

Effects of Results-Based-Financing on the Availability of Primary Registers in Private Health Facilities in Koulikoro, Mali

Mohamed Diabaté^{1*}, Moussa Bagayoko², Bréhima Boly Berthé³, Boubacar Tata Sangaré⁴, Djeneba Coulibaly⁵¹Agency for Contracting and Verification of Results-Based-Financing, Koulikoro, Mali²World Bank, Bamako, Mali³Army Medical and Surgical Centre of Bamako, Mali⁴Bamako Hospital of Mali⁵Commune II Reference Health Centre of Bamako, MaliDOI: [10.36347/sjams.2024.v12i03.004](https://doi.org/10.36347/sjams.2024.v12i03.004)

| Received: 27.01.2024 | Accepted: 01.03.2024 | Published: 08.03.2024

*Corresponding author: Mohamed Diabaté

Agency for Contracting and Verification of Results-Based-Financing, Koulikoro, Mali

Abstract

Original Research Article

Summary: Registries provide an infrastructure for data evaluation and management as well as knowledge collection system (library). The register in the health field allows you to acquire knowledge relevant and actionable to find solutions to problems current. **Objective:** The aim is to assess the availability of primary registers in private health centers. **Methods and Materials:** We carried out a retrospective, prospective and comparative survey on the availability of registers in the third quarter of 2022 and the third quarter of 2023 in private health centers having signed a performance contract with the Koulikoro contracting and verification agency as part of results-based financing. A total of 14 private health centers participated in this study. **Results:** We note an evolution in the availability rate of registers between the two periods evaluated. The availability of home visit, malnutrition and minor surgery registers was 0% in the third quarter of 2022 and it became respectively 4%, 7% and 80% in the third quarter of 2023. **Conclusion:** This study revealed that the regular verification of primary data recorded in registers is a factor leading to the increase in the availability of registers in private health centers.

Keywords: Effects, Results, based, financing, Primary, registers, Health, centre.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Research can benefit from registries in many ways including any type of study, whether cohort studies, case-control studies or randomized trials (RCT), with less personnel and costs than individual studies. “Nested RCTs” should, if possible, take place in small existing registry infrastructures this is both in the interest of registries and randomized studies [1].

Registries, as a bridge between basic biomedical research and daily medical practice, facilitate “translational research”. In the field of rare diseases, for example, research and publication activities have increased exponentially in biobanks associated with clinical registries. Also, the evaluation of innovations, whether new implants, vaccines or drugs is accelerated with clinical registers or population registers as established evaluation structures [1].

Illness or treatment registers often document the entire course of illness until death, that is, they collect data beyond the periods in which the patient is in contact

with the health system (hospital stays, medical consultation, etc.). They collect data from all patients, whether they are healthy or sick. Their research potential can be further expanded, for example by more efficient integration of the electronic patient record [1].

And finally, registers have the still underexploited potential of informing and evaluating health policy. In principle, activity with registry data is not primarily aimed at knowing whether these data are used for research, quality improvement or innovative practice in the health system. Registers should be able to be used for multiple purposes but rather to determine whether this activity generates knowledge useful to society and whether the potential harm linked to this activity is proportional to the benefit [1].

Information systems are increasingly important for measuring and improving the quality and coverage of health services [2]. The data provided by the health information system comes from service delivery and

administrative records kept as part of current transactions in health establishments and management offices [2].

Public health decision-making is critically dependent on the timely availability of robust data. The role of health information systems is to produce, analyze and disseminate such data [3]. Data must be collected, processed and transformed, communicated and used to inform decisions regarding resource allocation, policy formulation, staffing, service delivery, cost recovery, supportive supervision and management. other elements aimed at improving health outcomes [2].

One of the health information systems used in Mali is the Local Health Information System. And generally speaking, the collection, analysis, interpretation and transmission of data come from registers available in health centers, called primary registers. When these registers are not available, reliable, usable health data will not be used to be transformed into health information. Given the importance of the availability of registers in the health center, we initiated this retrospective, prospective and comparative study in order to improve their availability.

Objective: The objective is to assess the availability of primary registers in private health centers.

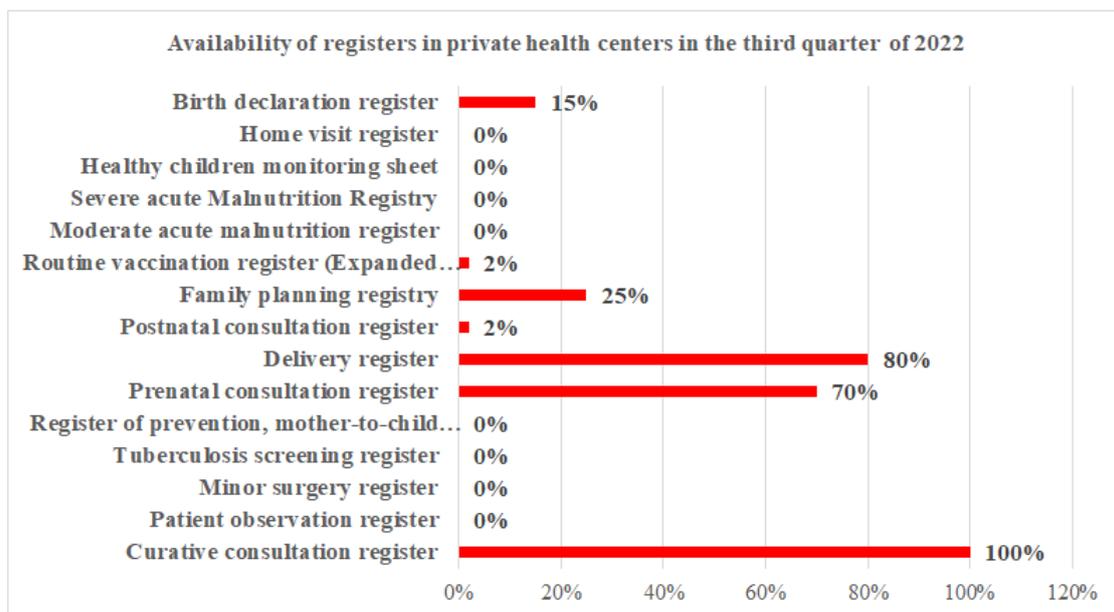
METHOD AND MATERIEL

We carried out a retrospective, prospective and comparative survey on the availability of registers in the third quarter of 2022 and the third quarter of 2023 in private health centers having signed a performance contract with the Koulikoro contracting and verification agency within the framework results-based financing.

At the start of results-based financing in the Koulikoro region, in the third quarter of 2022 we conducted a survey to assess the availability of registers to be available in private health centers in the Koulikoro region, enrolled by the health agency contracting and verification. The private health centers enrolled in the third quarter of 2022 were 14 in number. Then at the end of the third quarter of 2023 a survey was carried out to also assess the availability of these same key registers in the same 14 private health centers to compare the availability rate for these two periods in the same private health centers.

The availability of 15 registers was assessed in the 14 private health centers during the two periods mentioned above. These are the registers of:

- Curative consultation register
- Patient observation register
- Minor surgery register
- Tuberculosis screening register
- Register of prevention, transmission from mother to child of HIV"
- Prenatal consultation register
- Delivery register
- Post-natal consultation register
- Family planning register
- Vaccination register
- Moderate acute malnutrition register
- Severe acute malnutrition register
- Monitoring sheet for healthy children
- Home visit register
- Birth declaration register



Graph I: % of availability of registers in private health centers in the third quarter of 2022

RESULT

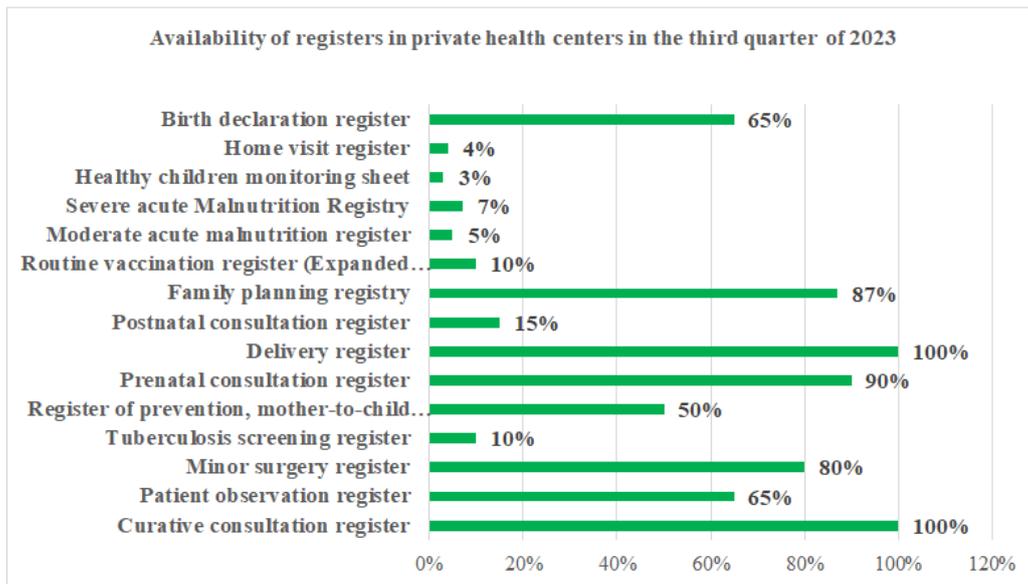
The results obtained when assessing the availability of registers in private health centers in the third quarter of 2022.

We note that the most available register during this period is that of curative consultation with a rate of 100%, then the delivery register (80%) and the lowest availability rates are the registers of home visits, observation patients...

In the third quarter of 2022, 80% of health centers had a delivery register.

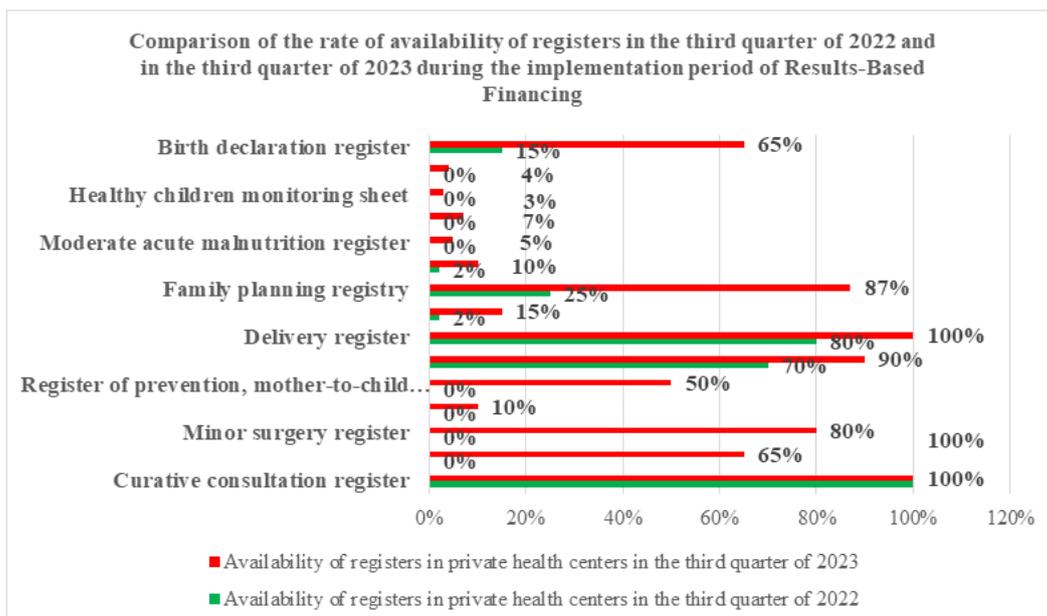
The results obtained when assessing the availability of registers in private health centers in the third quarter of 2023.

We note during this period that the availability of the curative consultation register is maintained at 100%, that of childbirth has increased from 80% to 100% and this increase in availability of registers is also noted in other registers. This progress is mainly linked to the verification of data in the registers since these data must be purchased and the availability of these registers does not allow the verification of the purchasable data therefore the managers of these private health centers use all means to provide the health structure in registers.



Graph II: % of availability of registers in private health centers in the third quarter of 2023

In the third quarter of 2023, 100% of health centers had a delivery register



Graph III: Comparison rate of the availability of registers between the third quarter of 2022 and the third quarter of 2023

The availability of home visit, malnutrition and minor surgery registers was 0% in the third quarter of 2022 and it became respectively 4%, 7% and 80% in the third quarter of 2023.

DISCUSSION

1. Limitations of the study:

We have not had many articles similar to our study topic. This limited the scope of the discussion. The size of the study does not allow the results to be extrapolated to the entire Koulikoro region.

2. General description:

In our study, we note between the period of Q3-2022 and that of Q3-2023 an improvement in the availability of registers in private health centers.

The availability of the curative consultation register was 100% in our evaluation and Mohammed FALL DOGO in his study found that all the structures concerned, the malaria data collection supports were available and could be accessed for the needs of our study [4]. This brings us closer to the study led by Gimbel *et al.*, [5] in Mozambique in 2011 where they assessed the availability of data by checking the presence or absence of monthly reports in all health structures in the district. In almost all the structures included in their study, the reports were present except in a few cases where copies of the reports were not made before their transmission to the higher level.

In the health register and data, the observation was that among the 71 registers analyzed (i.e. registers for which data were available on the Epidemiology France portal), 55 (77%) had been evaluated by the CER [6].

For the availability of malaria reports Mohammed FALL DOGO found 4% [5]. The main objective of health information is its use for decision-making at all levels of the health pyramid, but even more so where it is collected. These decisions taken must serve to correct inadequacies and improve the quality of the system. This was the observation made by TCHEKPE D. in Benin in 2009 [7].

Registries in the health system are an investment in the future. If managed scrupulously, in a transparent and independent manner, they can become a valuable public good, like public transport and the education system [1].

CONCLUSION

This study revealed that the regular verification of primary data recorded in registers is a factor leading

to the increase in the availability of registers in private health centers.

Acknowledgments

We thank the Regional Director of Health of Koulikoro, the coordinator of the Accelerated Progress towards Universal Health Coverage Project (PACSU) and the coordinator of the National Technical Unit (CTN) of Results-Based Financing (RBF).

REFERENCES

1. Bulletin, Registres de santé: un investissement nécessaire pour l'avenir, Page 3.
2. Abajebel, S., Jira, C., & Beyene, W. (2011). Utilization of health information system at district level in Jimma zone Oromia regional state, South West Ethiopia. *Ethiopian journal of health sciences*, 21. Disponible sur: www.ajol.info/index.php/ejhs/article/download/74271/64918
3. AbouZahr, C., & Boerma, T. (2005). Health information systems: the foundations of public health. *Bulletin of the World Health Organization*, 83, 578-583.
4. Dogo, M. F. (2016). Evaluation de la qualité des données de routines de la prise en charge du paludisme en commune III du district de Bamako.
5. Gimbel, S., Micek, M., Lambdin, B., Lara, J., Karagianis, M., Cuembelo, F., ... & Sherr, K. (2011). An assessment of routine primary care health information system data quality in Sofala Province, Mozambique. *Population health metrics*, 9(1), 1-9.
6. Haut Conseil de la Santé Publique de France, registre te données de santé, utilité et perspectives en santé publique, Page 23.
7. Tchekpe, D. (2010). Evaluation du système d'information sanitaire dans la zone sanitaire de Klouékanmè-Toviklin-Lalo au Bénin en 2009 [Internet] [mémoire de Master]. [BENIN] : Université de Cocody Abidjan; 2010 [cité 23 nov 2016]. Disponible sur: epivac.org/Node/3079
8. Ministère de la santé Mali. Rapport d'évaluation du système national d'information sanitaire par l'outil du réseau de métrologie sanitaire. MALI ; 2009 mars. Report No.: MS/SG/CPS.
9. Ministère de la santé Mali. Evaluation du système local d'information (SLIS) avec les outils du PRISM. MALI ; 2014 août.
10. Programme national de lutte contre le paludisme. Politique nationale de lutte contre le paludisme au Mali. 2013.
11. Organisation mondiale de la Santé. Surveillance épidémiologique en vue de l'élimination du paludisme. 2014.
12. Ministère de la santé Mali. Annuaire SLIS 2015. MALI; 2015.