Title

Using Open Source Software to Monitor Health Indicators

Introduction

Health indicators are summary measures that contain relevant information about certain attributes and dimensions of health status, as well as the performance of health systems. Taken together, they should reflect the health situation of a population and serve to monitor health conditions. To monitor the health status of states and municipalities, the Ministry of Health agrees on national priority indicators that must be monitored and evaluated by the three federated entities, so the Secretariat of Health uses Open-Source Software, open source tools that are free of cost. license for monitoring and evaluation.

Method

The results are quarterly calculations by the technical areas responsible for the indicators and made available in spreadsheets in Google Drive for Health Situation, which through the RStudio software extracts, tabulates and calculates the necessary information for monitoring. The variables used are: health region, municipality, year, quarter, indicator, agreed value, expected value, result, unit of measure, range. In order to present this information in a clear, timely and interactive manner, the Pentaho tool was used to assist in the construction of results dashboards that are made available via the internet for access by all municipalities and strategic health areas.

Results

The municipal managers and strategic sectors of the health department have access to the results in tables, graphs and maps of 23 Interfederative Pact Indicators and 14 indicators of the Health Surveillance Actions Qualification Program of 139 municipalities and 8 health regions.

Conclusion

The use of Open-Source tools ensured that it was possible to tabulate and make the results available in a timely, clear and interactive manner to all interested parties and allowed the continuity of the service execution, even in a scenario of economic recession, which makes the acquisition difficult or even impossible. or renewal of paid software.