



TOWARDS A CLEVER AUSTRALIA INDUSTRY INSIGHTS WHITEPAPER

HEALTH

IT'S HOW
WE CONNECT



TANYA FELTON

National General Manager, Health Industry Development

Email – tanya.felton@team.telstra.com

Contact number – (02) 8576 9980



Tanya Felton is National General Manager, Healthcare for Telstra Enterprise and Government team.

She has an extensive background in healthcare with a focus

on technology and a passion for smarter, connected hospitals and health systems.

Since 2011, Tanya has worked to build presence, profile and drive adoption of Telstra solutions across the Australian health care market. She is currently engaged in two innovation projects that that will help clinicians connect to a rich suite of clinical data and images that support delivery of high quality healthcare in a variety of care settings.

Prior to joining Telstra, Tanya worked across a breadth of disciplines in the health care sector in Australia, South East Asia and North America.

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OVERVIEW

INTRODUCTION AND OVERVIEW

For the past five years, Telstra has been measuring the productivity of Australia's largest companies. The resulting reports provide a fascinating insight into the types of initiatives leading organisations are undertaking and the benefits they are achieving.

In the healthcare sector, productivity is particularly important. As demands on the national system increase, providers are being forced to find ways to deliver more within constrained budgets.

The situation is exacerbated by the increasing range and cost of diagnostics, medical procedures and medicines. Advances in medicine have led to the ability to diagnose problems and perform procedures that previously would not have been possible. However, many of these are complex and require expensive equipment and post-operative care. Medical budgets are simply not keeping up with technical advances.

This is not to say medical organisations are avoiding technology spend. Large amounts are being invested in the underlying IT infrastructures that support hospitals and other facilities. Spurred by initiatives such as electronic patient records, organisations are installing or upgrading everything from bedside terminals and centralised data stores to the networks that connect them.

However, while the usage of IT is being extended, interoperability can often become a problem. This is particularly the case where legacy systems need to be able to connect with new applications.

However the situation in Australia is far from bleak with the country enjoying a robust and (on the whole) well-resourced healthcare system.

National health expenditure is significant. According to the most recently released national research, in 2009/10, the country spent \$121.4 billion on healthcare, up from \$72.2 billion a decade earlier. This represented 9.4 per cent of total spending on all goods and services and was an increase from 7.9 per cent a decade earlier.¹

Between 2000 and 2010, real growth in national health spending has averaged 5.3 per cent per year. This compares with an average annual GDP growth of 3.1 per cent² and is evidence of strong public commitment to the sector.

¹ Australian Institute of Health and Welfare: Australia's Health 2012 report (p 468)

² Australian Institute of Health and Welfare: Australia's Health 2012 report (p 8)

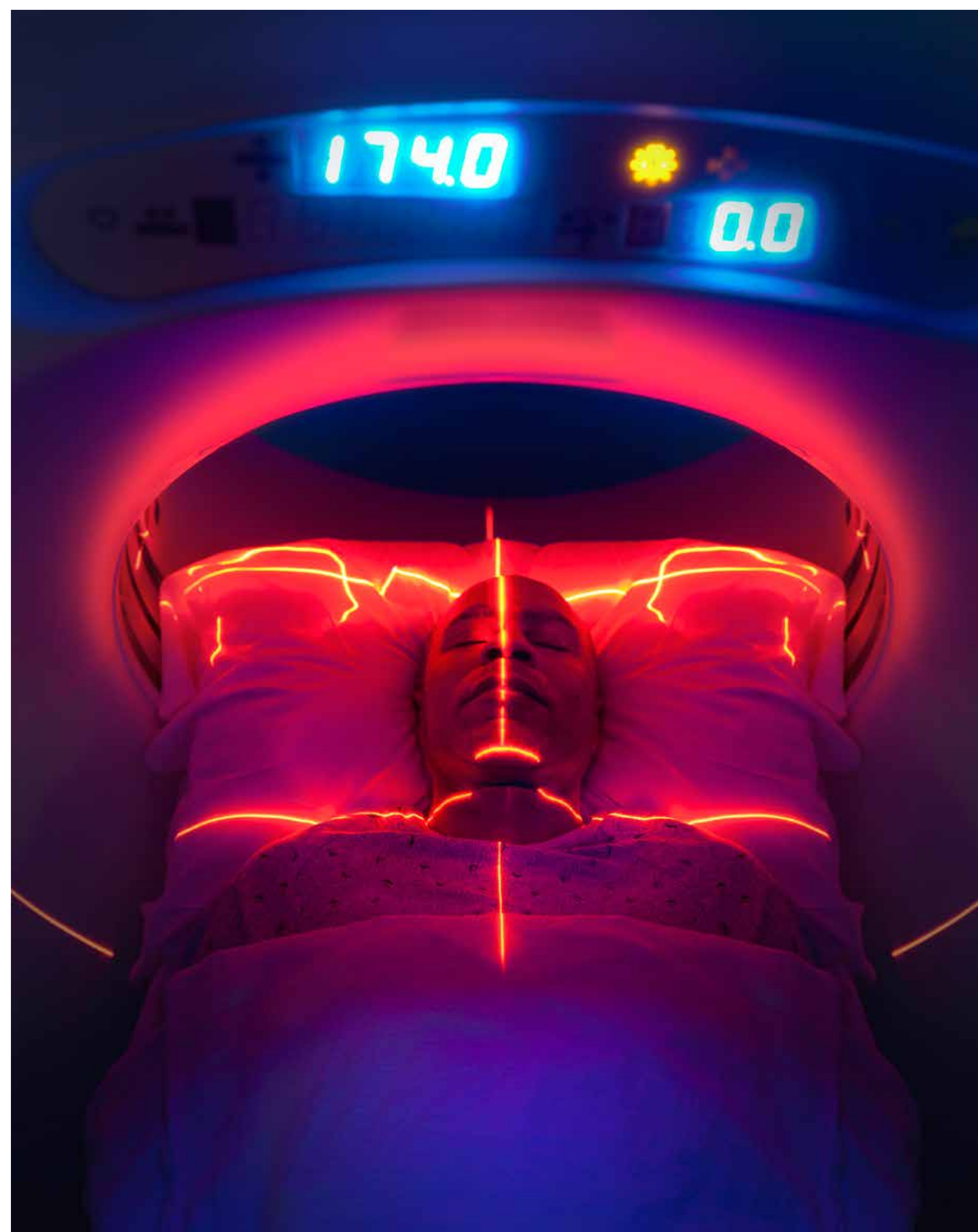
Australians also enjoy one of the highest life expectancies in the world. The average male lives for 79.5 years while the average female will live to age 84³. Much of this is attributable to the high standard of available healthcare.

Australia's pharmaceutical sector is also healthy. In 2011, it ranked as 15th largest in the world and generated revenues of approximately \$22 billion⁴. A strong research and development culture will ensure it remains vibrant and productive in coming years.

Yet, despite these encouraging indicators, there remains work to be done. As the country's population ages, demands on the healthcare system will continue to grow. With funding remaining constrained, the only alternative is to increase the efficiency and productivity of existing assets.

The pressures are already becoming evident. Among older Australians living in the community in 2009, almost half (49 per cent) aged between 65 and 74 years had five or more long-term medical conditions. This figure increased to 70 per cent of those aged 85 years or older.⁵

The lack of sufficient resources in regional and remote areas of the nation is also a constant challenge. Because of Australia's vast distances and dispersed population, the availability of on-the-ground healthcare facilities will always



be an issue. While solutions such as tele-health can assist with this challenge, there is still resistance among some healthcare provider organisations to fully embrace such tools.

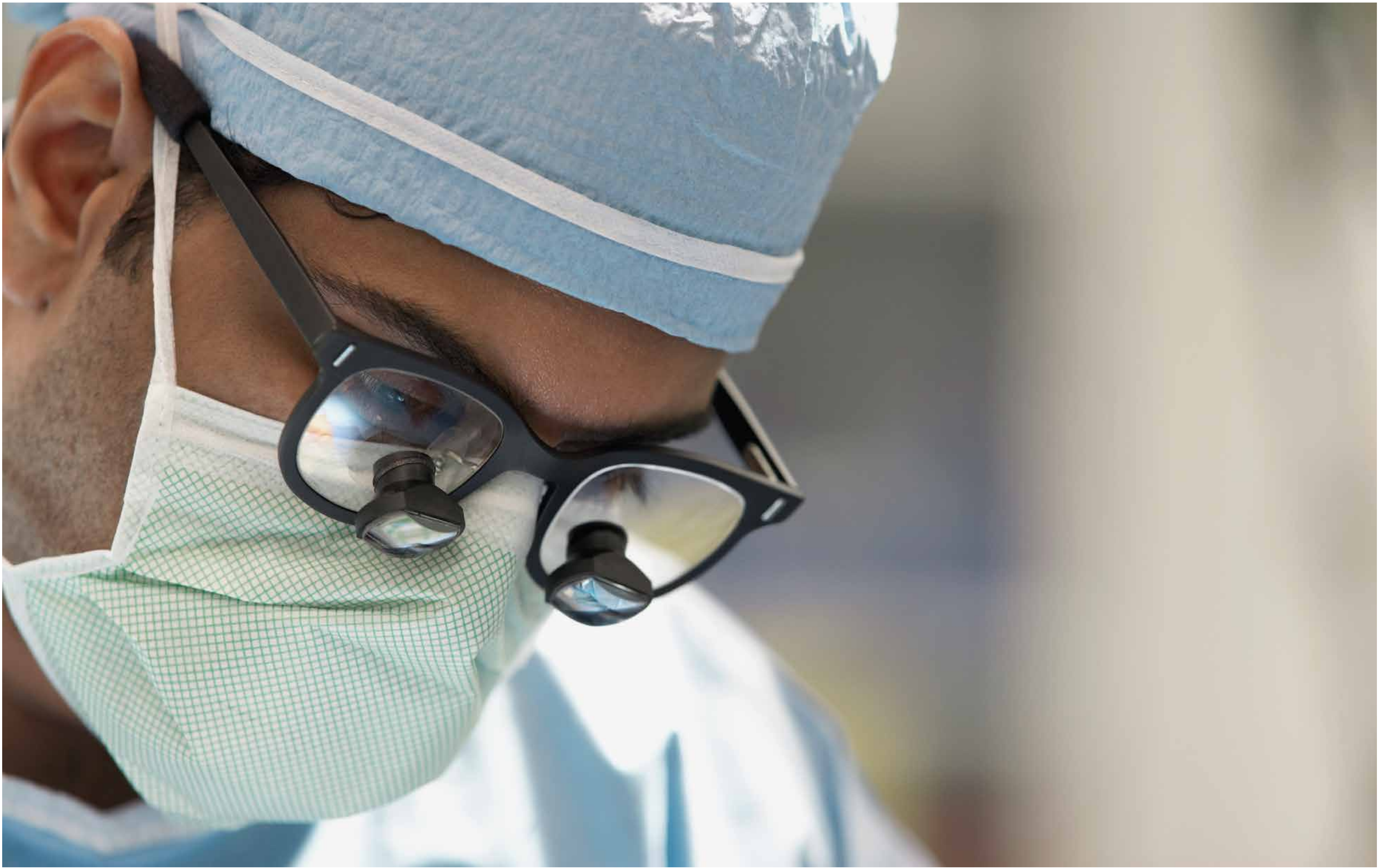
From a technology perspective, there are vast opportunities offered by a range of advances and existing services. Electronic patient records and the use of mobile communications tools for patient monitoring, diagnosis and treatment have great capacity to add value. So too do services that allow a doctor to examine and diagnose a patient from a remote location.

Encouragingly, health facilities around the country are investing large amounts in improving their underlying technology infrastructures to support these emerging initiatives. They recognise IT is fundamental to ensuring medical staff can be as productive as possible and provide the very best in patient care.

3 Australian Institute of Health and Welfare: Australia's Health 2012 report (summary section)

4 <http://www.adroitpeople.com.au/australia-industry-analysis-2012/>

5 Australian Institute of Health and Welfare: Australia's Health 2012 report (p9)



But while progress has been made, it seems there is still room for improvement. According to a recent international survey (2012), 92 per cent of Australian GPs were using electronic patient records, however this had dropped from 95 per cent in 2009.⁶ While the reasons for this decline are unclear, it demonstrates there is no room for complacency.

The same survey found that less than a quarter of Australian doctors said their patients could use email to contact them about medical questions or concerns. And, when a patient is seen by a specialist, their GP receives all the relevant information (including information about changes in the patient's medication), only one-third of the time.⁷

On the electronic medical record front, a surprising volume of patient data is still captured and stored in paper format, leading to inefficiencies and the potential for data loss. Adoption is also being constrained because there is yet to be a recognised national format for electronic patient records.

Overall, the organisations within the health sector that will be best positioned to deliver quality patient care during coming years will be those that use productivity initiatives to achieve more than ever before - to achieve 'Clever Growth'.

6 <http://www.canberratimes.com.au/opinion/gps-are-being-asked-to-take-up-thy-mouse-and-coordinate-20121120-29of8.html#ixzz2DaOcvmAy>

7 <http://www.canberratimes.com.au/opinion/gps-are-being-asked-to-take-up-thy-mouse-and-coordinate-20121120-29of8.html#ixzz2DaOcvmAy>

A SMART SHEET

A SHIFT TO CLEVER GROWTH

The concept of growth is changing. Where once it was measured simply in terms of rising revenues, it is now increasingly being seen as something that's intelligent, efficient and sustainable. It's not growth simply to get bigger, but growth to get better.

At Telstra, we term this as 'Clever Growth'. It encompasses not just increases in revenue but also productivity improvements and capability enhancements.

As part of the research for this year's Towards a Clever Australia report, Telstra conducted interviews with more than 1000 private and public-sector organisations. In-depth interviews were conducted with senior decision makers to gain an understanding of how their organisations were performing and the plans they have in place to improve this performance in the future.



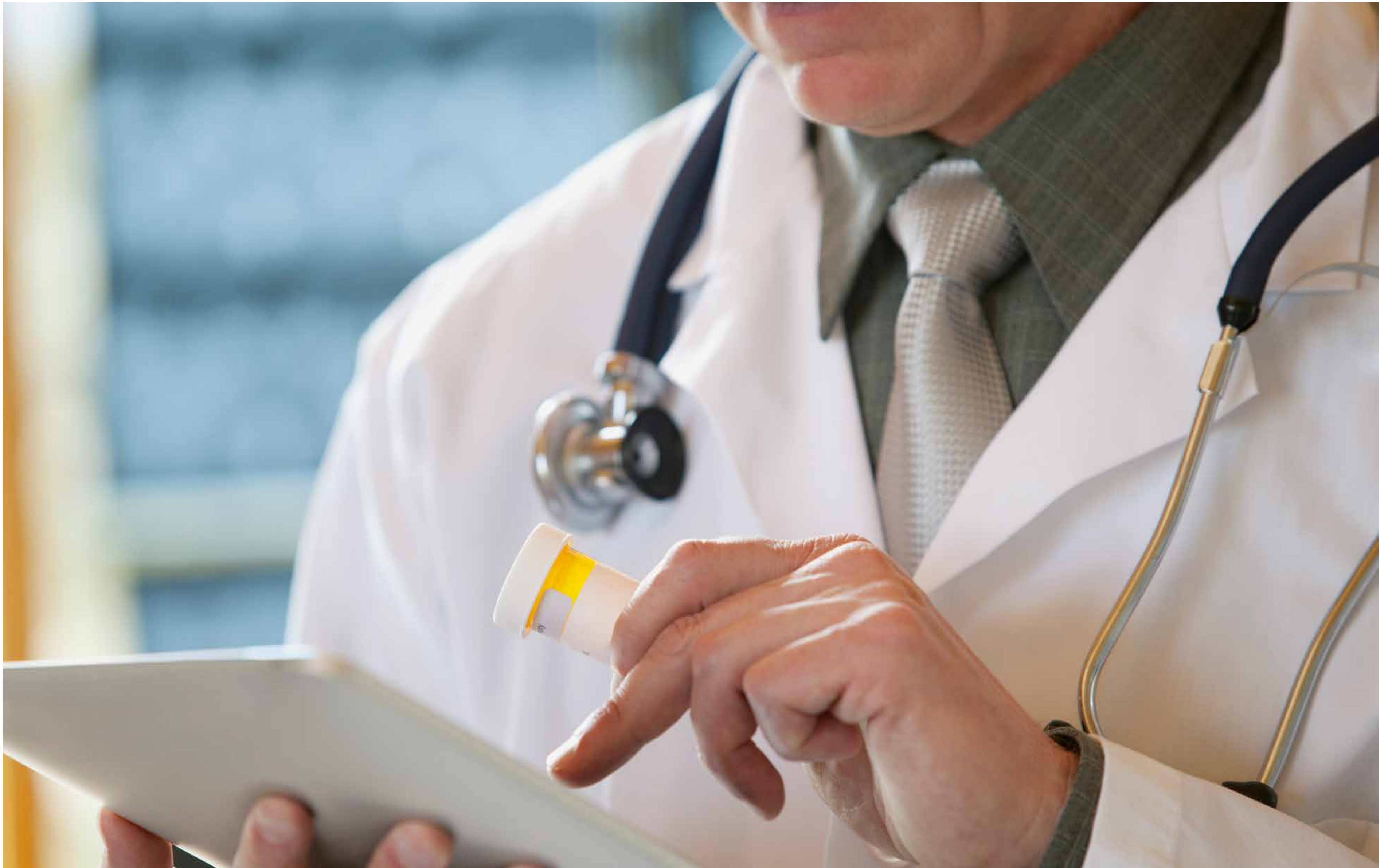
The result is a fascinating insight into Australia's corporate behaviours, attitudes and investments. It provides a clear picture of where our surveyed organisations are positioned when it comes to achieving the goal of Clever Growth.

Careful analysis of the research has identified three specific groups of organisations that co-exist within our national business landscape. Each group shares specific attributes and, importantly, specific modes of operation.

Telstra calls the first group 'Productivity Leaders' (Leaders). Its members comprise those organisations that both measure their productivity and have achieved substantial improvement to it during the past year.

The second identified group has been called 'Productivity Followers' (Followers). Members of this group, either don't measure their productivity or have not achieved substantial improvements to it during the last year.

For the first time this year, the research has identified a new group. Called 'Growth Champions' (Champions), members of this group have measured and achieved substantial productivity improvements during the past year while at the same time enjoying substantial growth.



Interestingly, just 5 per cent of all Australian organisations surveyed are members of this third group. While almost all sectors are represented, retail comprise 18 per cent, manufacturing comprise 12 percent, banking and finance comprise 10 per cent and health-sector organisations 13 per cent respectively.

Organisations in the Growth Champions group share specific characteristics:

- They are more likely to report being focused on customer satisfaction and achieving success in this area. This applies to 58 per cent of Champions compared with just 36 per cent of those organisations in the in the Leaders category.
- They report that effective employee collaboration is absolutely key to achieving Clever Growth. This was nominated by 100 per cent of Champions compared with 88 per cent of Leaders.
- They report investing more than other organisations in high-speed networks, sophisticated analytics and IT infrastructure performance to deliver growth. The research found that 88 per cent of Champions have invested in improving network speed and coverage compared with 70 per cent of Leaders.
- Champions recognise that achieving sustained productivity and growth is not a one-off task that can be completed and ticked off a corporate 'to-do' list. Instead, they understand that achieving Clever Growth requires an organisation to follow a process of constant evolution. Operations must be continually reviewed and revised to ensure they represent best practice and provide the support needed to meet pre-determined goals.

CLEVER GROWTH

CLEVER GROWTH IN HEALTH

Achieving Clever Growth is particularly relevant in the health sector. Increasing demand for medical care and the constant search for new treatments has pushed productivity improvements to the fore for many organisations.

Pressure is also being applied in the form of a move to funding based on achieving prescribed targets. This trend means providers must ensure they are being as productive as possible with the funds they have available.

Added to this is the increasing need to provide healthcare services to people in their own homes. It is being recognised that allowing people to remain at home not only reduces demand for hospital beds but in many cases can aid in reducing recovery times. While the cost and social benefits of this are significant, it requires a fresh approach to exactly how care services are delivered.

At the same time, there is also a push to keep people out of the healthcare system in the first place. While it perhaps sounds counterintuitive, the most successful health services organisations of the future are likely to be the ones that provide the type of support that reduces patient reliance on their offerings.

The introduction of larger numbers of mobile health workers is a classic example of how this goal can be achieved by Growth Champion organisations. By providing care services away

from existing facilities, patient demands can be met while operational costs are controlled. Although such an approach requires up-front investment in supporting infrastructure (such as mobile terminals and communications links), the long-term benefits will be significant.

Interestingly however, Telstra's research has found that only a relatively small proportion of organisations in the sector are Growth Champions. Of those surveyed, just 8 per cent were members of this group⁸. Of those remaining, 21 per cent are defined as Productivity Leaders while the remainder (71 per cent) fall into the Productivity Followers category.

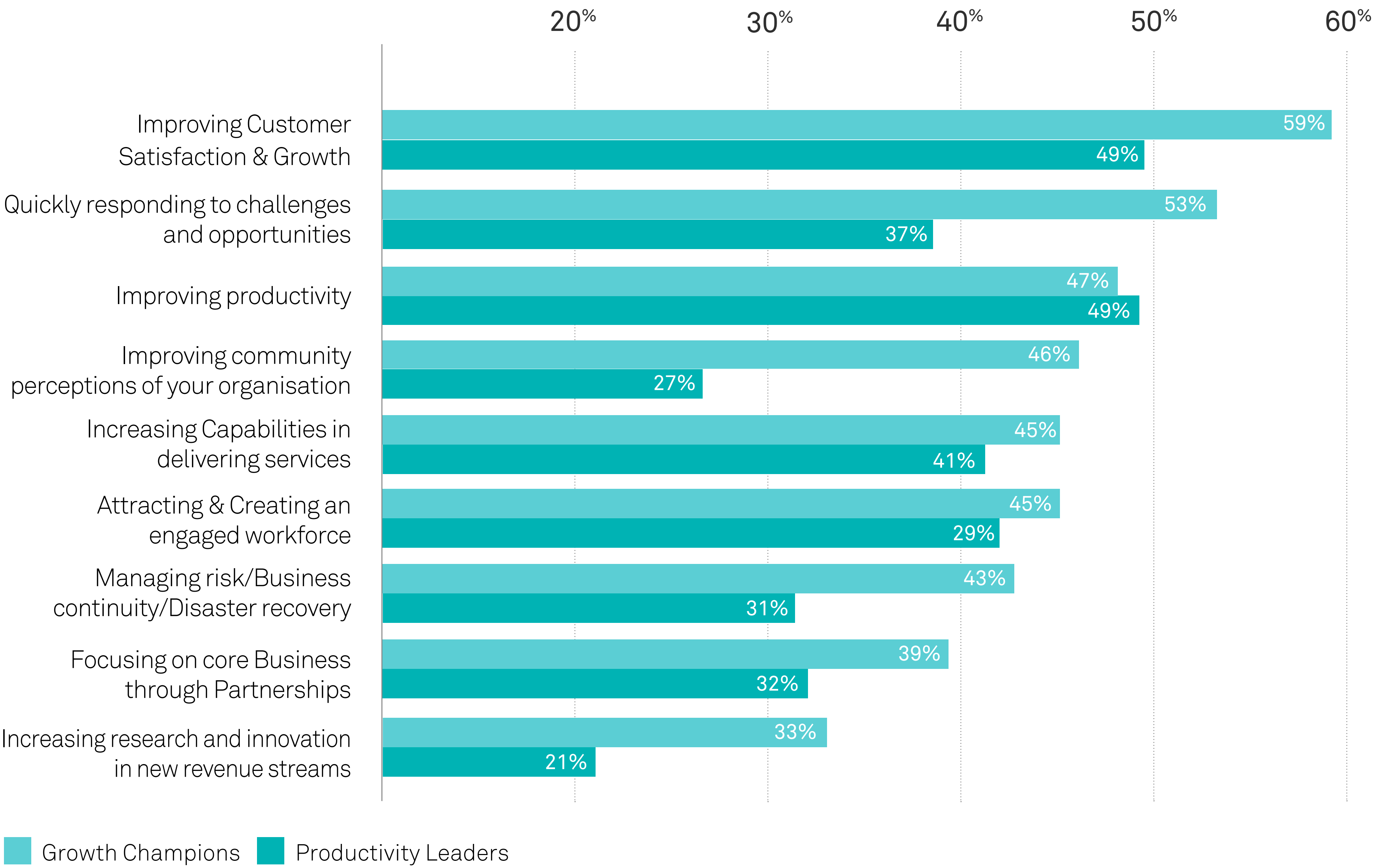
These results show there is significant scope for improvement when it comes to achieving Clever Growth in the Australian healthcare sector.

The Telstra research does show that the Australian health sector organisations achieving Clever Growth, like their counterparts in other industry sectors, are focused on a number of key initiatives including:

- Improving customer experience and satisfaction (where 'customers' are patients and their families, medical professionals and health administrators)
- Quickly responding to challenges
- Improving productivity

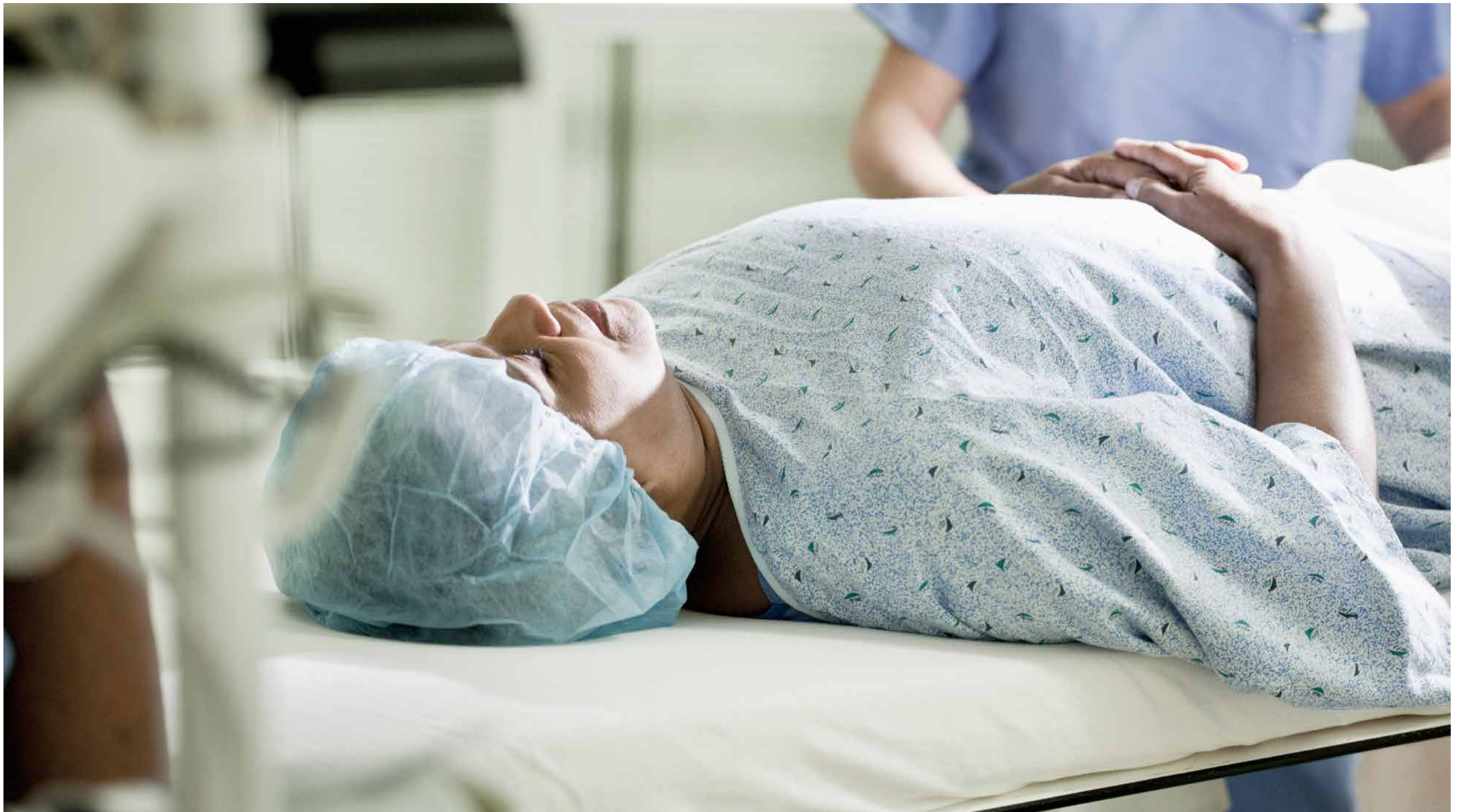


CHART 1 – STRATEGIES THAT LEAD TO GROWTH



Base: Growth Champions and Productivity Leaders who rated growth as a medium - major priority (n=190)
Note: Chart shows the percentage of organisations that rate a strategy as very important

IMPROVING CUSTOMER (PATIENT) EXPERIENCE AND SATISFACTION



Faced with the conflicting forces of finite budgets and growing workloads, many health providers are seeking ways to improve the delivery of services. For many, this means identifying ways in which staff can be more productive and thereby better meet the needs of patients within existing financial constraints.

Often this can involve the provision of services outside traditional facilities. Rather than requiring patients to travel to a central care facility, tools such as video conferencing links can be used to provide care within the home or a regional or remote health centre.

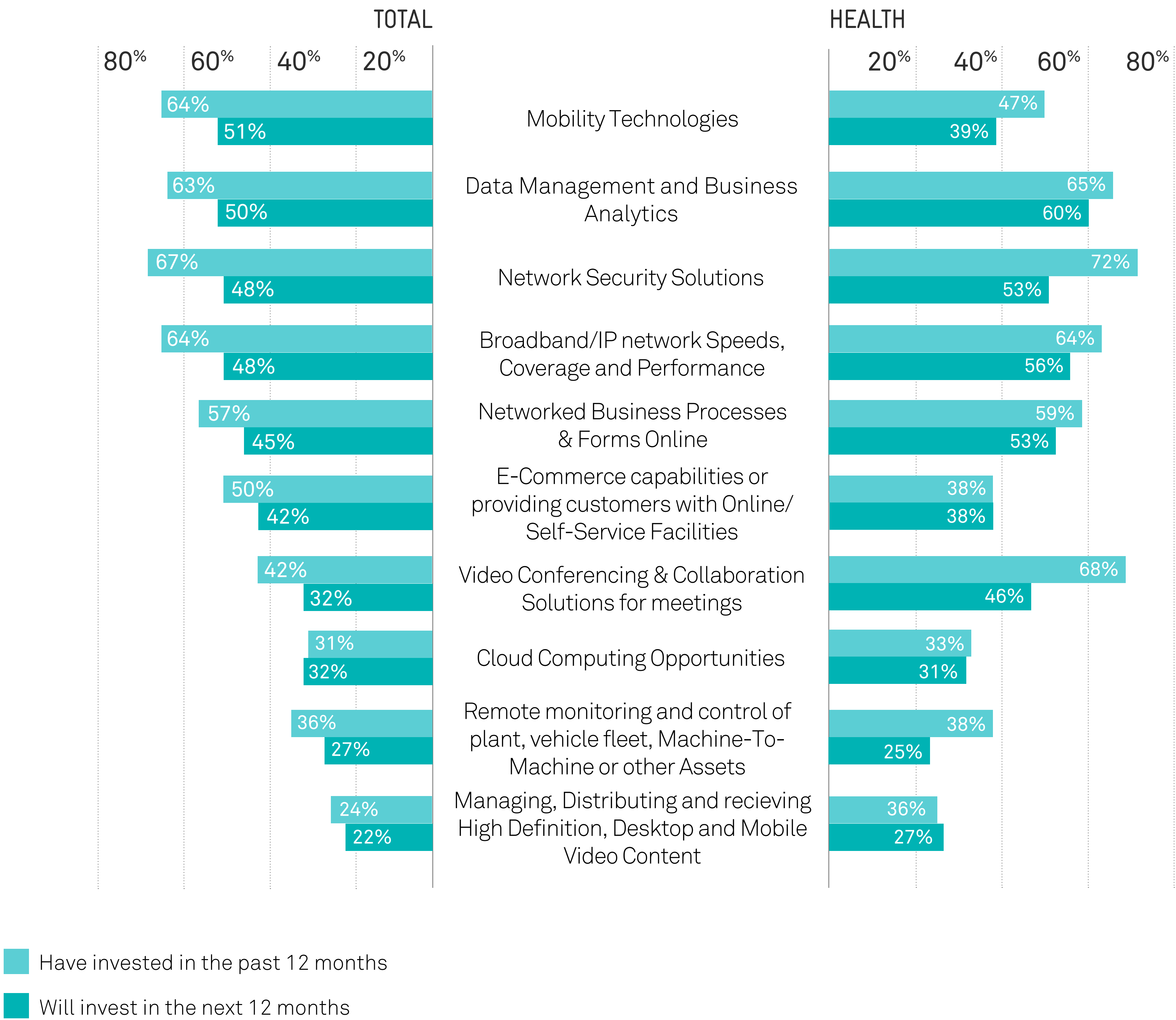
The clear benefits of this approach have already resulted in significant investments by some health organisations in video conferencing and collaboration systems. According to Telstra's research, 68 per cent of health sector organisations report having invested in this area

in the past 12 months and 46 per cent plan to do so in the next year.

Allowing staff to operate outside central facilities, by equipping them with mobility tools, is also increasingly important. Of those surveyed, 47 per cent report having invested in this area in the past year and 39 per cent indicated an intention to do so in the next year.

Networking and data management are also key priorities for health organisations as they deal with the rising volume of digital information and the need to ensure efficient access to patient records and medical results. Those achieving Clever Growth report allocating investments to this area.

CHART 2 – TIMING OF ICT INVESTMENT



Base: All Private and Government organisations (n=1060) and Health (n=67). (Data excludes ‘don’t know’ responses).

QUICKLY RESPONDING TO CHALLENGES

Medical technology and the methods by which healthcare is delivered are changing rapidly. Procedures that would once have been impossible or prohibitively expensive are now considered routine.

As a result, healthcare organisations must be in a position to quickly change their internal processes and the ways in which care is delivered to meet increasing patient expectations.

The quickly rising number of people requiring healthcare is another issue for the sector.

Telstra's research found that 36 per cent of healthcare sector organisations nominate rising customer (patient) numbers as a challenge, compared with 19 per cent in the wider survey group.

At the same time managing risks has also been identified by many organisations as a key challenge that must be quickly and continually addressed. The quality of delivered care, security and legal compliance are key examples in this area.

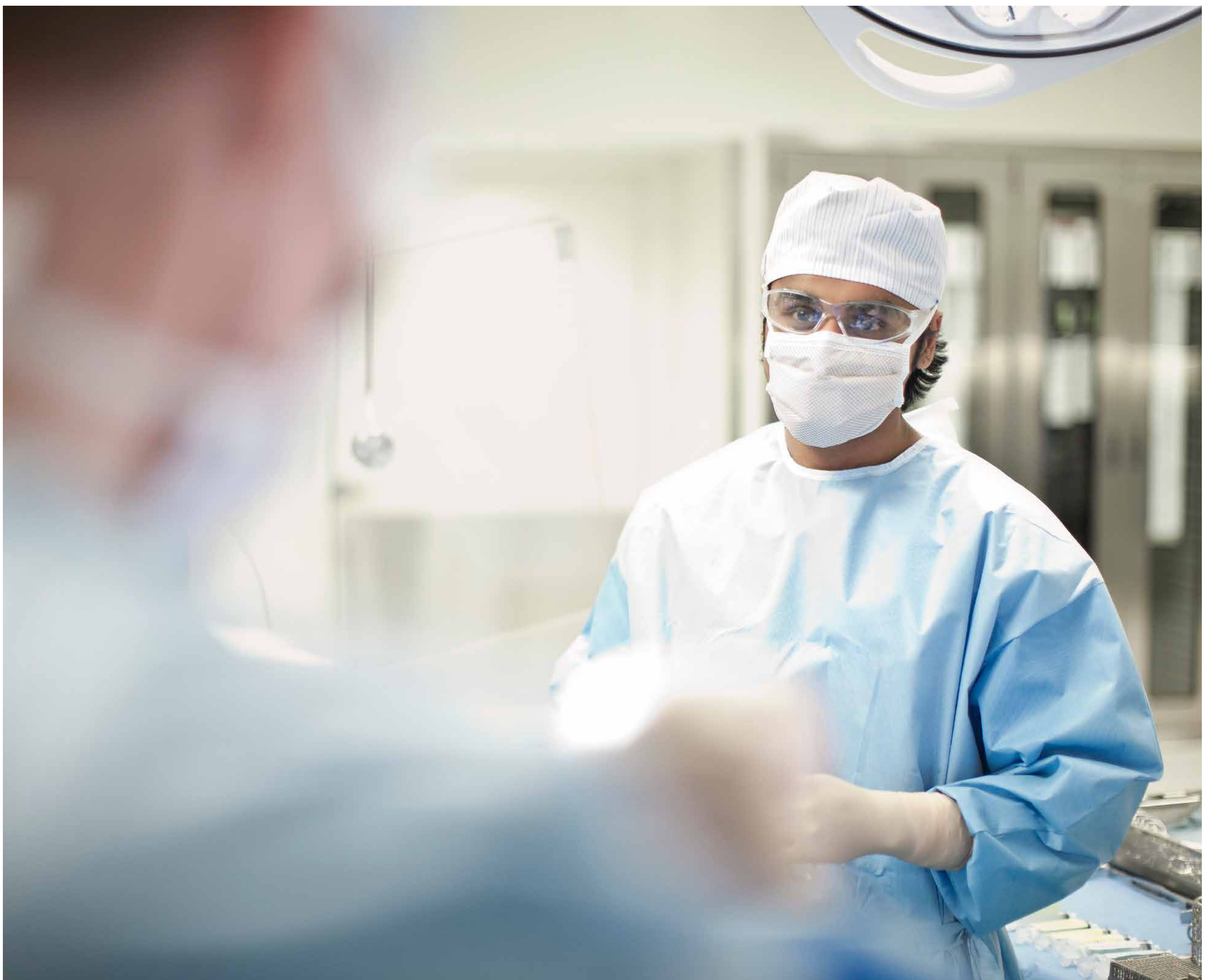
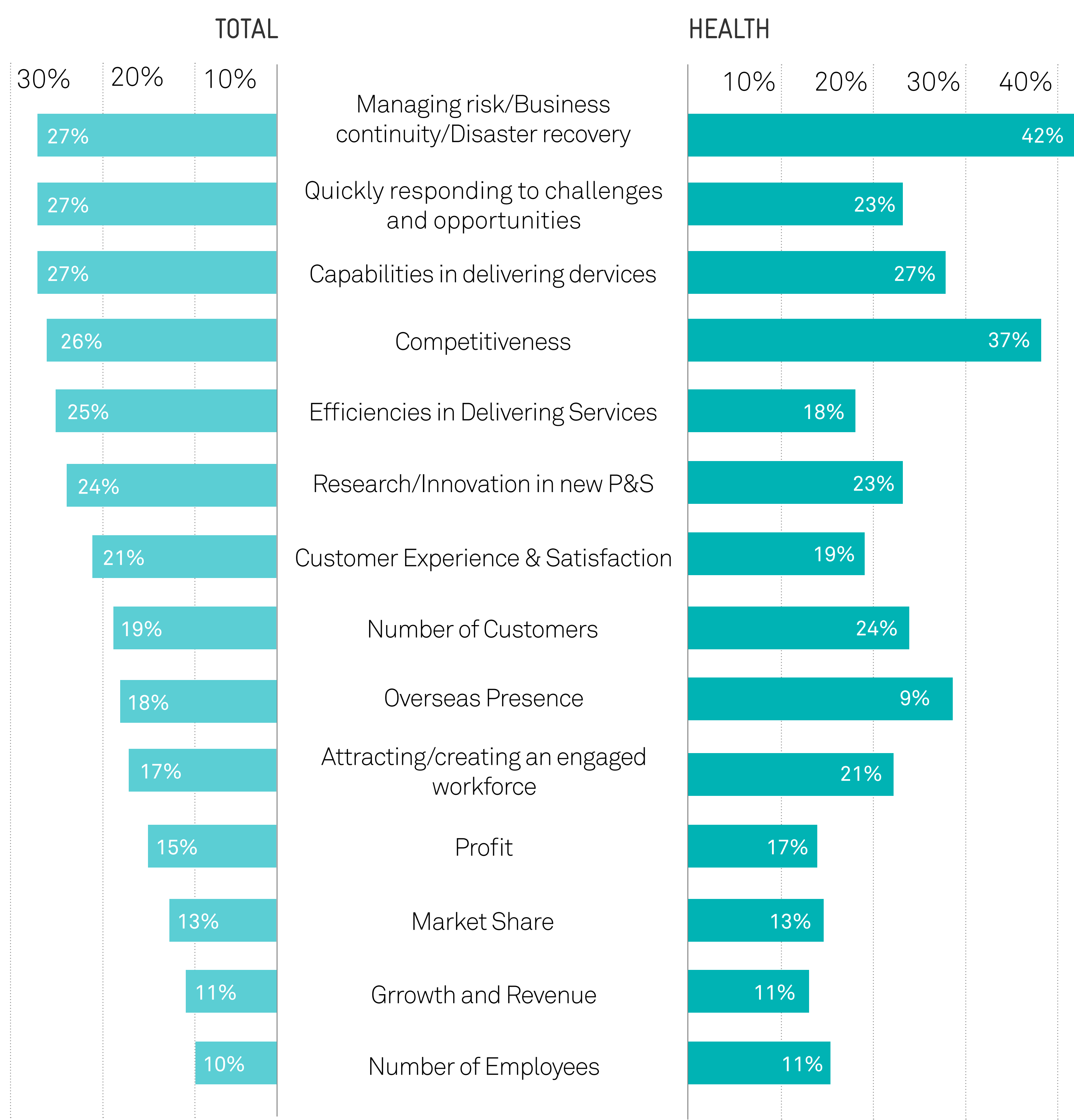


CHART 3 – THE SUCCESS IN ACHIEVING KEY ORGANISATION OBJECTIVES SUCCESS OVER LAST 12 MONTHS



Base: All Private Organisations (n=700) and Health (n=67).
Note: Percentage shown represents the percentage of respondents that increased a great deal/a lot.
(Data excludes ‘can’t say’ responses).

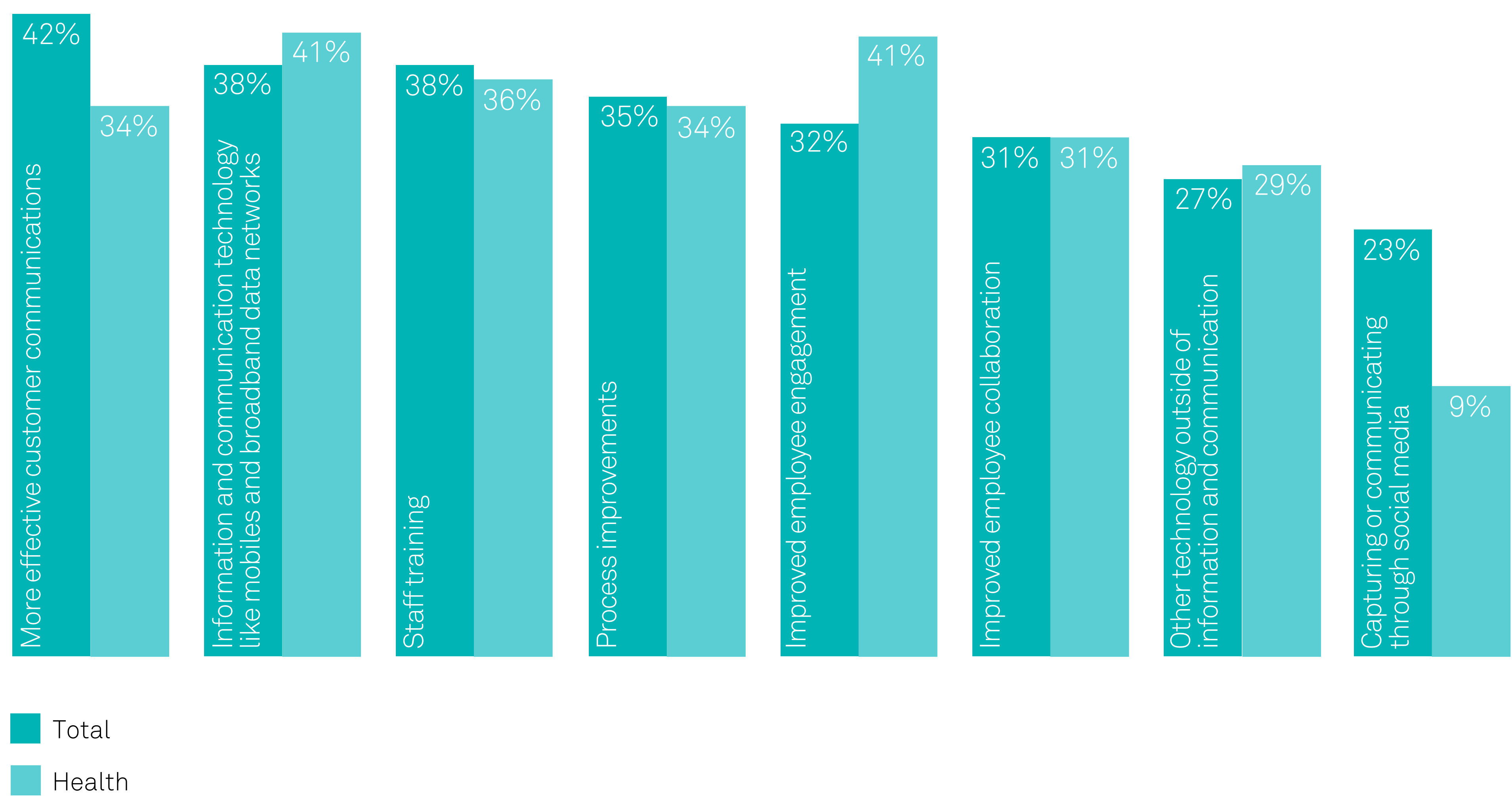
IMPROVING PRODUCTIVITY

The mantra of ‘doing more with less’ permeates the Australian healthcare sector. Despite increased allocations by state and federal governments, budgets have little hope of matching rises in demand for services. As such, it is vital organisations find ways to streamline their operations and achieve more with finite financial resources.

Here, technology has an important role to play. Increased usage of mobile and broadband data networks (nominated by 41 per cent of health organisations surveyed) is seen as a key method of achieving improved productivity.

Allied to this is a rapid increase in the use of video conferencing within the health sector. This communications technology is being used as an internal channel as well as a method of providing better access to services for patients in rural and remote areas. Many organisations expect usage of these technologies to become much more widespread during the next few years.

CHART 4 – PRODUCTIVITY IMPROVEMENTS FROM INVESTMENTS



Base: All Private and Government organisations (n=1060) and Health (n=67).
Percentage shown represents the percentage of respondents that rated the driver great deal/ a lot of improvement.
(Data excludes ‘can’t say’ and ‘not relevant to my company’ responses).

MEASURING PROGRESS

To achieve the goal of Clever Growth, it is important for organisations to measure the progress being made. The Towards a Clever Australia research shows organisations in the healthcare sector are more likely than not to have key performance indicators (KPIs) in place to measure their improvements in the area of productivity. Of those surveyed, 80 per cent said they had KPIs in place for this reason.

There is a strong correlation between measurement and success. Of those with KPIs in place, 25 per cent said their organisation’s productivity had increased ‘a lot’ or ‘a great deal’ (10 per cent) during the past 12 months. A further 38 per cent said it had increased ‘a moderate amount’ during the same period.⁹



HELPING OUR
CUSTOMERS

HELPING OUR CUSTOMERS

For Telstra, our goal of achieving Clever Growth is intrinsically linked with helping customers achieve the same objective.

As has been outlined in this white paper, the Australian health sector is already achieving well in this area with a world-class healthcare delivery infrastructure. More than 85 per cent of Australians have expressed confidence in how the healthcare system would serve them if they were severely ill.¹⁰

But there is no room for complacency. Telstra is working with its customers in a range of different areas to build on this success and help them achieve their goal of Clever Growth.

Examples include customers that are giving access to centrally held medical information in real time to mobile care providers, thereby

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ICT Manager, Health
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improving their efficiency and effectiveness. The provision of remote medical services also allows patients to remain in their local community and yet take advantage of medical expertise located in large cities. Telstra Virtual Trauma Care is an example of these capabilities.¹¹

Many hospitals are also streamlining their administrative processes, reducing costs and ensuring the maximum proportion of budgets can be allocated to patient care.

At the same time Telstra is also working to ensure vital networks and infrastructures remain secure, protecting the privacy of patients and ensuring reliable access to needed information.

As an example, Telstra is working with the Ambulance Service of New South Wales to roll out terminals that enable access to critical data in all NSW ambulances. The system used Telstra's Next G® network to transmit vital information directly to vehicles, improving the quality of care.¹²

The Loddon Mallee Health Alliance (LMHA) overcame the 'tyranny of distance' for their Virtual Trauma and Critical Care Unit by implementing a specially tailored Telstra MWAN solution. This enables metropolitan emergency departments to work in real-time with their rural counterparts, saving at least \$500,000 annually.¹³

10 http://www.menzieshealthpolicy.edu.au/mn_survey/Menzies-NousAustralianHealthSurveyReport2012.pdf

11 <http://www.telstra.com.au/business-enterprise/enterprise-solutions/industry-solutions/health-care/#tab-features>

12 <http://www.telstra.com.au/business-enterprise/resources-insights/case-studies/mobility/ambulance-service-of-nsw.xml>

13 <http://telstra.com.au/business-enterprise/resources-insights/case-studies/loddon-mallee-health-alliance-case-study.xml>

"CLEVER GROWTH IS ABOUT USING THE RESOURCES THAT ARE AVAILABLE TO PROVIDE THE VERY BEST STANDARD OF HEALTHCARE POSSIBLE. AS AUSTRALIA'S DEMOGRAPHICS CHANGE, THIS IS BECOMING INCREASINGLY IMPORTANT."

Tanya Felton – Telstra National General Manager, Healthcare



YOUR ORGANISATION

Telstra can provide support and guidance for health sector organisations that cover a range of critical areas. Solutions offered include:

- Managed Healthcare Service or MHS which is a comprehensive suite of service-based offerings enabling clinical access at the point of care, whether that is fixed point or mobile and wherever care takes place
- Telstra Bedside which allows medical professionals to access clinical applications and patient information from the hospital bedside
- Tele-health, which equips care givers with high-definition video conferencing facilities
- Adaptive asset management which automatically tracks valuable assets moving through an organisation in near real time with 100 per cent accuracy
- Network provision and management to provide reliable and scalable networking links to all parts of an organisation

For many customers, mobility is a particular area of focus. Properly equipped healthcare workers can deliver quality care to patients who are unable to visit centralised facilities. Telstra can provide solutions that allow access to centrally stored data and to the skills and knowledge of city-based experts reliably and cost effectively.

Telstra will continue to work with clients across the sector to improve their efficiency and promote Clever Growth.

YOUR CUSTOMERS

In the health sector, customers are patients and efficiently providing them with quality care is the primary objective of all organisations.

Telstra continues to work with care providers to implement new channels for service delivery. This includes initiatives such as tele-health and e-health as well as improving the infrastructures within care facilities.

The provision of high-speed, reliable and secure networks is also vital to ensure care professionals have access to the data and records they require to perform their work. In this area, Telstra is working with clients to maximise the benefits of both wired and wireless network links.

