

# Costs Associated with A COVID-19 Screening Test, Country Comparison Editorial

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## ABSTRACT

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## Introduction

The COVID-19 pandemic has created an unprecedented need for diagnostic testing. In early 2020, diagnostic manufacturers were still struggling to raise the capacity of the new COVID-19 test to a reasonable level, but due to limited supply and high demand, prices became a challenge to low- and medium-income countries [1]. COVID-19 screening tests are essential in tracking where countries are in terms of COVID-19 and how far they need to act to combat /and manage it. There are two types of tests currently being conducted, namely the COVID-19 Polymerase Chain Reaction (PCR) and Rapid Antigen Tests. The PCR tests whether a person has the virus, whereas the Rapid Antigen tests whether a person has developed antibodies against the virus, assuming they have previously contracted the virus and whether their immune system produced antibodies in response to the infection. In South Africa, a COVID-19 test is accessible in a public sector setting; however, in a private setting, the RT-PCR tests cost R850 and results are available within 24 hours. Rapid Antigen Tests cost R400 providing results within 15-30 minutes [2]. The CMS alleged that laboratory prices for COVID-19-tests were exorbitant and unjustifiable at R850 per test. As of 12th December 2021, the cost of the RT-PCR test had been revised to not more than R500. The reduction of 41% decline followed a complaint by the Council for Medical Schemes (CMS) to the Competition Commissioner that private laboratories were [3].

A COVID-19 test can be taken at a doctor's room, in a laboratory with a medical prescription, a pharmacy, a screening centre, or even a hospital setting. The test is costly when it is carried out in private laboratories and the price varies per laboratory. The intervention by the CMS, which led to a price reduction, has been widely welcomed in the private sector. It has also been accepted as a victory for patients utilising private laboratories, especially those patients would require more frequent testing as the variants emerge and mutate differently. Real-time- PCR is the most accurate diagnostic test for COVID-19, as it is more reliable than a rapid antigen test because of its high sensitivity and specificity to the virus. The PCR tests, which require a small saliva sample, have a sensitivity of 94% and specificity of 100%. In contrast, Antigen tests, which detect viral surface proteins, can provide a rapid and accurate indication of active infection, and provide a sensitivity of 97.1% and specificity of 98.5% [1,4]. Disparities in the price of a COVID-19 test vary by country, as shown in Table 1. COVID-19 as global pandemic has affected all countries across the globe, the recent new variant omicron has severely affected countries such as Europe depicted in figure 1. Testing and tracing are one of the main strategies used to screen patients infected by the virus. A pandemic such as COVID-19 is financed mainly by governments through national budgets allocated to the ministries of health. Public sector

testing is free of charge. However, should patients choose to test in a private setting or laboratory, there are costs associated. As of 11 December, the National Institute for Communicable Diseases

(NICD) reported a total of 20 176 391 COVID-19 tests that have been conducted, with the private sector accounting for 54% of all tests conducted [5-14].

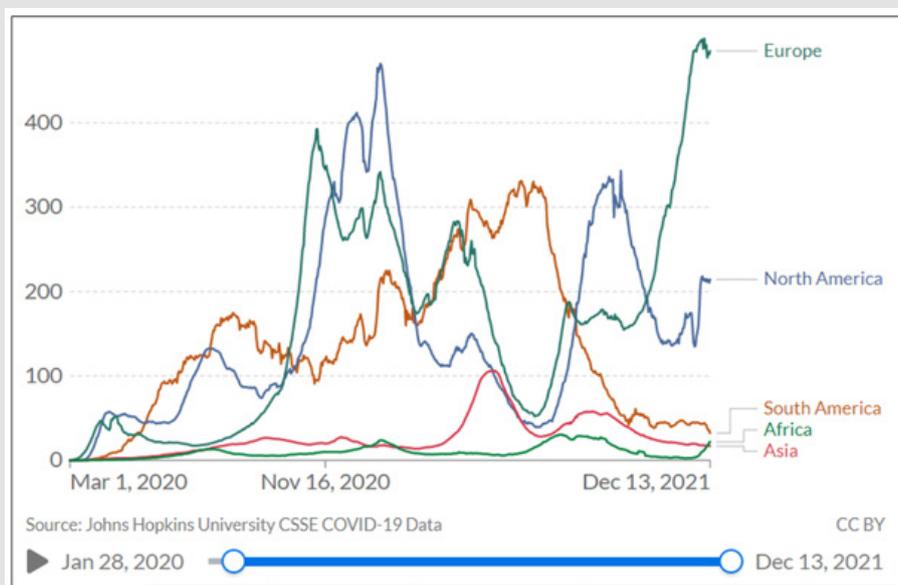


Figure 1: Daily new confirmed COVID-19 cases per million people [14].

Table 1: Comparison Analysis country’s PCR test prices.

Countries	PCR Funding Process
Nigeria	The cost of the COVID-19 PCR test varies across private laboratories in Nigeria. The payment portal currently ranges between N36 000 to N50 400 naira, R1 332-1 864.8 [9].
USA	The price of a PCR test in countries such as the United States (US) varies by geographic region, for example, the city, state and laboratory where one gets tested. The price ranges from \$40 (R 607.6) to more than \$400 (R6076), with \$400 no longer a reasonable amount [9].
Canada	According to Mondassar [9], the costs of a COVID-19 test in countries like Canada vary subject to the laboratory. In the Health Travel L’Escale clinic, the cost ranges between C\$120 (R1 454.4) and \$200 (R2 424).
Argentina, Spain, and Belgium	In some countries such as Argentina, Spain, and Belgium, the PCR test is free. PCR tests are done free of charge [9].
Uruguay, Germany	Similarlry to South Africa, In Uruguay, the Ministry of Public Health provides free PCR tests, however US\$141 (R 2 141.79) is charged in the private sector. In some countries where testing is free, only travellers pay for their tests. Like in Germany returning German citizens may get tested for free by health professionals throughout Germany, but testing upon arrival for travellers is most expensive [11].
Brazil, Chile	In Brazil, tests are covered by health insurance, and in Chile, the PCR test is free in public institutions.
Greece, Italy	For Greece, tests taken in public health settings such as public hospitals are free, but they are relatively cheaper when taken at a private doctor’s office [11]. In Italy, the price varies by geographic location, for example in provinces suchas Lazio (Rome), the PCR test costs about 13 euros (R 225.94).
China	According to the Chinese Way (2020), China uses the Nucleic Acid Test, which cost around \$22-37 (R 354.86-596.81). Travel PCR tests differ, and there are now different test prices for the unvaccinated and lower prices for the vaccinated. Travel test price is 249 Euro or R 4.9K [13].
UK	The test prices differ according to geographical location in the UK, whether home, drive-through or sampling stations. The test generally costs \$44.90 (R723.91), and the antigen test between \$19.90-34.90 equals R320.84-562.85 (Europhins, 2021). The travel test costs around 99 to 145 euros (R1805+).
Kenya	The original price for the PCR testing is 6800 KES. However, if individuals take the PCR test at home, an additional 2500 KES is required for sample collection. For same-day results, an additional 2500 KES needs to be paid in emergency tests
Rwanda	The current price for PCR tests is Rwf 10,000, which is currently under discussion to reduce it by 40%-50%, and negotiations are underway for the government to subsidise a part of this fee or for medical insurance to cover these tests fully [6].

Swaziland/eswatini	The cost for a PCR test is E700 which has been reduced to E500 from the 13th December 2021 [7].
Australia	PCR tests for referrals when one has COVID 19 symptoms is free in public sectors; however, if tests are for international travel and employment purposes, the cost attached to a private facility ranges between \$200-300 depending on the turnaround time for the results [10].
New Zealand	PCR tests are free for residents and non-residents showing COVID 19 symptoms. PCR for travel purposes is done privately at a fee that depends on the location. Free rapid antigen tests will be made available at selected community pharmacies from December 2021 to 31st January 2022 and will be available for people who are not fully vaccinated, over the age of 12 years and three months, and do not have COVID-19 symptoms [8].

## Conclusion

This editorial showed varying costs associated with COVID-19 tests depending on the setting, geographic region, and country. High extremal values of COVID-19 tests costs in other countries indicate an urgent need to regulate prices associated with a COVID-19 test. The case study of CMS in South Africa is essential key learning for other countries on how stakeholders and consumers can intervene of fair practice, competition, product, and services relating to the pandemic can be scrutinised for fairness. This editorial further calls for transparency in all input's costs associated with COVID-19 tests. This is to ensure that the private sector does not unduly benefit or employ profit driven approaches or practices during a pandemic such as COVID-19. Lastly, the review of costs associated with COVID-19 tests should be a function of an ever-changing environment coupled with increased demand for the product or service and the emergence of new variants which may well require patients more frequents testing.

## References

- (2021) Mission possible: getting affordable COVID-19 tests to those who need it most.
- Testaro (2021) Antigen COVID-19 testing.
- (2021) Council for Medical Schemes.
- Ducharme (2020) What to know about COVID-19 tests, from PCR to antigen to antibody.
- Medlynks CA (2021) COVID-19 Testing.
- Mwai C (2021) Rwanda mulls slashing the testing cost for Covid-19. The New Times.
- Hlatshwayo S (2021) Times of Swaziland.
- (2021) Leaving New Zealand.
- Mondassur (2021) How much does the PCR test cost?
- (2021) Testing.
- (2021) Schengenisainfo news. Travel: How much do Covid-19 tests upon arrival cost in different EU countries.
- Europhins (2021) Home tests need to be ordered at least two days before your arrival to align with testing requirements. If you are ordering less than two days in advance, please select a drive-through near you.
- (2021) Midland health. Why is the cost of the COVID-19 test very low in China.
- (2021) Our world in data. Daily new confirmed COVID-19 cases per million people.

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