

An Assessment of the performance of the National Health Research System in Mauritius to accelerate progress towards Universal Health Coverage

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Abstract

Background: The goal of universal health coverage (UHC) is that every individual has access to quality health services without running the consequences of financial hardship. The World health report 2013 "Research for universal health coverage" states a performant National Health Research Systems (NHRS) can contribute by providing solutions to challenges encountered in advancing towards UHC by 2030. The WHO Regional Committee for Africa adopted a resolution in 2015 urging member states to strengthen their NHRS to facilitate production and utilization of evidence in policy development, planning, product development, innovation, and decision-making. This study aimed to calculate NHRS barometer score for Mauritius in 2020, identify the gaps in NHRS performance, and recommend interventions for boosting the Mauritius NHRS in the pursuit of UHC.

Methods: The study used a cross-sectional survey design. A semi-structured NHRS questionnaire was administered and complemented with a review of documents archived in pertinent Mauritius Government Ministries, universities, research-oriented departments and non-governmental organizations websites. The African NHRS barometer developed in 2016 for countries to monitor the RC resolution implementation was applied. The barometer consists of four NHRS functions (leadership and governance, developing and sustaining resources, producing and utilizing research, financing research for health [R4H]), and 17 sub-functions.

Results: In 2020, Mauritius had an overall average NHRS barometer score of 60.84%, a 38.27% improvement compared to a score of 44.0% in 2018. The four NHRS functions average indices were 50.0% for leadership and governance, 77.0% for developing and sustaining resources, 52.0% for producing and utilizing R4H, and 58.2% for financing R4H. The overall NHRS barometer score improvements are attributed to the underlying performance growth of 50.0% in leadership and governance, 29.0% in developing and sustaining resources, and 16.4% in financing R4H.

Conclusion: The performance of NHRS could be improved further through the development of a national R4H policy, strategic plan, prioritized agenda, and national multi-stakeholder health research management forum. Furthermore, increased funding for the NHRS may nurture the human resources for health research capacities, hence the number of pertinent publications and health innovations.

Full Text

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Tables

Table 1 Sub-functions / parameters used in calculation of Mauritius NHRS barometer, 2020

<p>A. Leadership and Governance of R4H</p> <ol style="list-style-type: none"> 1. Existence of a national policy on research for health (R4H) 2. Existence of a Law / legislation relating to R4H 3. Existence of a strategic R4H plan 4. Existence of a national research ethics review committee 5. Existence of a national R4H prioritized agenda 6. Existence of a national health research focal point / unit 	<p>B. Developing and Sustaining Resources for R4H</p> <ol style="list-style-type: none"> 7. Existence of health research programme / directorate / department at Ministry of Health and Wellness (MOHW) 8. Number of technical & support staff in R4H programme per 100,000 population 9. Whether R4H programme has internet connectivity 10. Presence of a Medical Research and Innovation Council (MRIC) 11. Number of universities and colleges conducting R4H per a million population 12. Existence of non-governmental organization(s) undertaking R4H
<p>C. Producing and Utilizing R4H</p> <ol style="list-style-type: none"> 13. Existence of a national health research management forum (NHRMF) 14. Existence of knowledge translation platform (KTP) 15. Total number of R4H publications (between 1 December 2019 to 30 November 2020) per 100,000 population 	<p>D. Financing R4H</p> <ol style="list-style-type: none"> 16. Presence of funded R4H budget line within government budget 17. Percentage of MOHW budget allocated to R4H in 2020/2021 financial year

Source: Kirigia *et al* [21].

Table 2 Mauritius NHRS leadership and governance barometer score in 2020				
Sub-functions	Actual Score (A)	Maximum Score (B)	Minimum Score (C)	Sub-Function NHRS barometer scores (D)=(A-C)/(B-C)
National R4H Policy	0	1	0	0
R4H Legislation/Laws	1	1	0	1
R4H strategic plan	0	1	0	0
Functional National Ethics Committee (NEC)	1	1	0	1
National Health Research Focal Point/Unit	1	1	0	1
National prioritized R4H agenda	0	1	0	0
<i>Average NHRS 'leadership and governance' barometer score</i>				<i>0.50 (50%)</i>

Table 3 Mauritius NHRS 'developing and sustaining resources' barometer score in 2020				
Sub-functions	Actual Score (A)	Maximum Score (B)	Minimum Score (C)	Sub-Function NHRS Index (D)=(A-C)/(B-C)
Health Research Programme (HRP) / Unit	1	1	0	1
Number of Technical Staff in HRP per 100,000 population	3.157	100	0	0.0316
Whether HRP has internet connectivity	1	1	0	1
Presence of Mauritius Research and Innovation Council (MRIC)	1	1	0	1
Number of universities and colleges conducting R4H per a million population	3.157	5.39 (Cabo Verde)	0	0.586
Presence of NGOs undertaking health research	1	1	0	1
<i>Average NHRS 'developing and sustaining resources' barometer score</i>				<i>0.77</i>

Table 5 Mauritius NHRS 'financing research for health' barometer score in 2020				
Sub-functions	Actual Score (A)	Maximum Score (B)	Minimum Score (C)	Sub-Function NHRS Index (D)=(A-C)/(B-C)
Presence of health research budget within government budget	1	1	0	1
Government allocation to R4H as proportion of MOHW budget in 2020/2021 financial year	0.328	2.0 (Regional target)	0	0.164
<i>Average NHRS 'financing research for health' barometer score</i>				<i>0.582</i>

Table 6 Mauritius NHRS Barometer in 2020				
Sub-functions	Actual Score (A)	Maximum Score (B)	Minimum Score (C)	Sub-Function NHRS Index (D)=(A-C)/(B-C)
A. Leadership and Governance for R4H				
1. National Health Research Policy	0	1	0	0
2. Health Research Legislation/Laws	1	1	0	1
3. Health research strategic plan	0	1	0	0
4. Functional National Ethics Review Committee (NEC)	1	1	0	1
5. National Health Research Focal Point/Unit	1	1	0	1
6. National health research agenda	0	1	0	0
B. Developing and Sustaining Resources for R4H				
7. Health Research Programme / Unit	1	1	0	1
8. Number of staff in HRP per 100,000 population	3.157	100	0	0.0316
9. Whether HRP has internet connectivity	1	1	0	1
10. Presence of Mauritius Research and Innovation Council (MRIC)	1	1	0	1
11. Number of universities and colleges conducting R4H per aa million population	3.157	5.39 (Cabo Verde)	0	0.586
12. Presence of NGOs undertaking health research	1	1	0	1
C. Producing and Utilizing Research for R4H				
13. Existence of functional national health research management forum (NHRMF)	0	1	0	0
14. Existence of knowledge translation platform(s)	1	1	0	1
15. Total number of research for health publications between 1 December 2019 and 30 November 2020 per 100,000 population	7.02	12.514 (South Africa)	0	0.561
D. Financing Research for Health for R4H				
16. Presence of health research budget within government budget	1	1	0	1

17. Government allocation to R4H as proportion of MOHW budget in 2020/2021 financial year	0.328	2.0 (Regional target)	0	0.164
Overall NHRS barometer score ((sum of sub-function indices divided by 17) x 100%)				60.84%

Figures

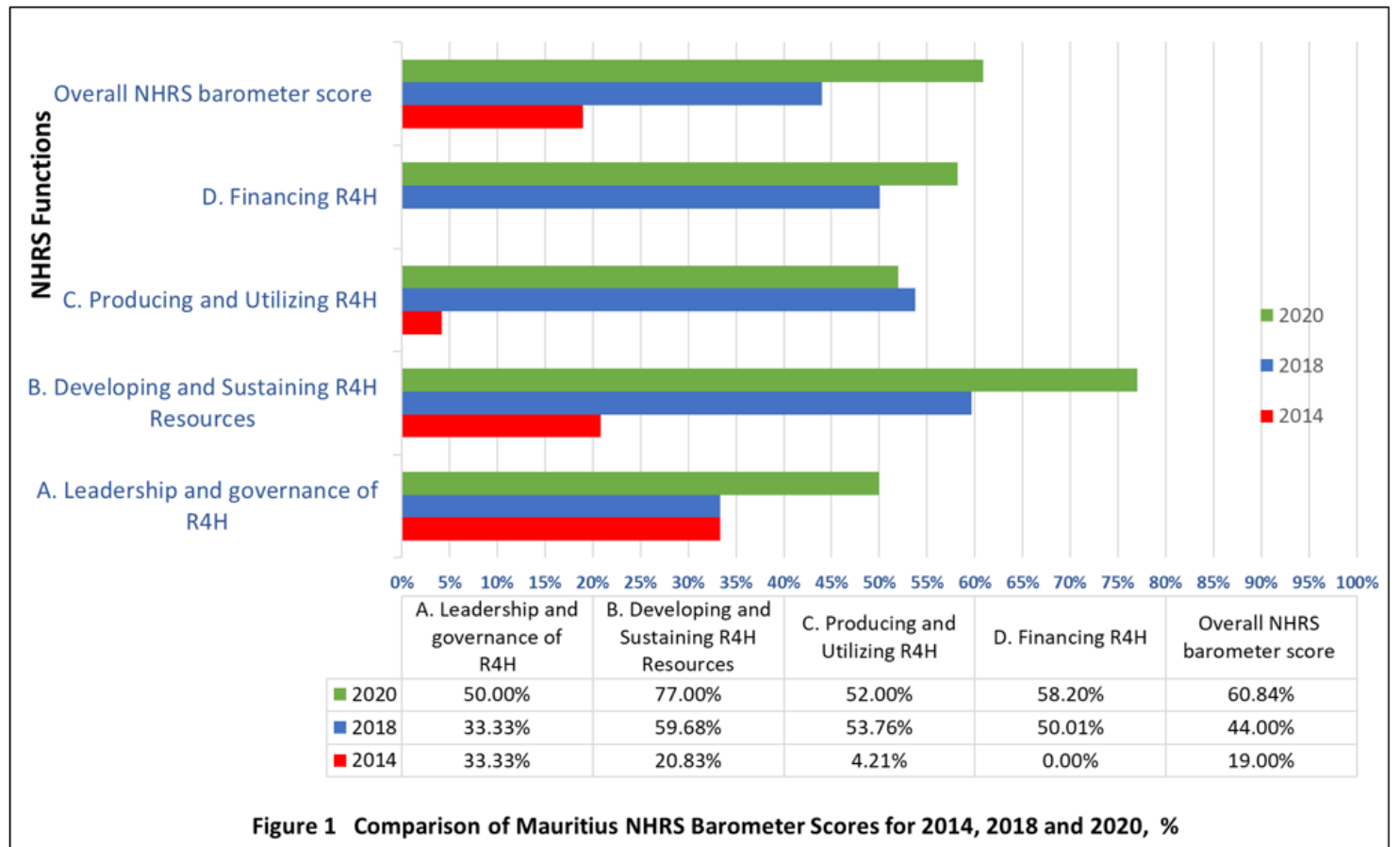


Figure 1

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