

Advances in the management model for provision of HIV genotyping services in Brazil

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CONTEXT

Up to 2015 Brazil's Ministry of Health (MoH) purchased genotyping tests and distributed them through a national laboratory network (Renageno). This involved the costs of logistical arrangements for kits and samples, laboratory equipment maintenance and continuous human resources training in the laboratory network. However, since 2016 testing has been contracted out to a private-sector laboratory service which includes centralized testing, samples collection in 708 collection points throughout the country and the online release of test results. This study compares the features of these two schemes for acquiring HIV genotyping tests.

METHODS

Data were collected from the Genotyping Control System (Sisgeno) database from 2015 to 2017 and a comparative analysis of the variables was performed.

RESULTS

Under the former system, when the MoH was buying and distributing the kits, public laboratory professionals were responsible for evaluating the test requests to check if they complied with the criteria established in the relevant clinical protocol. This procedure, and its outcomes, lacked necessary rigor and generated unnecessary costs. On the other hand, after the outsourced service was hired, the private laboratory rejected all the non-compliant requests, which represented 17% of total requests, thus generating an approximate US\$300,000 saving to the public purse in 2017 alone. Moreover, the average time of results-release in the old input purchasing system - 49 days in 2015 - fell to 11 days in 2017, thus optimizing patients' clinical management.

Another important advance related to antiretroviral resistance monitoring was the increased number of results released: from 8,080 in 2015 to 12,265 in 2017. Finally, the unit value of tests under the new scheme is now 40% lower than those previously purchased by the MoH.

Map of Brazil indicating the average time (in days) between sample collection and result release by geographic region.

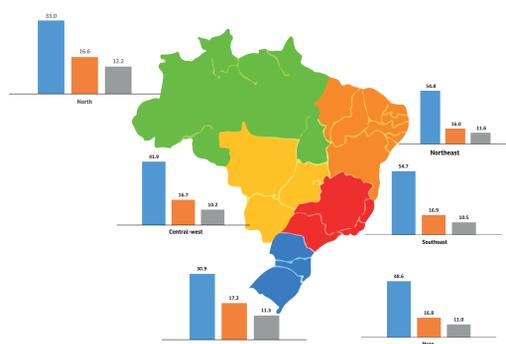
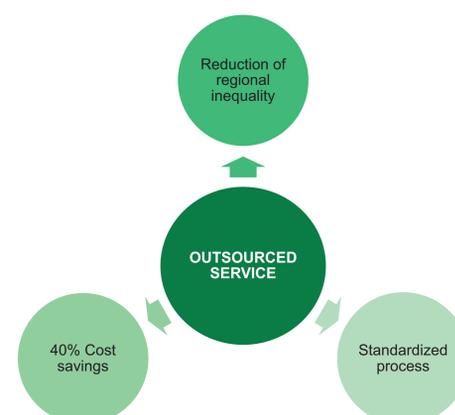


Figure 02: Advantages of the new acquisition model of the HIV genotyping test.



CONCLUSIONS

The study showed that outsourcing genotyping testing offers a number of advantages such as standardized testing, a single laboratory for the MoH to ensure quality control, lower costs overall (e.g. price of reagents, logistics costs), reduced delivery time of test results, and the end of unnecessary testing. The outsourced service approach has also boosted access to testing, thereby enabling patients from all Brazil's regions to receive equal treatment - an important step forward in Brazil's efforts to achieve the 90/90/90 goals.

CONFLICTS OF INTEREST

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest.