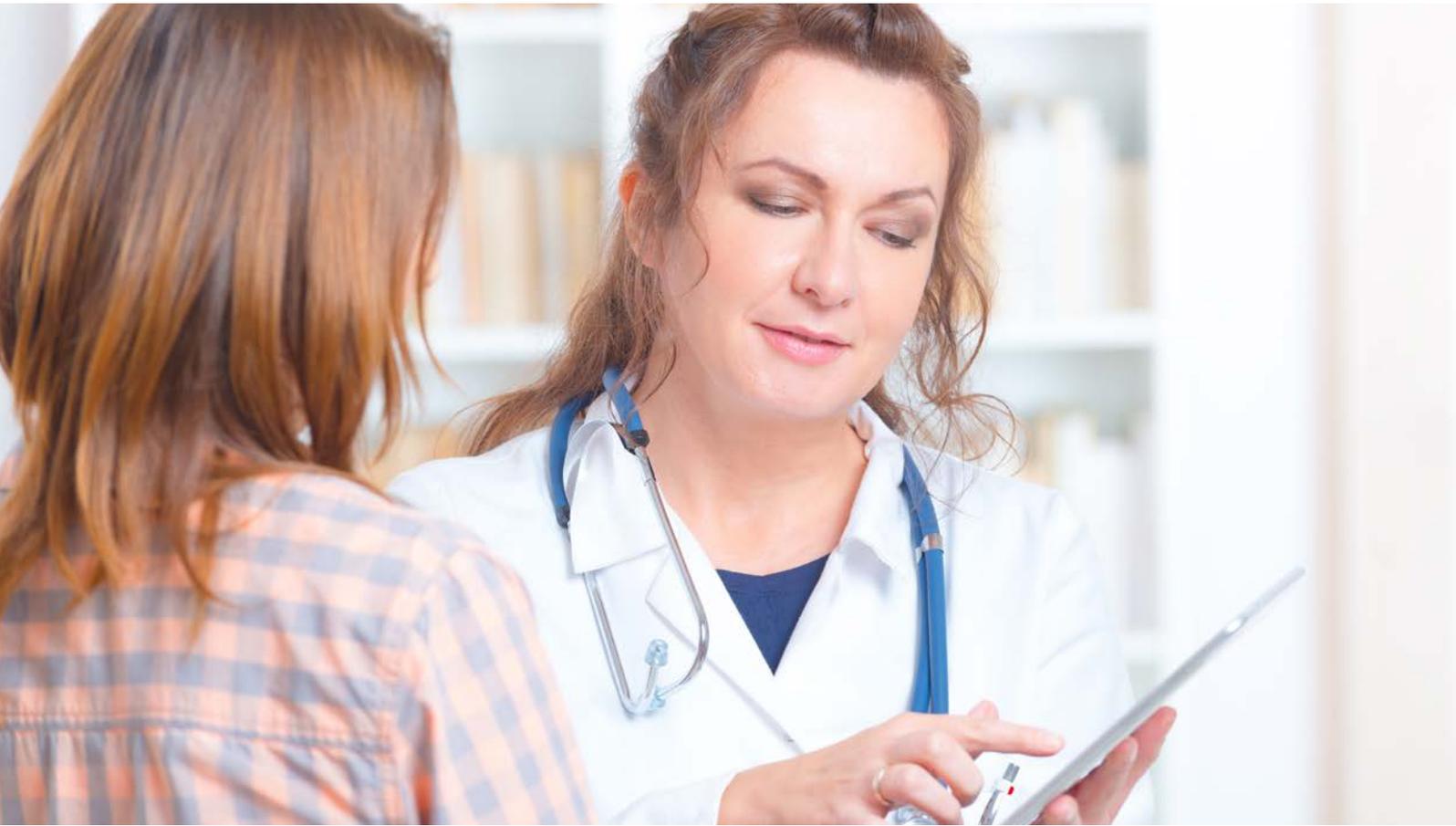
By contrast, there was also concern that some staff is unable to get up to speed quickly enough with new working processes and applications. To counteract this, CIOs must be able to communicate effectively, both up and down the organisational ladder, with people who are less technologically literate. Finding this level of communicative skills within informatics departments is a major challenge, but nurturing these skills is worth the investment.

No CIO we interviewed is aware that their institutions provide any form of financial incentive to promote adoption. Incentives are instead based around relationship programmes for requesting doctors, including concierge channels and quicker access to patient information. There is also support from the board for training and the use of information technology.

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² Accenture’s 2016 Consumer survey on patient engagement in Brazil, Accenture’s 2015 Doctors survey in Brazil



HYPOTHESIS 3

CIOs need to take on a new role, adopt new skills and get resources to lead a successful digital health transformation

Finding: The Brazil survey found two faces of CIOs: digitally-orientated operational experts with no healthcare background and healthcare experts with an operational focus.

Two types of healthcare CIO

Digitally-orientated operational experts with no healthcare background are especially prevalent in the private sector. These individuals are recruited from outside of the sector and, they are focused on delivering and maintaining effective technology services to the organisation. They tend to be less concerned with consumers' growing digital health demands, both within and outside their organisations.

- **Operational focus:** For example, keeping legacy systems up-to-date and available, thinking about resilience and security of the IT estate, implementing core systems for the organisations and delivering Wi-Fi.
- **Productive and allocative efficiency focus:** ROI, value-based purchasing, consistency of service, turnover times.
- **Limited focus on health outcomes:** For example, patient satisfaction surveys, feedback loops and clinical outcomes did not feature as priorities. This is underscored by the current initiatives in the sector.
- **Innovation:** They tend to spend less time exploring the opportunities offered by digital health due to focus on day-to-day work.

Healthcare experts with an operational focus who tend to preside in the public sector. They think more holistically and spend more time considering how technology can be an enabler of innovation and transformation. In addition to their sector expertise, these individuals can think more holistically because of their overarching responsibility towards public health in Brazil, which necessarily implies three spheres of government (city, state and federal spheres).

- **Operational focus:** For example, keeping legacy systems up-to-date and available, thinking about resilience and security of the IT estate, implementing core systems for the organisations and delivering Wi-Fi.
- **Productive and allocative efficiency focus:** ROI, value-based purchasing, consistency of service, turnover times.
- **More focus on outcomes:** For example, patient satisfaction surveys and feedback loops feature as ongoing features of service process and development; as well as assessing clinical outcomes or comparing the efficiency and effectiveness of care plans.
- **Innovation:** Relationships with universities and other institutions mean that a combination of research, teaching and care drive innovation.

For recruiting digital talent, look outside healthcare

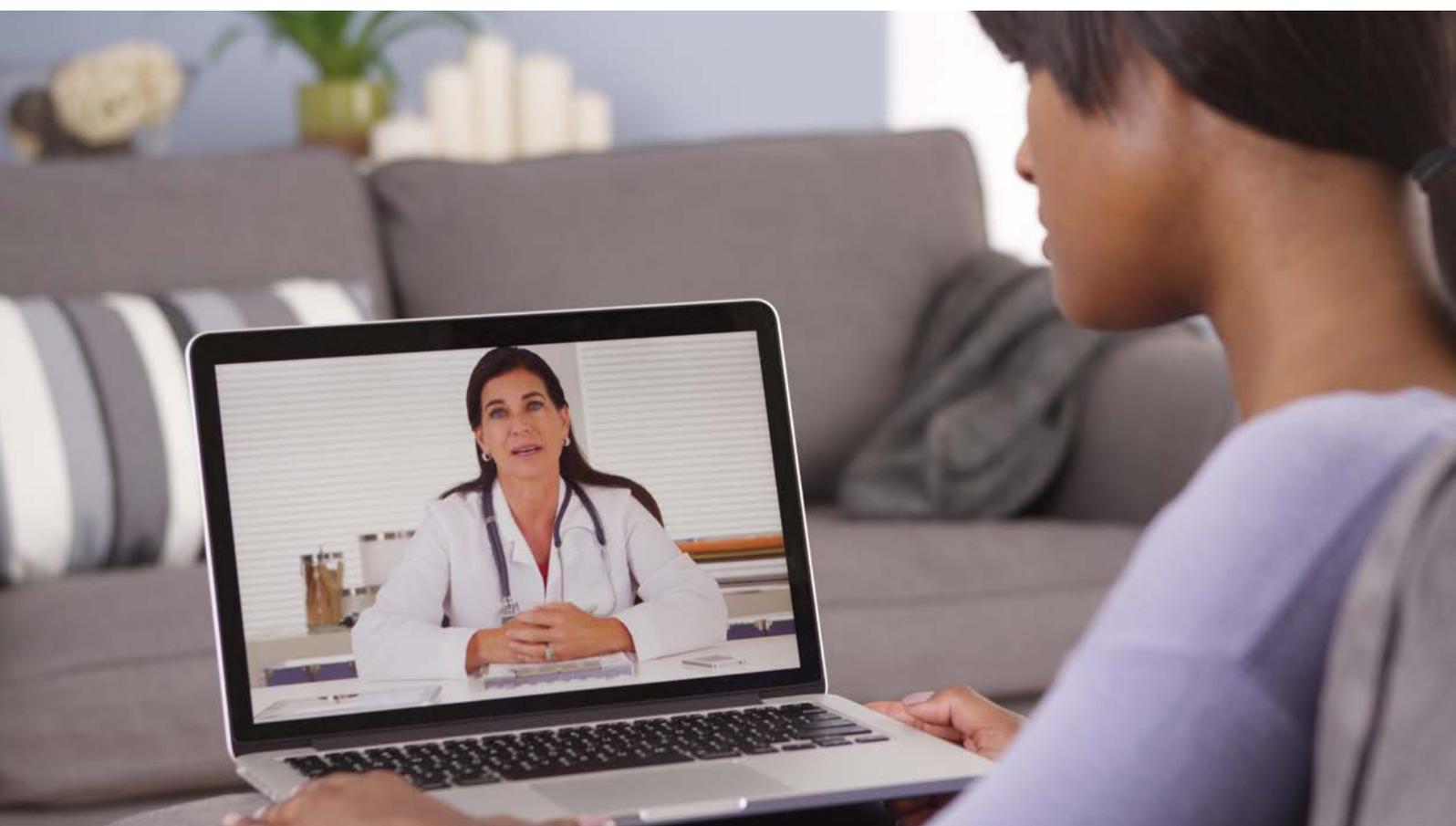
The survey found that CIOs are in senior positions, including at board level, and are required to participate in decision-making at various levels across the organisation. In such positions, CIOs normally receive requested budgets and are responsible for managing large internal teams, with the ultimate objectives of:

- providing well-implemented technological solutions to support growth; and
- addressing external demand for digital delivery.

From an implementation point of view, private hospitals often recruit externally in sectors that are regarded as more digitally advanced and, therefore, better able to introduce best practices. These individuals tend to be recruited for senior positions with a mandate to manage large internal teams. While these teams provide significant capacity, they can limit a CIO's ability to contract the most appropriate expertise on a project-by-project basis.

Technology team structures can therefore present practical obstacles with respect to the future of digital. These teams are focused on day-to-day responsibilities and, therefore, frequently lack both the time and strategic expertise to consider areas of innovation and best-practice patient needs. As such, CIOs are more inclined to develop digital solutions in stages rather than risk overreaching.





CONCLUSIONS

As the healthcare landscape is transformed towards a digital future, the position of the CIO is undergoing a similar transformation. Across the survey, CIOs were united in their belief that their role was, at its core, an executive role, with a focus on efficiency and process enhancements, as well as a broader agenda for innovation and change. However, to ensure an agenda of innovation and change – a relatively new addition to their responsibilities – CIOs must wear several hats; as innovators, change managers, executive decision-makers and business leaders.

CIO SURVEY - GEOGRAPHIC COVERAGE





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