

Completion Assessment Executive Summary

HealthConnect

December 2022

Investee	Reach Digital Health (previously Praekelt.org Foundation NPC) and IDinsight
Main implementation country	South Africa
Additional implementation countries	N/A
Funding amount agreed	\$500k
Funding amount disbursed	\$500k
Co-funding	N/A
Investment Date	January 2021
Actual implementation period	Until December 2022
Expected PYI range at year 10 (2021 estimate)	N/A ¹

Innovation

Following the outbreak of COVID-19 in early 2020, the South African government responded swiftly to mitigate the spread through a set of public health measures and restrictions. In addition, the National Department of Health in South Africa (NDOH), in partnership with Reach Digital Health, launched a digital platform and mobile application called HealthConnect to disseminate accurate and timely information on COVID-19 transmission, prevention, and symptoms to the public. HealthConnect for COVID-19 comprises three sets of digital tools: HealthAlert (HA), HealthCheck (HC) and HealthWorker Alert.

GIF awarded a grant of USD 500,000 to Reach Digital Health and IDinsight to test how HealthConnect influenced users' behaviour and how they could maximise the potential of the data collected, including citizens' self-reported data, to generate insights to improve the government's response to the pandemic. Funding was used to support the M&E and data science work streams; as well as staffing, licences, and overheads for Reach Digital Health.

The HealthConnect deal progressed successfully through all stages of the truncated GIF investment process for COVID-19 response grants, and all due diligence requirements were met. There was noted risk under social responsibility due to data protection and privacy, and social inclusion, but overall GIF found the net risk acceptable. GIF agreed that IDinsight and Reach Digital Health met the core standards for business ethics and integrity. The due diligence process took longer than anticipated for a COVID-19 grant. The funding application was submitted in April 2020, and was approved in November 2020, with the Grant agreement then signed at the end of January 2021, and the final report submitted in June 2022. In addition to the delays in the grant award process, the evolving context of the pandemic saw several changes to the external conditions that required a shift in focus and affected the completion of deliverables. Many of these deviations were due to external circumstances that could not be controlled or predicted by the project stakeholders. The platform adapted to remain relevant by rapidly reacting to changes as possible. Other external challenges included delays in getting approval from the NDOH. By the time

¹ Ex-ante PI analysis for COVID-19 was not undertaken due to the limited timeframe for diligence and the dynamic evolution of the pandemic. While learnings from the innovation can provide insight into the breadth and possible depth of the impact, they may not be sufficient to enable an ex-post analysis.



research was ready to commence, the pandemic was well into the recovery phase of mid-2021, and unfortunately, the originally conceptualised research was less relevant, and the platform had experienced a decline in users.

Performance and results

The grant was intended to support the Government of South Africa's response to the COVID-19 pandemic by evaluating and improving digital communication tools and using the data generated to inform and improve decision making. Of the four broad objectives, this assessment deemed Objective 1 "partially achieved," and Objectives 2, 3 and 4 as "achieved." Objective 2 was to generate actionable insights on how HealthConnect for COVID-19 content could be improved. This was achieved, particularly with regards to the enhancements of "better messaging" which included edits to the FAQ bot to utilise natural language processing. Objective 3 was to support the NDOH to respond to the COVID-19 pandemic. This was achieved, as insights were shared with the NDOH as part of various working groups, and analysis conducted informed government communication strategies and priorities. Objective 4 related to the development of M&E tools and systems by IDinsight for Prakelt.org, which occurred as well as the training and guidance to sufficiently embed these M&E processes.

Objective 1 was "to produce quantitative and qualitative insights on key research questions with respect to how users' knowledge, attitudes and behaviours are influenced by HealthConnect for COVID-19." This was expected to be achieved through three experimental studies. Study A, the "Referrals Study," tested whether messaging could increase the number of HealthCheck users. However, the findings from Study A were too small² to produce any insights or draw any conclusions about messaging models. Study B (the "Honesty Study") aimed to test whether messaging appealing to a new or existing user's commitment to honesty could lead to more truthful responses on the HealthCheck symptom tracker. Study B's results on messaging also provided insights for future health messaging platforms, as appealing to a user's sense of morality ("moral appeal") was shown to be most effective. This meant that Covid-19 content (and other future health messaging) can be designed around this insight. Study C planned to leverage various behavioural science insights to improve the occurrence of testing and self-quarantining. Study C ultimately did not take place because, with delays mentioned above, the sample size of 'at-risk' HealthConnect users was too low to be able to draw conclusions, and so the study was dropped.

Of the 13 deliverables in the contract, this assessment deems two as not achieved; six partially achieved; and five achieved. Those that were not achieved were primarily due to the access to testing data not being obtained, and the subsequent shift in priorities by the NDOH from a focus on prediction of Covid-19 towards vaccination of the population. For the deliverables that were deemed partially achieved, this is because of the proportion against target. For example, in the case of deliverable 9, "requests logged from NDOH or other government agencies," the target was five requests logged, however three requests were logged. Deliverable 5 was to produce analysis on knowledge, attitudes, and behaviours; however, this was only partially achieved because IDinsight did not measure whether knowledge or attitudes changed in their studies in either their qualitative or quantitative analysis. Behavioural insights were inferred from Study B.

Practical Impact

Practical Impact was not modelled ex-ante, given this was a fast-tracked Covid-19 deal, and ex-post analysis may remain challenging given the lack of clear data on impacts for beneficiaries. In South Africa, the reach of HealthConnect for COVID was high, with almost 14.5 million unique users of HealthAlert over GIF's grant period. The numbers for those who continued to engage repeatedly with the platform

² Only three new users were referred in total.



amounted to over 1.1 million HealthAlert subscribers, 195,000 user messages for the FAQ bot, and 3.1 million unique HealthCheck users.

On depth of impact, the evidence generated during this grant remains more anecdotal. In terms of value addition to government pandemic response, the NDOH used the insights from the presentations made by Reach Digital Health to inform its communication priorities and communication strategy, and leveraged the HealthConnect platform to assist with vaccination promotion and registration. Moreover, out of the 195,000 users of the FAQ bot, 32,873 provided feedback with 61% suggesting it was useful. Also, while benefit or change in behaviour or knowledge was not directly measured, it was inferred from the results of Study B (the "Honesty Study") for users in higher health institutions. The most effective treatment arm (Moral Appeal) increased the avoidance of campus by 0.9 days compared to control as measured by a proxy of high/moderate/no HealthCheck results for the user in question.

Finally, IDinsight and Reach Digital Health made several practical improvements to the platform, and as a result of the GIF investment, Reach Digital Health has been able to leverage and access additional sources of funding for continued deployment in the market. The HealthConnect learnings have been further adapted to other thematic areas such as tuberculosis. Additionally, the M&E framework and impact focus has been carried over to other tools with government partnership (MomConnect RCT being planned with IDinsight) highlighting the institutional impact beyond the HealthConnect platform as a result of this investment and the learnings thereof.

Achieving impact across all deliverables and objectives was challenging due to barriers such as (1) access not being granted to third-party testing data, (2) delays in approvals and permissions, (3) changes in government priorities as the pandemic evolved, and (4) a decline in HealthConnect users.

Key Lessons

The grant investment in HealthConnect offered several lessons for innovation in health platforms and government policy support.

A key factor in being able to support government decision-making is being able to work with the government. Support can only be provided if governments' needs are known, but this is accelerated if there are mutual ambitions, and the government provides access to the information and data that needs to be utilised to provide that support, preferably with a champion. The process must be dialectical in nature. A key success factor is also being able to be adaptive as needs or priorities change in crisis. The innovation was able to stay supportive to the NDOH as it was able to pivot from a focus on prediction to vaccine registration.

Some of the innovations and efforts completed through the grant were not adopted by the government because of the rapidly shifting priorities and redeployment of senior stakeholders. A risk mitigation strategy is crucial to have up front in the context of higher-risk innovations and partnerships, and perhaps a 'Plan B' determined up front. Alternatively, when components of the research or investment are contingent on third parties (such as the contingency on data and access from government) this should be built into the contractual structure; either with alternatives proposed or having research 'staggered' and dependent on access.

The vision of success for the investment was enhancing government response to the COVID-19 pandemic by evaluating and improving digital communication tools and using the data generated to improve decision making. Through the analysis conducted from HealthConnect, and the sharing of these insights with the working groups, success was achieved despite the challenges and shifts in objectives.

Lessons for Reach Digital Health include the work, learnings and tools developed for M&E, as well as the development done around the Natural Language Processing feature. These features will support the



continued scale-up of Reach Digital Health's work and deepen their impact in the future and were unlikely to occur in absence of the funding. The adaptations made to the HealthConnect platform as a result of this investment have now been applied to other platforms, such as MomConnect. At the time of the GIF investment, Reach Digital Health had multiple funding applications submitted for various functions of the platform, which were eventually secured. A lesson for funders going forward is to collaborate at the funder level to reduce the burden on the non-profit to manage and coordinate all sources of funding required for the overall objective. Both Reach Digital Health and IDinsight had learnings at the project level that can be carried into other work, relating to predictive modelling, user journey across different channels, working in a crisis and public sector partnership.