Discovery Digital Health strategy: COVID-19 accelerates online health care in South Africa

Amy Fisher Moore and Verity Hawarden

Amy Fisher Moore and Verity Hawardena is based at the Institute of Business Science, Department of Personal and Applied Learning, University of Pretoria Gordon, Johannesburg, South Africa.

On a crisp autumnal morning in mid-April 2020, Adrian Moss, manager in the Special Projects, Digital Health team of Discovery Health, prepared for work at his home office in Blairgowrie [1] by opening his laptop and sitting down at his desk. Moss was surprised by how quickly he had adjusted to working at home during the national lockdown in South Africa, amid the government's attempts to "flatten the curve" against COVID-19. While adjusting his headset, Moss thought about yesterday's data, advising of the uptake from both doctors and patients for the telemedicine consulting platform called DrConnect, where he served as product owner. The platform offered both broader access to health-care information to its members as well as a specific COVID-19 tool for all South African citizens, free of charge, to help individuals understand their personal risk for COVID-19 and, where needed, to schedule virtual health-care professional consultations.

Discovery prided itself on its use of data and behavioural thinking to inform both products and consumer uptake and usage. Yet, Moss was conscious that DrConnect had the potential to reach a much wider audience. What else should the team be doing to raise awareness and drive both doctors and patients to use the platform? How else could telemedicine be used to slow the rapid spread of the coronavirus through the country?

Discovery: from small health insurer to global insurance provider

Discovery Holdings Limited (Discovery) was founded in 1992 by South African businessman and entrepreneur Adrian Gore as a small specialist health insurer. In the 28 years since its inception, it had become an integrated financial service organisation, offering health insurance, life assurance, investment, banking and long-term savings products. The company operated in South Africa, the USA, the UK and China, with 12,000 employees and 20 million clients (Global data, 2018).

The main focus of Discovery (2020a) was health and wellness, as well as financial security of clients' families through the health and financial products that it offered. Its aspiration was to be one of the best insurance organisations in the world; known for excellence, innovation and financial strength (Discovery, 2020a) through its financial and behavioural structures to deliver value to clients. Increasingly Discovery also positioned its work as delivering shared value through the products and services that it offered, seeing the patient as core to the overall system (Discovery, 2017).

Gordon Institute of Business Science
University of Pretoria

Disclaimer. This Case Study has been published as part of a special section of short cases in Emerging Markets Case Studies, entitled "Managing in a Crisis: Lessons from the Covid 19 crisis" in partnership with Gordon Institute of Business Science, University of Pretoria.

Digital health global trends

Digital health care or telemedicine was defined as the access to a medical professional through technology, such as a computer or smartphone. Telemedicine had been a focus for providers of emergency care, for example, The Red Cross which used telemedicine platforms to deliver care globally to disaster areas affected by hurricanes, earthquakes, drought, famine and similar (Wicklund, 2018). Other organisations such as the US military and the North Atlantic Treaty Organisation (NATO) had used telemedicine to cope with care in high risk areas, such as battle zones (Wicklund, 2018). A 2017 PWC report described how the demand for health care in emerging markets was increasing, driven by a range of influences, such as a growing population (McKeering *et al.*, 2017) and increased prevalence of non-communicable diseases (McKeering *et al.*, 2017). Harnessing the power of digital connectivity with medical advice could be a more affordable and sustainable health-care solution for both developed and emerging countries (McKeering *et al.*, 2017).

As COVID-19 spread through the world, telemedicine was proposed by some governments and national health-care advisors as the first step and primary means of health-care support (Discovery, 2020b) on a national basis. Officials from the Centers for Disease Control and Prevention and the World Health Organization in February 2020 urged hospitals and clinics to expand their use of telehealth services, sometimes referred to as remote or virtual care, to help triage the sick and encourage concerned patients to avoid already-crowded medical facilities when possible (*Brodwin,* 2020).

The challenges in some countries for the effective use and uptake of digital health care were varying. According to the director of the University of California, San Francisco's telehealth programme, in the USA, the vast number of private, state and federal payers with diverse reimbursement policies and state-based medical licensing affected uptake (Brodwin, 2020). Lessons from the "Near Me" Scottish video consulting service suggested that "in-person support might be needed to tackle both technical issues (such as assessing technical readiness and installing web cameras and monitors) and operational ones (such as identifying and redesigning key workflows – for example, for picking up prescriptions or medication) in the early stages of implementation. . . Guidance for clinicians and patients on how to make the most of a video consultation would be likely to help widespread adoption (Greenhaigh *et al.*, 2020)." In China, consultation platforms had seen significant increases; an online platform Wenyisheng (or 'Ask Doctor' in English) saw enquiries for respiratory-related services increase by 50 times since 2019. However, a lack of sharing about customer experience over social media and a need for more services integrated through the digital medical experience could be an inhibiting factor for mass market participation (Yanga and Goh, 2020).

Development of DrConnect – Discovery's telemedicine platform

The core Discovery Health team believed there was the potential for application of Telemedicine in South Africa and thus, in 2017, a project team within the organisation was formed to develop the product and bring it to market. A partnership was established with a Palo Alto, CA organisation called HealthTap Inc [2]. Together they developed the white label [3] platform DrConnect which was launched in South Africa in 2017. For members of the Discovery Health administration scheme, access to an extensive library of doctor-created and peer-reviewed health-care content (bizcommunity, 2017), as well as access to virtual consultations with those health-care providers they had visited in the past 36 months was included in the platform (Discovery, 2020c). The platform was further refined to deliver more client value and in 2018 plans were announced to "build on the powerful library of doctor input and leverage advancements in artificial intelligence to provide symptom triage to members (Noach, 2018)" (Exhibit 1).

At the time of the launch of DrConnect in 2017, the Special Projects team led the deployment of the DrConnect platform from a business requirement perspective, working closely with the Discovery Health Systems teams to ensure integration was seamless. Key business considerations included access to a trusted health information library, a platform which enabled telemedicine for both members and health-care providers across all Discovery Health administered schemes and a platform that supported a more cost effective, sustainable level of care. There was also a strong need to ensure all business requirements (from security and confidentiality, quality of information to technical specifications) were met across the broad health business. Moss, his manager Luca Jacobs, and the Digital Health Special Projects team were the business owners for the DrConnect product, joining the team a few years after the launch. A core focus was the need to drive engagement from both members and doctors. Additional work included defining the product roadmap with Health Tap; product positioning; ensuring the product was in working order for the business and end users (pulling in support from internal team members if not); and developing a groomed backlog of future development.

Other key considerations included comprehensive testing and training with doctors and key opinion leaders to ensure seamless go-live. These took the form of webinars and in-person training sessions. Discovery partnered with Stellenbosch University in developing a Continuing Professional Development (CPD) [4] module addressing the ethics of telehealth. Member communications and marketing were focused on social media, email and owned channels. These were delivered via videos, emailers and digital content which later evolved into social media influencer content.

Partnership between two South African legendary brands

General access to health care in South Africa was a challenge; in a population of 54 million people only 10–15% had access to quality health care (Discovery, 2020d). Discovery and Vodacom, one of South Africa's largest cellular network operators, saw an opportunity to provide access to care by offering consultations to the broader South African public. Work was done to push for a rapid launch of the platform in April with a wider range of clients to help address the health-care challenge during the pandemic. Their partnership was an offering of a free online doctor consultation service for all South Africans with coronavirus-related concerns who were considered high risk (Rumney, 2020). This offering was a limited version of the overall DrConnect service. A provisional limit to the initial number of consultations was budgeted to cover development costs and doctors' consultation time. This was expected to cost R20m and would be split between Discovery and Vodacom (Rumney, 2020) [5].

Discovery Chief Executive Adrian Gore confirmed to the public that Discovery neither benefited financially from the partnership nor would receive a share in any revenues that Vodacom would earn from new customers (Rumney, 2020). Discovery (2020b) was built on the purpose of making people healthier, and the initiative was a means to assist with making an impact to fight the pandemic. Vodacom Chief Executive Officer Shameel Joosub indicated the partnership with Discovery could go a long way "in alleviating any increased pressure on healthcare practitioners while at the same time empowering citizens by connecting them with doctors" (Discovery, 2020b).

The two platforms which were available for such consultations involved DrConnect and HealthID (the latter being an electronic health record which captured patient records electronically) (Discovery 2020b). Patients could access the DrConnect service from both the Discovery and Vodacom websites; the offering was for dedicated COVID-19 specific screenings and one free consultation. Once on the site, patients answered a risk assessment questionnaire and if considered to be at high risk were able to choose a doctor or be allocated to an available doctor in a dedicated COVID-19 care team (Discovery 2020b). Dr Noluthando Nematswerani, Discovery Health's Head of the Centre for Clinical Excellence, said DrConnect should be used "as another method to contain the spread and

minimise the accompanying health and other environmental effects of COVID-19" (Discovery 2020c).

Changing regulations to adapt to the pandemic

The Health Professions Council of South Africa (HPCSA) was the governing body for health-care practitioners in South Africa and provided standards of professional and ethical conduct. According to the Health Professions Act, No. 56 of 1974 (the Act), registration with and following the regulations of the HPCSA (2014) was a core duty of health-care practitioners. Initially, the HPCSA (2020) guidelines required that telehealth would only be permissible in circumstances where there was an already established practitioner-patient relationship, except where telepsychology was involved, in which case telehealth would be permissible even without an established practitioner–patient relationship. In response to the COVID-19 pandemic and state of emergency in South Africa on 26 March 2020, the HPCSA published guidance to health practitioners which included reference to the use of telemedicine, permitting use of telehealth but enforcing the established practitioner–patient relationships. Ten days later, the HPCSA reassessed its existing regulations, rules and guidelines under the Act and on 7 April 2020 published a statement allowing telehealth without a previous practitioner–patient relationship, provided that consultations were done in the best interest of patients (HPCSA, 2020).

Challenge of forming new habits

Moss had spent quite a bit of time analysing the data and thinking through what hindered patients or doctors from engaging with the platform. Since 2017, he and the team had been balancing a number of challenges; finding the right number of doctors as well as patients to be engaged on the platform; as well as the HPCSA guidelines requiring a pre-existing relationship between practitioner and patient. After the DrConnect launch, while the uptake from doctors was solid, there were not many that were engaged fully in the platform. There was a need to ensure the platform could balance supply with demand to ensure an excellent user experience. Occasionally, they received feedback that a patient would want to engage through DrConnect with their preferred physician, but sometimes the doctor did not reciprocate which left the patients feeling like they were "sitting in the waiting room and not being serviced" [6]. Both a synchronous consultation (physician–patient meeting through a video camera, for example) and asynchronous consultation (messages between physician–patient without requiring both parties to be online simultaneously) were available. To increase the quality of consultations, Moss and the team then decided to drive for active engagement of doctors on the platform by promoting the supply of doctors to those prepared to make time for patients online. By ensuring the doctors on the platform were highly engaged, the platform would be more beneficial to potential patients. The advantage for doctors was that it was potentially broadening their client base and increasing their revenue.

When thinking back to the lessons learned from 2017 with respect to engagement, the Discovery team decided to limit the core COVID-19 doctor pool to a subset of 145 individuals. To allow for patients to interact with doctors they had not seen before (as their physician may not be available, or in the case of a non-Discovery Health member, where no previous doctor relationship existed), Discovery worked to identify a group of doctors who were prepared to form the COVID-19 panel. This panel would conduct virtual consults with any user who presented COVID symptoms or had been in high risk environments. Considering the uptake results between the core and non-core COVID-19 doctor teams was interesting. The non-core COVID-19 doctors were engaged far more in asynchronous consultations which could be billed but could also be seen as more opportunistic in nature and perhaps less clinically relevant. For members seeking help around COVID-19 symptoms, there was a more guided entry into the virtual consult journey. This meant that the COVID-19 doctors engaged in more synchronous consultations which was enabled through a variety of different ways, primarily making time for consultations. The challenge

was that the doctor's practice management software did not integrate with the DrConnect system, which made scheduling appointments a bit more difficult. As of the end of March 2020, more than 600 doctors had asked to be reactivated on the platform.

Opportunity that COVID-19 created for telemedicine

Discovery Health believed that COVID-19 created an opportunity of engaging differently in daily life. Acceptance for new forms of digital channels, including that of telemedicine, was part of a new conversation and a chance to make a difference in a constrained environment and a burdened public health system. The data from the USA and Europe showed that digital health care had reduced the load on emergency rooms, thus freeing up critical health services. It was hoped tat wider unintended benefits for digital health care uptake could also have social and environmental benefits (from broader access to doctors to limited travel or medical supplies needed for first consultation). But change could be difficult. As Moss reflected on a PWC 2017 (McKeering *et al.*, 2017) report on the future of telemedicine, he thought about the four themes that were outlined as pillars to a telemedicine strategy: disruption, engagement, integration and trust.

Considering the global increase in telehealth and digital channel usage, were Moss and his colleagues doing enough to drive these areas, especially with respect to trust of the system and engagement with different stakeholders? New habits were quickly being formed with improved comfort levels in digital communication across work and personal lives of those affected by COVID-19. Would this change see a temporary lift in telehealth and virtual consultations or permanent habit-forming change that saw the "long tail" [7] affect interactions with medical professionals for years to come? What else should be considered to drive further engagement and adoption especially during the pandemic period?

Keywords:
Sustainability,
Disaster management,
Distribution channels,
Innovation,
Product differentiation,
trategy

Notes

1. Blairgowrie is a suburb in the northern suburbs of Johannesburg, Gauteng. Discovery's headquarters is based fewer than five kilometres away in Sandton, Gauteng.
2. HealthTap Inc. develops health care software.
3. A white label product is a product or service produced by one organisation that other companies rebrand to make it look as if it is their product.
4. The Health Professions Council of South Africa required health practitioners to continue their lifelong learning of knowledge, skills and ethical studies that underpinned competent practice through a process called continuous professional development (CPD).
5. For more information on Vodacom's online overview of DrConnect: https://now.vodacom.co.za/article/vodacom-and-discovery-join-forces-to-beat-covid-19
6. Interview with Adrian Moss and Xxxx, 16 April 2020.
7. A "long tail" refers to a concept where a situation has an extended impact.

References

Bizcommunity (2017), *DrConnect Remedies Online Health Questions*, Medical Technology News South Africa, 14 September, Retrieved from: www.bizcommunity.com/Article/196/159/167412.html (accessed 27 April 2020).

Brodwin, E. (2020), *Telehealth Can Help Fight the Novel Coronavirus, the US Challenges Could Limit its Potential*, STAT, 28 February, Retrieved from: www.statnews.com/2020/02/28/coronavirus-telehealth-digital-health-us-hospitals-companies-face-challenges/ (accessed 26 April 2020).

Discovery (2017), *Global recognition for discovery: Discovery's Vitality Shared Value Insurance Model has been Recognized on a Worldwide Scale for Pioneering Our Unique Approach to Health Insurance*,

July, Retrieved from: www.discovery.co.za/corporate/discovery-shared-value-insurance-model (accessed 8 May 2020).

Discovery (2020a), *About US*, Retrieved from: www.discovery.co.za/corporate/about-us (accessed 29 April).

Discovery (2020b), *Free COVID-19 Online Doctor Consultations Available to All South Africans Through Vodacom and Discovery Partnership*, Retrieved from: www.discovery.co.za/corporate/covid19-free-online-covid-19-consultations (accessed 30 March 2020).

Discovery (2020c), *COVID-19: Virtual Consultations are Not a Matter of the Future But a Matter of Health*, 12 March, Retrieved from: www.discovery.co.za/corporate/covid19-travel-virtual-consultations (accessed 27 April 2020).

Discovery (2020d) *Mother-Daughter GP Team Leading the Way in Digital Healthcare*, April, Retrieved from: www.discovery.co.za/corporate/digital-healthcare-way (accessed 26 April 2020).

Global Data (2018), *Discovery Holdings Limited (DSY): Financial and Strategic SWOT Analysis Review*, Global Data, December, 2-34.

Greenhaigh, T. Wherton, J. Shaw, S. and Morrison, C. (2020), *An Opportunity in a Crisis?*, The BMJ, 12 March, Retrieved from: www.bmj.com/content/368/bmj.m998 (accessed 26 April 2020).

Health Professionals Council of South Africa (HPCSA) (2014), *General Ethical Guidelines for Good Practice in Telemedicine*, Booklet No: 10, Human Rights, Ethics and Professional Practice Committee, August, Retrieved from: www.hpcsa.co.za/Uploads/Professional_Practice/Conduct&Ethics/Booklet10TelemedicineSeptember2016.pdf (accessed 28 April 2020).

Health Professionals Council of South Africa (HPCSA) (2020), *The Health Professions Council of South Africa (HPCSA) Response to the COVID-19 Pandemic*, 7 April, Retrieved from: www.hpcsa.co.za/Uploads/PSB_2019/Announcements/HPCSA_RESPONSE_TO_THE_COVID-19_PANDEMIC_7_April_2020_Final.pdf (accessed 27 April 2020).

McKeering, D. Norton, N. and Gulati, A. (2017), *The Digital Healthcare Leap*, PwC, February, Retrieved from: www.pwc.com/global-health (accessed 28 April 2020).

Noach, R. (2018), *Digital Healthcare: the Evolution of Better Medicine*, Discovery, October, Retrieved from: www.discovery.co.za/corporate/digital-healthcare (accessed 27 April 2020).

Rumney, R. (2020), *Discovery, Vodacom set up online virus consultation Service*, Moneyweb, 1 April, Retrieved from: www.moneyweb.co.za/news-fast-news/discovery-vodacom-set-up-online-virus-consultation-service/ (accessed 26 April 2020).

Wicklund, E. (2018). *Using Telehealth Technology for Care Coordination During a Disaster*, mHealth Intelligence, 24 August, Retrieved from: mhealthintelligence.com/features/using-telehealth-technology-for-care-coordination-during-a-disaster (accessed 26 April 2020).

Yanga, Y. and Goh, B. (2020), *Worried Chinese Turn to Online Doctor Consultations Amid Coronavirus Outbreak*, Reuters, 26 February, Retrieved from: www.reuters.com/article/us-china-health-internet-healthcare-idUSKCN20K0X8 (accessed 26 April 2020).

Exhibit 1. Online introduction to DrConnect platform

Figure E1

Source: https://www.discovery.co.za/corporate/drconnect-get-trusted-doctor-advice (accessed 20 May 2020)

Corresponding author

Amy Fisher Moore can be contacted at: amy@moore.za.com