future health index

South Africa

Market report
2016

Introduction

The Future Health Index (FHI) highlights the opportunities and barriers to a more connected and integrated form of healthcare that will better serve future generations. By measuring the attitudes and opinions of patients and healthcare professionals, this study seeks to identify key areas where digital innovation has the potential to improve not just the provision of healthcare, but overall health and well-being.

The FHI provides a benchmark for a country's readiness to meet some of the key healthcare challenges emerging globally. It measures readiness by examining perceptions about the accessibility and level of integration of healthcare services, and the adoption of connected care technology throughout national healthcare systems. It is based on the input and self-reported behaviors of patients and healthcare professionals throughout 13 geographically and developmentally diverse countries, including South Africa, which collectively produce a snapshot of how healthcare is experienced on both sides of the patient–professional divide.

It is a difficult truth that one of the greatest achievements of modern times — the overall global advance of public health — has created one of humanity's most pressing dilemmas. Around the world, healthcare systems are under strain as populations swell and grow older, helped by the extension of sanitation and medical services, as well as breakthroughs in technology and disease treatment. This report takes a closer look at the perceptions of South African respondents in particular, and their views on the South African healthcare system.

The FHI provides insights for conversations on ways to meet the emerging healthcare challenge, with a focus on increasing access to healthcare, integrating systems, and promoting the adoption of connected technology — all of which combine to enhance efficiency and outcomes.

To see the full 13-country research outcomes, please visit **www.futurehealthindex.com**

Foreword

Pore omnit et acius sint esto que recum faccullam que velit eossequi doluptat digendaectis molore, utatem et que volore re perumqui cones voluptaepero. Sum que ad magnam et volorem idebit et reptae volo dolo venihiciis andam in essiti ullit volum fuga. Udi blaborem fugia nobitat archil ipsae inteser estiumque earupti repersp erferio. Et endendebit fugit, ulluptam quiam rest, similla consendit posam nis et et perspere vitate qui bea sum, nullorerat.

Xeriaectumqui rehenis eosam eos a que idebit, occat pos rehendel magnatet unt aut eaquist, qui aut eum sequi idessinctet reptae aut esti quae. Ri dolorem doluptas as ut imus magnia nistrumqui cus dolo blabore cabores erferum ullorpore ipiendes erum versperi aciaeperio. Nam reped quodit aut videliq uossunt aut as sequo tempost iatur? Qui con cullorum ulpa arcidel ibeaque volenturepro que netur sam derate pe es modi ipidese nimolut quia conestiur aut accae sita eos doluptate et dolores iusa nienihil in pro omni namus.

Evendi testo quam et aute si que non rest ut harum di cus dercia dolore, ullaniene poreic torempor re dolorem rem velest, coressit dolorro quidem dolorepuda quo culpa acit expla perspic iatatis magnatibus.

Git accatibus, sequia quate volestion rerrori busdae pores audia deliquam, voluptae dolore es a duntusanimod quunt latur?Luptatem quuntia corehen daestio blatiis ius evelique venimil luptat.Mi, volorum quiae sitas maion ea pernatemos aut ape exeruptate inveratius vel ipsunt, ut ut essequae nobis natur?

Icius eum necaessi consent harum niet vent liasperum volorit laceperovid magnatatur, coreium ut aboreprecea simporest, qui ut eveniendant que veles es adit omnis solescium ate di quam, sum, conet accum fugitatem rerum reictios apero verum doleste catatio nsedite velectiat aces ex erferundeles num quam volore non comnimet elesend itaspel ipitis sequate ommolor eperion sequam iusciandae coreiusam quiditia comnimus eatem il moluptat dessinu llendae. Fuga. Berferitibus et renduci untion paria sequas et est, unt et es etur, tendicilit et aut ium anihilic.

Country background

GDP per capita (2014 – USD)	**$6,483.85**
Healthcare expenditure per capita (2014 – USD)	**$570.21**
Healthcare expenditure as a percentage of GDP	**9%**

Type of health system	Public
	• National Health Insurance (NHI) system designed to ensure that all South African citizens have access to essential health care
	• NHI system expected to be funded through personal taxation and mandatory employer contributions
	• System is two-pronged:
	  1. Public: large, under-resourced and overused
	  2. Private: small, well-funded and well-equipped

Average life expectancy	**59** • Healthy life expectancy: 51
Infant mortality rate (per 1,000)	**34**
Top 10 causes of death	1. HIV/AIDS 6. Tuberculosis 2. Stroke 7. Hypertensive heart disease 3. Diabetes mellitus 4. Ischemic heart disease 8. Interpersonal violence 5. Lower respiratory infections 9. Diarrheal diseases 10. Road injury

Sources Include: World Bank (2014), World Bank (2015), Deloitte (2015), CIA World Factbook (2015); World Health Organization (2012)

The Future Health Index

What is the Index?

- The Future Health Index (FHI) provides a benchmark for a country's perceived readiness to meet some of the key healthcare challenges emerging.

- It measures a country's perceived readiness by examining perceptions about the accessibility and level of integration of healthcare services, and the adoption of connected care technology throughout the national healthcare system. It is based on the input and self-reported behaviors of patients and healthcare professionals throughout the country, which collectively produce a snapshot of how healthcare is experienced on both sides of the patient–professional divide.

- Please see the Appendix I for further details on the Index.

What is South Africa's Index score?

- South Africa's Future Health Index (FHI) score of 56.7 (ranked 8th out of 13 countries) is based on low access to healthcare resources but a high adoption of connected care technology.

- While South Africa ranks highly in the adoption of connected care technology, low access to healthcare resources drags its overall score down. South Africans are conscious of some of the benefits of health system integration, but without basic access to healthcare, integration is difficult to achieve.

	South Africa	13-Country Average	Country GDP per Capita (USD)
Overall Index	**56.7**	**56.5**	
Access to care across the health continuum Sub-Index:	63.2	65.9	
Integration Sub-Index:	55.3	55.8	6,483.85
Connected Care Technology Adoption Sub-Index:	51.6	47.8	

Overview of key findings

1. **South Africa's Future Health Index (FHI) score of 56.7** (ranked 8th out of 13 countries) is based on low access to healthcare resources but a high adoption of connected care technology.

2. **Healthcare professionals and patients differ on the effectiveness of the health system in meeting the needs of the population,** particularly when comparing public and private systems. South Africa's healthcare system is one of the lowest-rated by its citizens among the 13 countries surveyed.

3. **Cardiology issues are prevalent among patients in South Africa,** and these patients tend to have more negative perceptions of the national healthcare system than the average patient. However, they are open to connected care technology, suggesting an opportunity to use technology to improve these patients' outcomes and experiences.

4. **Cost is a bigger barrier** to healthcare overall than in any other country surveyed.

5. Although South Africa's health system is not considered to be very integrated at present, **patients and healthcare professionals alike see a clear value in future integration.**

6. **To realize a fully integrated health system, concerns regarding cost must be addressed.** Both patients and healthcare professionals worry that integration of the health system could lead to healthcare becoming more expensive in the long term.

7. **Openness to connected care technologies raises South Africa's connected care technology adoption sub-index score above the average,** with South African healthcare professionals and patients acknowledging the benefits of connected care across the health continuum.

8. **Patients and healthcare professionals agree that individuals are fully responsible for managing their health.** However, patients feel more capable of managing their own health than healthcare professionals perceive them to be.

9. **The overall health of the population is viewed as less of a challenge** than other key issues affecting the country, particularly crime.
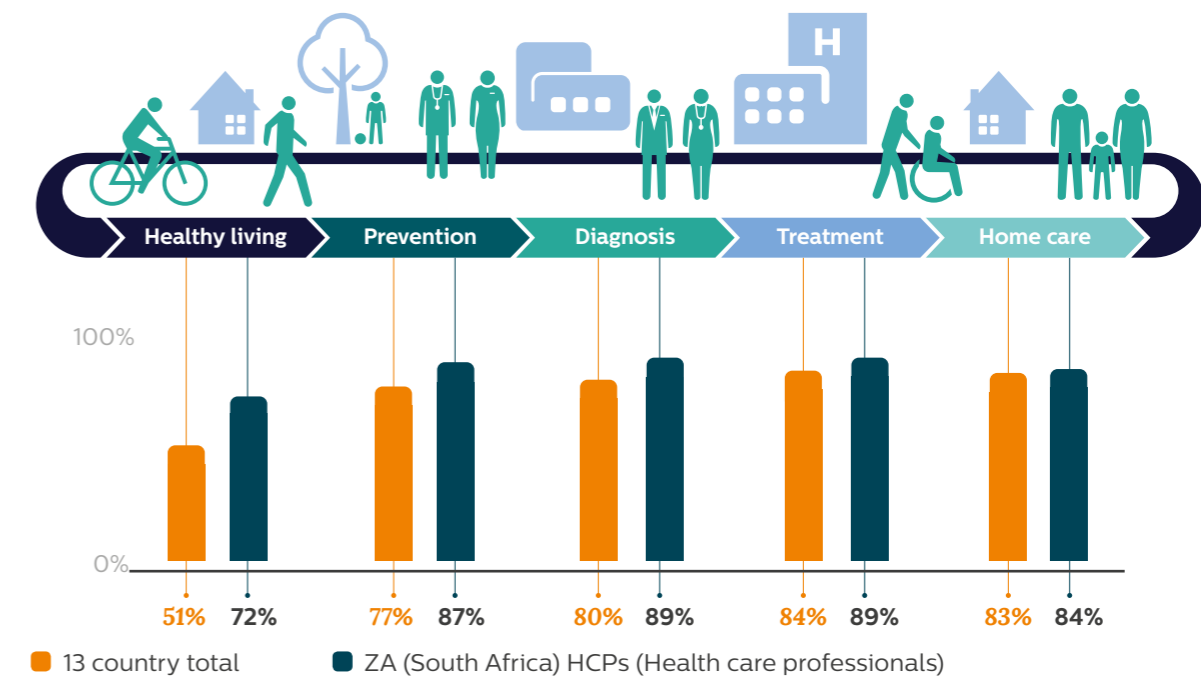
Key findings in detail

1. South Africa's Future Health Index (FHI) score of 56.7 (ranked 8th out of 13 countries) is based on low access to healthcare resources but a high adoption of connected care technology.
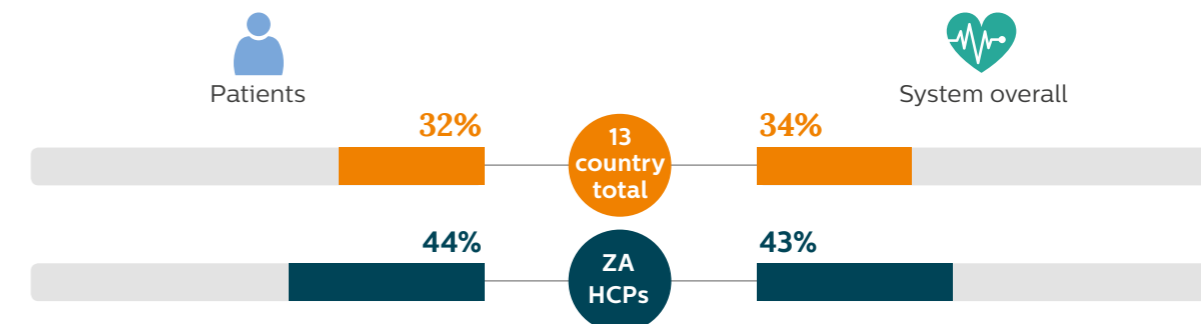
South Africa Index Score

• In line with South Africa's below average score on Access (63.2), both healthcare professionals and patients prioritize improving access as something the government should do to improve public health.

 – Improving access to healthcare services when people need them is important to both patients (48%) and healthcare professionals (41%), as both list it as a top action the government can take to improve public health. Additionally, they think the government should build and improve hospitals and other healthcare facilities (47% patients and 39% healthcare professionals).

 – This came through in interviews with healthcare professionals as well, as they note the limited amount of resources, lack of staff and education as current challenges for the market, all of which impact access.

• South Africa is middle–of–the road on Integration (55.3).

 – It scores above average on attitudes toward integration, but below average in cost value. It is on par, however, with the average in regard to the level of integration.

% agree that integration can help improve

	Healthy living	Prevention	Diagnosis	Treatment	Home care
13 country total	51%	77%	80%	84%	83%
ZA (South Africa) HCPs	72%	87%	89%	89%	84%

■ 13 country total   ■ ZA (South Africa) HCPs (Health care professionals)

% agree integration would make long–term costs more expensive

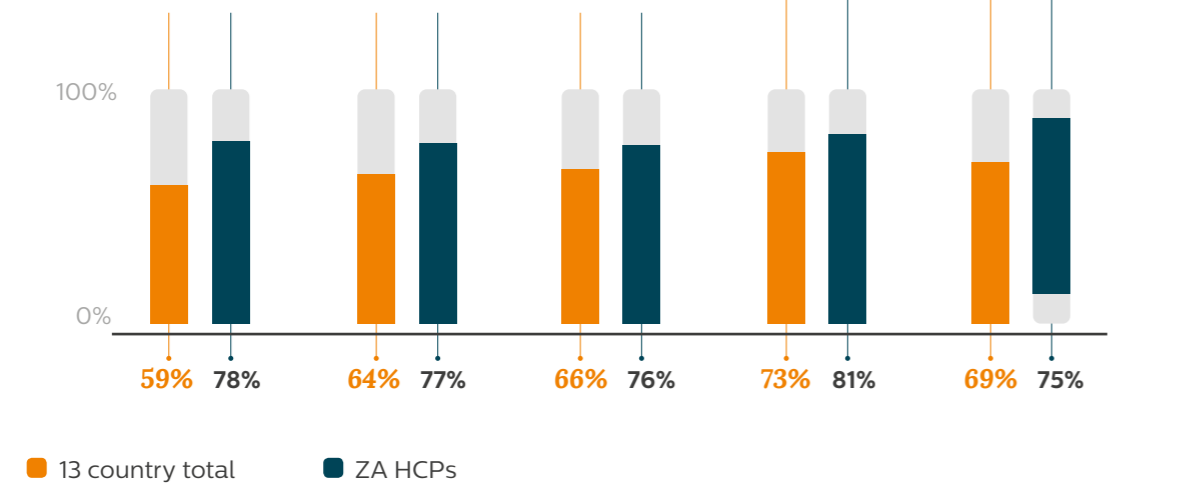|	Patients	System overall
13 country total	32%	34%
ZA HCPs	44%	43%

- Despite financial and cost related issues with healthcare in South Africa, the index for adoption of connected care technology (51.6) is above average. Strength within adoption comes from current usage, knowledge and perceptions of the importance to healthcare.

% agree connected care is being used often/always during

Healthy living	Prevention	Diagnosis	Treatment	Home care

100%

0%

18%	35%	23%	42%	28%	45%	32%	48%	35%	46%

% agree connected care is important for improving

100%

0%

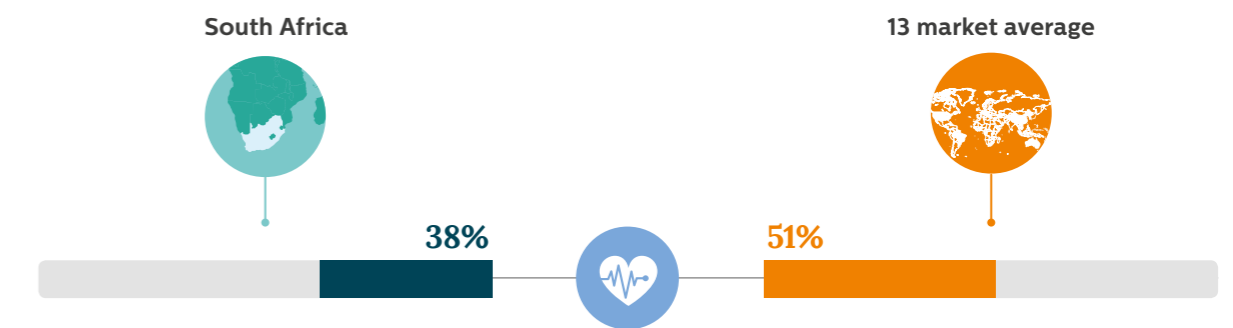| 59%	78%	64%	77%	66%	76%	73%	81%	69%	75%

■ 13 country total   ■ ZA HCPs

2. Healthcare professionals and patients differ on the effectiveness of the health system in meeting the needs of the population, particularly when comparing public and private systems. South Africa's healthcare system is one of the lowest-rated by its citizens among the 13 countries surveyed.
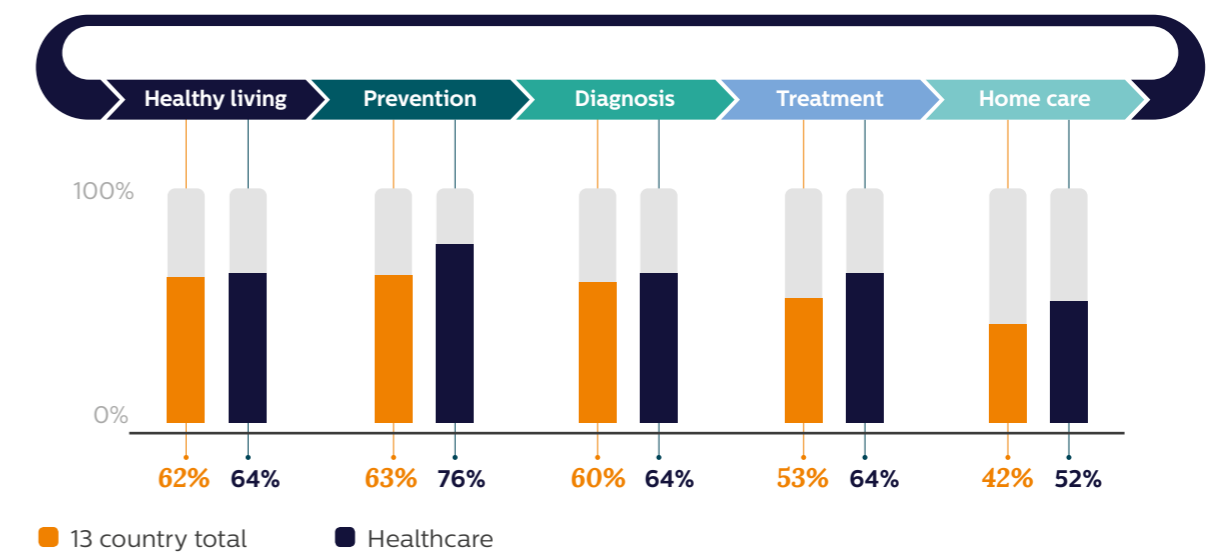
- Compared to patients, more healthcare professionals agree that healthcare available via the health system in South Africa meets patients' needs (46% healthcare professionals vs. 38% patients). In particular patients, rate the system significantly below average compared to each of their counterparts across the 13 markets in this study. In fact, South African patients rate the health care system second lowest, behind Brazil (12%) out of the 13 markets.

Healthcare system meets needs (agree/strongly agree)

South Africa

13 market average

38%   51%

- In interviews, healthcare professionals note a large disconnect between patients versus the industry at large regarding focus of care. Specifically, while the population is more focused on diagnosis and treatment, the government is investing in healthy living, awareness and disease prevention. HCPs note that they are often forced by circumstance to focus on diagnosis and treatment as patients will only come to them when they are already sick.

% agree patients have access to resources for

Healthy living	Prevention	Diagnosis	Treatment	Home care

100%

0%

62%	64%	63%	76%	60%	64%	53%	64%	42%	52%

■ 13 country total   ■ Healthcare

"A lot of patients don't even know what's going on; they are coming in with advanced diseases. They don't know about signs and symptoms, so it's difficult to talk about prevention if you've already got it."

**Oncologist, 6-10 years' experience,
Public sector**

"People are focused on treatment, so we as public healthcare specialists are trying to give them help and education in the morning before they see the doctors. We are trying to drive the people's minds to prevention rather than treatment."

**Nurse, 15+ years' experience,
Public sector**

• Patients have more confidence that the private health system meets their needs, as compared
to the public health system.

  – For example, 41% of patients agree that the public health system takes care of their needs when they use the health system for preventative purposes, compared to 78% who feel the same about the private sector.

  – In interviews with healthcare professionals, the public versus private healthcare sectors are discussed often, particularly in relation to the fact that few can afford private healthcare, and the majority of the population relies on the public sector for their healthcare needs. Many healthcare professionals note that the private sector is able to meet patient needs, only if they can afford to pay for it.

"Health is very split between public and private. In the public sector, which is where the bulk of people are, there is not enough money; whereas in the private sector there are serious people with a lot more money. I think health in this country is very skewed at the moment; split between the haves and the have-nots."

**Doctor, 1–5 years' experience,
Public sector**

"The government can improve on what they are currently doing and be held accountable. They are saying "this is what we will do" but they must follow through and be consistent."

Health Practitioner, 15+ years' experience,
Private sector

3. Cardiology issues are prevalent among patients in South Africa, and these patients tend to have more negative perceptions of the national healthcare system than the average patient. However, they are open to connected care technology, suggesting an opportunity to use technology to improve these patients' outcomes and experiences.

• About one-third (31%) of patients surveyed in South Africa have had experience with a cardiology-related issue, including artery disease, arrhythmia, heart murmurs, heart valve issues, stroke or high cholesterol.

• Unfortunately, patients with cardiology-related issues, who may be some of the patients needing to utilize healthcare resources the most, have some of the most negative views of healthcare in South Africa.

  – Patients with cardiology-related conditions are more likely to rate overall healthcare in South Africa as poor/fair (71% vs. 67% of patients overall).

  – They are also more likely to disagree that the healthcare available to them meets their needs (35% vs. 29% of patients in general).

  – And they are more likely than average to disagree that the national government prioritizes the health of its citizens (61% vs. 52% of patients overall).

  – 43% of cardiology patients perceive government health related regulations/policies as one of the top barriers to coordinating healthcare further in their country, compared to just 39% of South Africa patients overall.

• Cardiology patients are also more likely to say that they don't feel cared for by their doctor in between visits (53% vs. 49% of patients overall).However, cardiology patients know more about connected care technology than the average patients.

  – 31% say they completely understand how to interpret results from the device (compared to 24% of patients overall)

  – 29% completely understand how to properly use the device (vs. 24% of patients overall)

  – 27% completely understand when you should share the data with a healthcare professional (vs. 21% of patients overall)

• These patients not only have more experience with and knowledge of connected care technology, but they are also more trusting of it.

  – Patients with cardiology-related issues are more likely than patients in South Africa overall to use a medical device to track their own health indicators (36% vs. 26% of patients overall).

  – About two-thirds (63%) of patients with cardiology conditions believe data from connected care technology is at least usually accurate, compared to about half (55%) of patients overall.

  – About half (48%) of cardiology patients who own or use connected care technology have shared the information with a healthcare professional (vs. 38% of patients overall).

"It means a more holistic approach. It's a multi-disciplinary team helping the patient take care of every aspect of their disease all together at once. It would be wonderful if that was available all together under one roof."

**Pediatrician, 6-10 years' experience,
Private sector**

4. Cost is a bigger barrier to healthcare overall than in any other country surveyed.

• Among patients who have not visited a healthcare professional when they needed to, about half (47%) say that they did not visit because they could not afford it. This is significantly higher than any other market, including other developing markets, and the overall average (23%).

• Healthcare professionals also acknowledge this problem, as 63% believe that patients have avoided coming to see them for the same reason (unable to afford).

5. Although South Africa's health system is not considered to be very integrated at present, patients and healthcare professionals alike see a clear value for future integration.

• Many patients (64%) and healthcare professionals (58%) think the health system in South Africa is not at all or only somewhat integrated.

– Of note, patients with a history of respiratory (70%) or cardiology (74%) issues are considerably more likely than South African patients overall (64%) to think the country's health system is not integrated.

– In healthcare professional interviews, there is also consensus that the South African healthcare system has very little integration.

• The need for integration is apparent to patients, as 77% report having to repeatedly tell the same information to multiple doctors.

– This scenario is more common among patients with a history of cardiology issues (82%).

• A large majority of both patients (82%) and HCPs (86%) say that it is important that the health system in South Africa be integrated.

– What's more, the majority of HCPs agree that integrated health can improve the health of South Africa's population in a variety of situations, including when patients are being treated (89%), diagnosed (89%), or using health systems for treatments that will prevent medical conditions from forming (87%).

– Further supporting this, in interviews with HCPs, enthusiasm for integration was clear, as they believe that integration would free up resources and improve patient care overall.

• Many healthcare professionals (80%) are very or somewhat willing to share health information about patients with other HCPs or colleagues, which could signal an openness to further care coordination.

"An integrated system would mean everyone is working together for the sake of the patient; saving time and energy. I'd say the concept is marvelous, excellent!"
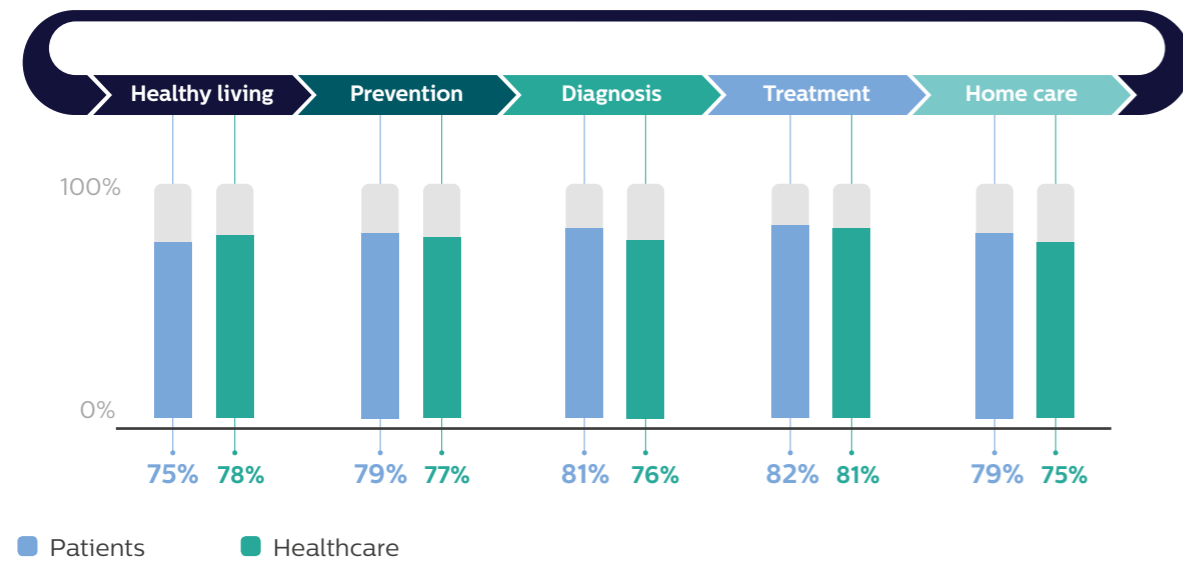
Nurse, 1–5 years' experience,
Private sector

6. To realize a fully integrated health system, concerns regarding cost must be addressed. Both patients and healthcare professionals worry that integration of the health system could lead to healthcare becoming more expensive in the long term.

• Half (49%) of patients think that healthcare integration will make long-term healthcare costs more expensive to the system overall, and 43% of healthcare professionals feel the same.

– However, patients who have had experiences with heart-related issues in the past are less likely to believe that integration will increase costs to the system overall (48%), compared to those who have had respiratory (54%) issues.

• Similarly, 50% of patients and 44% of healthcare professionals think integration will make costs to patients more expensive in the long-term

• The overall cost of healthcare (48%) is considered a top barrier to further healthcare coordination among patients (vs. 42% of healthcare professionals).

– In interviews, healthcare professionals acknowledged that limited financial funds and resources are a challenge, resulting in healthcare professionals questioning the feasibility of implementing a connected care or an integrated health system.

7. Openness to connected care technologies raises South Africa's connected care technology adoption sub-index score above the average, with South African healthcare professionals and patients acknowledging the benefits of connected care across the health continuum.

• Overall, half of healthcare professionals in South Africa (54%) say they are knowledgeable about connected care technologies (vs. 25% of patients). Comparatively, only 33% of healthcare professionals in the other markets consider themselves to be knowledgeable.

• The majority of both patients and healthcare professionals agree that connected care technologies can play an important role in improving health across the health continuum.

% agree connected care is important for improving

| Healthy living | Prevention | Diagnosis | Treatment | Home care |

100%

0%

75% 78%   79% 77%   81% 76%   82% 81%   79% 75%

■ Patients   ■ Healthcare

- About two-in-five of each audience believe that keeping track of health indicators and symptoms such as blood pressure, blood sugar, sleep patterns, and heart rate in a journal, on a website, with an app/mobile device, or with some other computer program can help patients more effectively manage their health (patients: 44%, healthcare professionals 41%).

  – What's more, most patients (79%) would feel comfortable sharing information from a connected care device with a healthcare professional.

- Patients are open to asking medical questions and getting the information and access they need from their healthcare professionals online; healthcare professionals are also interested in these types of interactions.

  – Three-quarters (75%) of patients are interested in posing medical questions to their healthcare professionals online, and 71% of healthcare professionals are also interested in this type of interaction. The ability to receive medical test results (69% of patients and 74% of healthcare professionals), request a prescription (68% of patients and 65% of healthcare professionals) and schedule an appointment online (69% of patients and 74% of healthcare professionals) is also intriguing to both audiences.

  – Interviewed healthcare professionals feel that patients will see time and money efficiencies as a result of connected care, while healthcare professionals will benefit from streamlined processes.

8. Patients and healthcare professionals agree that individuals are fully responsible for managing their health. However, patients feel more capable of managing their own health than healthcare professionals perceive them to be.

- Most patients (80%) and healthcare professionals (69%) believe that individuals should have full responsibility for preventing poor health.

- Half (54%) of healthcare professionals believe that patients have the knowledge they need to manage their own health effectively, compared with 81% of patients.

- Two-in-three healthcare professionals (63%) agree that patients always or often need to take a more active role in managing their health, but haven't done so.

  – And yet, healthcare professionals say that patients always or often come to appointments armed with knowledge about their health (50%) and/or wanting to take control of their health (61%).

  – According to patients who are not active in managing their own health, cost (30%), lack of motivation (25%), and time (25%) are the biggest reasons why.

9. The overall health of the population is viewed as less of a challenge than other key issues affecting the country, particularly crime.

- Crime is most often considered to be among the most important issues the country faces by both patients (67%) and healthcare professionals (48%).

- Comparatively, the overall health of the population is less of a concern, though healthcare professionals (36%) are more likely to say it is a top challenge compared with patients (12%).

- Further, the aging population is not a significant concern for the vast majority of South Africans patients and healthcare professionals. Just 3% of healthcare professionals and 1% of patients consider this to be one of the most important challenges facing the country.

- For patients (52%) and healthcare professionals (43%), economic/financial problems are considered to be a top challenge facing the country. Both list it as the number two issue, falling just after crime.

Appendix: Methodology

Philips undertook original research to understand the perception towards connected care and the role it plays in the future of healthcare. The study, which will be run annually, included both quantitative surveys and qualitative in-depth interviews. These were conducted from February–April, 2016 in 13 countries. In partnership with an independent global market research firm, a survey was fielded from February 24, 2016 to April 8, 2016 in Australia, Brazil, China, France, Germany, Japan, The Netherlands, Singapore, South Africa, Sweden, UAE, U.K. and U.S. in their native language.

In South Africa, a combination of online, face-to-face (computer-assisted) and phone (computer-assisted) interviewing was used to reach a total sample of:

- 201 healthcare professionals (those who work in healthcare as a doctor, surgeon, nurse practitioner, registered nurse, licensed practical nurse or nurse across a variety of specializations) (estimated margin of error at the 95% confidence level of +/- 6.9%)

- 2,067 adult patients (those 18 years old or older who have visited a healthcare professional in the last three months) (margin of error at the 95% confidence level of +/- 2.2%)
  - Throughout this document, cardiology and respiratory specific patients are cited.

- Cardiology patients are those from the total sample who currently have or have had in the past one or more of these conditions: Artery Disease, Arrhythmia, Heart murmurs, Heart valve issues, Stroke, High cholesterol.

- Respiratory patients are those from the total sample who currently have ever had one or more of these conditions: Chronic bronchitis, COPD, Emphysema, Asthma, Sleep apnea.

Secondary research was also conducted, gathering information from third party data and case studies to further validate the primary research results. To provide context around the quantitative data, the survey was supplemented with 30-45 minute in-depth interviews with about 20 healthcare providers in South Africa, conducted in partnership with two market research firms from March 7-April 11, 2016.

The Future Health Index (FHI) is calculated by combining the quantitative survey responses from patients and healthcare professionals equally on questions about access to the healthcare system, their country's current state of health integration and adoption of connected care technology and. The Index ranges from 0 to 100 points, and is the average of three sub-indices: access (across the health continuum); integration (of health system); and adoption (of connected care technology). Each of the three sub-indices range from 0 to 100 points, and each are weighted equally in the final FHI score. The three sub-indices scores are based on a series of question groupings (or components) that draw from a distinct theme in the questionnaire.