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Financing for Universal Health Coverage, A Myth or a Reality in Low- and Middle- Income Countries (LMICs): The Case of Cameroon

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ABSTRACT

The 17 Global Sustainable Development Goals were conceived and adopted by the United Nations in 2015, with an overall purpose to end poverty while protecting the planet and ensuring global peace and prosperity by 2030. One of the goals, Goal 3, directly relates to health by proclaiming good Health and wellbeing. Target 3.8 focuses on Universal Health Coverage (UHC). Universal Health Coverage is enshrined in the concept that all people have access to the full range of quality health services they need, when and where they need them, without suffering financial hardship. Therefore, UHC encourages financial risk protection including access to safe, effective, quality affordable essential medicines and vaccines to all.

The achievement of target 3.8 of the Global Goals entails Government engagement and good political will in healthcare financing to limit out-of-pocket financing of healthcare. This can be achieved through dedicated government budgets to finance various aspects of the healthcare delivery system including essential medicines and health commodities, as well as health facilities within the rural communities.

To realise this dedicated government funding, a structured questionnaire shall be administered to commercial directors of Brasseries du Cameroun, Guinness Cameroun, Kadji Beer Company, and Tobacco factories in Cameroon.

The current rate of out-of-pocket financing of healthcare in Cameroon is approximately 70%. Thousands of families still suffer financial hardship. Besides, long travel distances to the nearest health facility, with no road networks are real obstacles to access to healthcare. This in turn affects targets 3.1 to 3.4 of the global goals. The current healthcare expenditure in Cameroon is 3.82% of GDP as of 2021, below the African average of 5.76%, the Sub-Saharan Africa average of 5.10% and the global average of 7.02% GDP.

Considering the low political will, the low current healthcare spending, and the current crisis that are almost paralysing the economy, as recommendation, dedicated taxes on some commodities consumed within the country as source of finance to exclusively finance healthcare in enclaved areas of the country so that all people can indeed have access to the healthcare they need and where they need without suffering financial hardship.

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Introduction

In 2012, the United Nations Conference on Sustainable Development held in Rio de Janeiro Brazil gave birth to the Sustainable Development Goals (SDGs). These goals intended to meet the urgent environmental, political, economic and health challenges facing the world, and to replace the eight Millennium Development Goals whose implementation started in the year 2000 primarily to tackle poverty and ensure good health [1]. The 17 SDGs were adopted by the United Nations in 2015 through a vote by all the UN member states to transform the world within the period ranging from 2015 to 2030 in the domains of climate change, peace and inclusive societies, healthcare, as well as to reduce inequalities. Healthcare transformation involves inter alia Universal Health Coverage. The equality of the nations can thus be achieved, while addressing environmental challenges [2].

The Sustainable Development Goals

The 17 SDGs are displayed in Figure 1 below, listed in bulleted points as follows [4]:

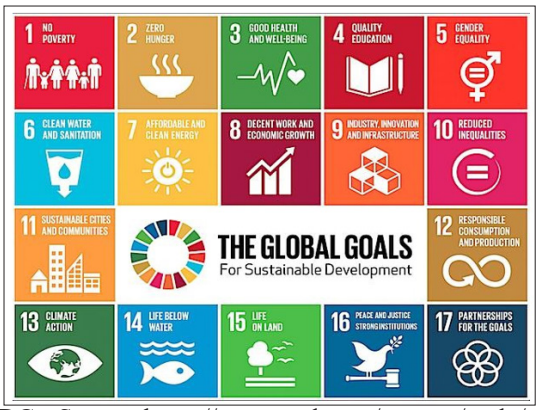

Figure 1: SDGs. Source: https://www.undp.org/content/undp/en/home/sustainable-development-goals.html

- Goal 1: No Poverty – Donate what you don't use
- Goal 2: Zero Hunger – Waste less food and support local farmers.
- Goal 3: Good Health and Well-Being – Vaccinate your family
- Goal 4: Quality Education – Help educate children in our community.
- Goal 5: Gender Equality – Empower women and girls and ensure their equal rights.
- Goal 6: Clean Water and Sanitation – Avoid wasting water
- Goal 7: Affordable and Clean Energy – Use only energy-efficient appliances and light bulbs.
- Goal 8: Decent Work and Economic Growth – Create job opportunities for youths.
- Goal 9: Industry, Innovation and Infrastructure – Fund projects that provide basic infrastructure.
- Goal 10: Reduced Inequalities – Support the marginalised and disadvantaged.
- Goal 11: Sustainable Cities and Communities – Bike, walk or use public transport.
- Goal 12: Responsible Consumption & Production – Recycle paper, plastic, glass, aluminium
- Goal 13: Climate Action – Act now to stop Global Warming
- Goal 14: Life Below Water – Avoid Plastic Bags to keep the oceans clean
- Goal 15: Life on Land – Plant a tree and help protect the environment
- Goal 16: Peace, justice and human rights – Stand Up for Human Rights
- Goal 17: Partnerships for the Goals – lobby your government to boost development financing.

Each of the 17 SDGs were further broken down to targets, that can be realised through events and publications to guide the actions towards the achievement of these global goals [4]. These global goals are intricately linked to each other and ultimate to health, since most of them directly affect the Social Determinants of Health (SDOH).

The Specific Health-Related Global Goal

SDG 3 proclaims Good Health and Well-being, and is subdivided into nine targets, each of which addresses different aspects of health, namely,

- Reduce Maternal Mortality (3.1),
- End all preventable Neonatal and Child Mortality (3.2),
- Fight Infectious Diseases (3.3), R
- educe mortality from Non-communicable Diseases (3.4),
- Prevent and treat Substance Abuse (3.5),
- Reduce deaths from Road Traffic Accidents (3.6),
- Universal access to Sexual and Reproductive Health (3.7),
- Achieve **Universal Health Coverage (3.8)**, and
- Reduce illness and deaths from hazardous chemicals and pollution (Environmental Health) (3.9).

Other targets of the Health Goal, which in essence are the means of achievement of Good Health and wellbeing include: implementing the WHO framework convention on tobacco control (3.A), support research, development and universal access to affordable vaccines and medicines (3.B), increase health financing and support health workforce in developing countries (3.C), and improve early warning systems for global health risks through emergency preparedness (3.D) [2].

SDG 8 combines Millenium Development Goals (MDG) 4, 5 and 6 in respectively reducing child mortality, improving maternal health, and combatting HIV/AIDS, Malaria and other diseases [5].

SDG 3.8: Universal Health Coverage (UHC), What it is

Target 3.8 of the SDGs targets UHC. According to the World Health Organisation (WHO), UHC implies that all people have access to the full range of quality health services they need, when and where they need them, without financial hardship [6]. This all-encompassing definition of UHC has people-centred, quality assured, place, time, and financial implications. "All people", implies people in all areas of a country, be they rural, semiurban or urban communities, and from all economic levels. This implies a qualified health work force that needs to be equitably distributed within the health system. Robust health systems must be in place to ensure UHC. Health systems encompass all institutions, organisation, and resources that are devoted to promoting, sustain or restore health [7].

"Full range of quality health services" implies a complete package of health services equitably distributed throughout the country to satisfy the "when" and "where" aspects of the definition of UHC, ranging from preventive to curative services. In most LMICs, as well as High income countries, there exist massive disparities in specialist services and procedures between the rural and urban settings. As stated by Crouch, Yell, Herbert, Browne, & Hung, even in the US, dialysis centres, a specialist service, are more concentrated in the urban cities as opposed to the rural communities [8]. Interestingly and paradoxically, the life expectancy in rural UK is 2 years longer than urban, though this is not explained by better healthcare services [9]. Primary healthcare services are mostly provided by GPs and Nurses, but are fully covered by NHS in the UK, with an NHS budget of 10% of GDP [9]. In the US, Health Insurance schemes like Medicare and Medicaid, among others assume the healthcare financing role for certain categories of the population [10].

Back to the definition of UHC, WHO states that quality Health services measure the degree to which the health services for individuals and the population increase the likelihood of the desired health outcomes and are consistent with evidence-based professional knowledge [11]. Quality health services, therefore, must address access to healthcare, which both cover the aspects of time and place. According to the Agency for Healthcare Research and Quality (AHRQ), access to comprehensive quality health services implies having the timely use of personal health services to achieve the best outcomes [12].

The definition of UHC equally considers time and space. Access to healthcare is constrained by numerous factors, one of which is the geographical location of the facility and the travel distance. Major travel distances and limited access to motorised transport can limit access to health care, and result in some preventable deaths. Travel distances can range from 0-24 hours, and even days in the absence of motorised transport [13].

The last aspect of the definition of UHC is financial risk protection (FRP). FRP cannot be assured with catastrophic out-of-pocket (OOP) spending to receive health care. According to Bolongaita, et al., OOP account for about 40% of health expenditure in LMICs [14]. This significant figure implies that the choice to remain healthy must involve another, yet uncomfortable choice to be financially unprotected. Access to healthcare in some settings involves disposal of landed properties or other fixed assets, thus plunging the families into abject poverty.

The Universality of UHC

All the targets of the SDG 3 can only be achieved through UHC. UHC therefore stands as the overarching target of Good Health

and Wellbeing. According to WHO, "countries need to have strong, efficient and equitable health systems that are rooted in the communities they serve" [14]. Healthcare within the community can only be achieved through the concept of Primary Health Care (PHC) which involves an approach geared towards the whole society to strengthen health systems and ensure services for health and wellbeing are equitably distributed throughout the country, and as such are closer to the community [15,16]. However, in most LMICs, there tends to be a concentration of Health Facilities and skilled personnel in the urban milieu compared to the rural milieu, forced by socio-cultural factors, health system factors and intrinsic health worker factors [17]. This poses a challenge on any progress made towards UHC since some communities will be favoured at the expense of others.

Progress Towards UHC Globally

The zeal to achieve UHC was enormous even before the promulgation of the 17 SDGs in 2015 to advance SDG Goal 3.8. There has been a progressive increase in the level of achievement of this goal from 2000 to 2015 as WHO documents an increase from 45 to 68 index points within this period [18]. However, there was observed abrupt stagnation, and deterioration in some cases, observed in service coverage in some regions of the world, except Africa and Southeast Asia regions, added WHO. Progress towards UHC ought to be in dual phase: Service Coverage and Financial Risk Protection (FRP). As documented by Nwankwo, et al., service coverage favours the urban milieu due to diverse factors from the health system perspective as well as from the health worker's career orientation and objectives [17]. However, in most cases, an increase in service coverage is counteracted by an increase in catastrophic out-of-pocked expenditure [18].

The achievement of the SDGs would have been very smooth if the progress made during the MDG era was maintained as we transitioned and continued during the SDG era. However, all advances in the achievement of most SDGs, including SDG 3 were apparently neutralised and/or stagnated with the advent of the SARS CoV-2 pandemic in 2019. According to Yuan, et al., (2023), SARS CoV-2 adversely affected 13 of the 17 SDGs, with only four being spared to an extent (SDG 12, 13, 14 & 15). The drive to end poverty was almost completely frustrated by the SARS CoV-2 pandemic. SDG-3 was affected in all facets, affecting, inter alia maternal mortality, under 5 mortality, access to essential medicines and health technologies, as well as availability of skilled health care professions.

Progress UHC in LMICS

The Impact of SARS CoV-2

The aftermath of the SARS CoV-2 pandemic on LMICs especially in Africa South of the Sahara, and South East Asia WHO regions is very grievous on the achievement of the SDGs with OOP healthcare spending of over 70% in some countries like Bangladesh and Nigeria [19]. This high OOP is directly parallelled by low per capita government expenditure on health. The SARS CoV-2 pandemic significantly affected non-resilient health systems, with lasting impacts on all facets of healthcare from pharmaceutical and health products supply chain to the provision of healthcare services. The result of this impact was preventable deaths that occurred due to interruptions in visits, and stock out of life-saving health commodities like antiretroviral medications [20]. The impact on Tuberculosis was at least fourfold: reduced TB testing and reporting due to the similarities of its symptoms with those of TB, restriction in patients' movements, stock outs of anti-tuberculosis medicines, and coinfection with TB and SARS-CoV-2 infection, all of which resulted in increased morbidity and mortality [21]. These are clearly a stall in the global progress towards UHC.

The Impact of Conflicts and Wars

Armed conflicts and wars affect all aspects of human life including healthcare. in war and conflict situations, healthcare workers are trapped in-betweens the armed groups, with the challenge of whether or not to treat victims and be accused of collaborating with them by the opposing camp (Nkiese & Wirba). Healthcare facilities in geographic locations affected by armed conflicts and humanitarian crises are inaccessible to the population because of challenges in transportation and insecurity in any attempt to move to the health facilities [22]. Thus, armed conflicts affect Global Health Security (GHS) and hinder the attainment of the SDGs.

Progress in UHC Activities in Cameroon

Progress towards UHC in Cameroon is rather exceedingly slow. With the Global Goals voted way back in 2015, Cameroon officially launched the first phase of UHC in April 2023 in the Mandjou Health District of the East Region [23]. The focus of this initial phase was on HIV care and treatment, TB, malaria and onchocerciasis, as well as the management of kidney failure through haemodialysis [24].

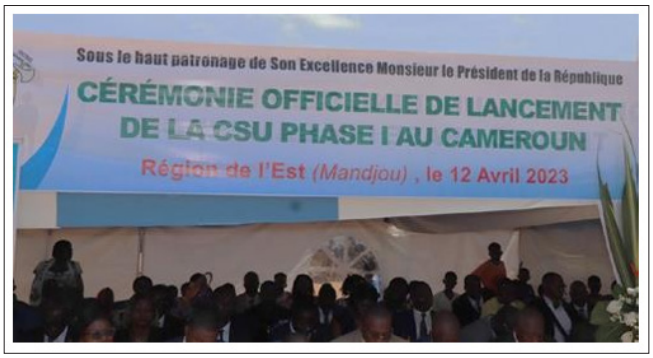

Figure 2: Launching Ceremony UHC Phase 1, Bertoua Cameroon. Source: Management Sciences for Health, 2023

UHC activities will encompass inter alia Maternal and Child Health, Infectious diseases and Non-communicable Diseases (NCD) [25]. However, significant progress has only been on infectious diseases like HIV, TB and Malaria, relying heavily on funding and technical support from The Global Fund, World Bank, USAID and PEPFAR among others, besides the state, households and the private sector [26]. Progress in UHC needs to go beyond a political agenda to effective implementation, especially in Cameroon where there is too much distrust towards the government as the main actor in healthcare [25].

The Impact of the Socio-political Crises

The current socio-political crises in the English-speaking regions of Cameroon have had untold negative consequences in the achievement of UHC. Most of the population is unable to access healthcare for security reasons, even if they have the means to pay, considering that the current OOP spending on healthcare is 70% [23]. Besides, some health facilities have been obliged to stop their operations in certain localities for the security of the health workers. Armed conflicts thus challenge GHS, which affects Global Goal 16 on Peace, Justice and Human Rights, with violations from both the military forces and the Government forces (Nkiese & Wirba).

Realities of the Health System

Health Systems need to be responsive to the expectation of the population, ensure good health for the citizens, and ensure fair financial contribution so as to make the provision of healthcare sustainable. To achieve these, Risal, proposes four vital system functions that must be observed: healthcare service provision, resource generation, financing, and stewardship [27].

Healthcare Services Provision

Provision of health services is the sole responsibility of the state [28]. The state has the obligation to ensure accessibility and affordability of healthcare services and that the cost does not dive the users into financial hardship. Reliance solely on the state will never meet the healthcare needs of the population. Some localities are completely without a public health facility and the travel distance is considerable. This is the reason why other actors in healthcare delivery, like the for-profit private facilities and the faith-based facilities step in to assist in healthcare provision.

Resource generation

In this regard, the state ensures that human, financial and material resources for health are available and adequate to meet up with the healthcare needs of the population and assist the human resources for health in service provision.

Financing

Healthcare financing can be achieved in various ways. First, the state through its budgetary role allocates finances for healthcare. Besides, health insurance schemes come in to assist the population and reduce the financial burden on them that can potentially arise from OOP [10].

Stewardship

Healthcare stewardship is an over-arching principle enshrined in selfless, careful and responsible management of the wellbeing of the population by the government and government agents [29]. The government has responsibility on the entire health system to oversee the health of the population. Good stewardship translates itself to good governance and cannot be achieved without good political will. Good stewardship results in improved health outcomes and better population health outcomes.

Key Health Indicators

Human Resources for Health

This is estimated in terms of number of physicians, nurses, pharmacists, physiotherapists, etc. per defined population. Recently, the number of physicians per 1000 population in Cameroon, as of 2020 was reported at only 0.1 (World Bank Group, 2024), as opposed to other LMICs like Cape Verde (0.8), Djibouti (0.2), Ghana (0.2), Lesotho (0.5) and Zambia (0.3). The figure for 2024 is not different at 0.13 (Statistica, 2024) for physicians, 0.23 for nurses, 0.01 for pharmacists, and 0.05 physiotherapists per 100 000 population. These figures speak for themselves and stand as an obstacle to the path of UHC.

Distribution of Human Resources for Health

With the figures presented above, the health personnel cluster themselves around the urban cities leaving the rural communities at the mercies of roadside medicines vendors and very unqualified personnel to attend to their needs.

Under Five Mortality

The current under five mortality in Cameroon is 52.798 per 1000 live births, with a small decline from 66.866 in 2015, with a fertility rate of 4.241 births per woman. It is worrisome if Cameroon shall be able to achieve the neonatal mortality of less than 12 deaths of every 1000 life births and under five mortality rate of 25 deaths per 1000 life births by 2030 [30,31].

Maternal Mortality

Maternal Mortality as of 2020 was 438.00 per 100 000 life births, down from 447.00 in 2015
[31].

Life Expectancy at Birth

Life Expectancy at birth as of 2023 was 60.61 years, up from 57.28 years in 2015, indicating a positive progress.

Financial Risk Protection

There is no mechanism in place for financial risk protection. Each year, thousands of families are plunged into financial hardship from catastrophic health expenditure, especially those receiving treatment on in-patient basis and those suffering from chronic diseases (both non-communicable diseases (NCD) and communicable [32]. According to OECD, "a lack of financial protection can reduce access to healthcare, undermind health status, deepen poverty, and exacerbate health and socio-economic inaqualities"[33].

The Healthcare Budget

Cameroon's healthcare budget as of 2019 stood at 208 billion FCFA, representing 4.29% of the state budget [26]. According to data from The World Bank, the Cameroon's healthcare spending from 2015 to 2021 is illustrated below showing a minimal increase form 2015, the year the Global Goals were adopted [31]. The 2021 figure of 3.82% of GDP, is below the African average of 5.76%, the Sub-Saharan Africa average

of 5.10% and the global average of 7.02% GDP (The World Bank Group, 2024). From the table, Cameroon's per capita healthcare spending is significantly low compared to other countries classified as LMICs like Cape Verde ($248), Djibouti ($88), Ghana (100), Lesotho ($115), Nigeria ($84), and Zambia ($75) among others [31,34].

Cameroon Healthcare Spending - Historical Data

Year	Per Capita (US $)	% of GDP
2021	$64	3.82%
2020	$58	3.77%
2019	$56	3.65%
2018	$58	3.62%
2017	$50	3.40%
2016	$51	3.59%
2015	$50	3.60%

Table 1) Cameroon's Health Spending Historical Data. Source: [31]

Can UHC be Achieved with the Current Healthcare Budget?

The realisation of UHC involves appropriate financing, political will, robust health systems, and transparency. In countries like Zambia, the healthcare budget as of 2023 was 10% of the total budget [35]. Zambia believes that a healthy nation is key to socio-economic development (Social Health Publication Network, 2024). Zambia holds that the realisation of UHC depends inter alia on Private Sector involvement, Public-Private Partnerships,

cooperation with financial partners, and optimising household payment for healthcare services, while reducing reliance on external funding [36]. The above is the example of a determined LMIC in achieving UHC.

In Cameroon, one of the alternative solutions to significant OOP is Private Health Insurance; however, this scheme is intended to cover those that can subscribe to it, and as such is highly selective in its coverage [37]. Besides selectivity, Oyono adds that the limitation of private insurance on UHC is that it is not accessible to all. Since the official launch of UHC in 2023, there have been some milestones registered in UHC in rendering prenatal care affordable, free deliveries, subsidies in cost of haemodialysis, as well as free consultation to some children [38]. However, these milestones have been through funded programs by foreign partners. How sustainable can reliance on partners be? Besides, the beneficiaries of these initiatives are mostly found in the urban cities. The rural communities are left alone with few or no health facilities, some of which have been abandoned in the conflict zones, plagued by long travel distance to health facilities and catastrophic healthcare expenditure.

There was a political move in 2015 towards UHC through the creation of the Intersectoral National Technical Group (UHC-TWG), aimed at pooling together different funding sources to address the inequalities between the insured and the uninsured [39]. For such a move to be effective, the institution must be independent with financial autonomy, but with external controls to ensure complete accountability and reduce corruption. However, the impact of this move is yet to be felt nationwide.

Dedicated Taxes as a Source of Financial for UHC

Taxes Only on Alcoholic Beverages, a Potential Source of Financing for UHC

According to Bama, Cameroon is the 4th leading consumer of alcoholic beverages in Africa, and the first in the CEMAC region, having consumed 1.1 billion litres of beer in 2023, up from 660 million Litres in 2016 [40,41]. This translates to about 3.05 million litres per day. Considering the average beer size of 650ml, this amounts to 4.7 million bottles per day. The figure for 2024 is likely higher considering the hike from 660 million in 2016 to 1.1 billion Litres in 2023.

Considering the average factory price of 400FCFA per bottle of beer, we recommend the introduction of just a 2% tax (on the factory price) on all alcoholic beverages for UHC. The total calculated revenue is as illustrated on the table below (considering $1 ≈ 600 FCFA):

Table 2: Year Income for UHC from 2% taxes on Beer in Cameroon

Quantity Consume d Per Day	Unit Price (FCFA)	Total Daily Cost (FCFA)	UHC Daily Income (2% of Factory Price)	UHC Monthly Income	UHC Yearly Income
4 700 000	400	1 880 000 000	37 600 000	1 128 000 000,00	13 724 000 000,00
	Unit Price (USD)	Total Daily Cost (USD)	UHC Daily Revenue (USD)	UHC Monthly Revenue (USD)	UHC Yearly Revenue (USD)
4 700 000	0,67	3 133 333,33	62 666,67	1 880 000,00	22 873 333,33

The figures in Table 2 are the result of just 2% taxes on Beer alone as a dangerous commodity being consumed nationwide. These could go to constructing ultra-modern health facilities. There are no universal estimates on the cost of constructing a health facility in LMICs, however, it is estimated that the Douala gynaecology-obstetrics and paediatrics hospital, commissioned on November 07, 2015 costed about 15 billion FCFA [42]. The above cost approximately corresponds to the cost of this ultramodern hospital. The same funds can be utilised to build at least ten integrated health centres in each of the country's 10 regions within selected localities per year based on need analysis. Such integrated health centres will assist in taking care of the poor population that presently relies on unqualified drug vendors who end up endangering their lives.

Part of the funds can as well be utilised to give special incentives to the healthcare workforce that accepts to render their services in the rural settings to take care of the desperate population, as well as provision for healthcare services, like supply of essential medicines and health technologies.

Other Possible Taxable Commodities for UHC (Tobacco and Sweetened Beverages)

Aside from Alcoholic beverages as a source of finances for UHC, tobacco, and sweetened beverages whose consumption is in massive amounts, and their consumption endangers the health of the consumers and non-consumers alike [43]. We propose a similar 2% tax on the factory cost.

Justification of the 2% Tax on Dangerous Goods.

According to WHO, the dedicated tax increase on these dangerous goods should be high enough to render the dangerous goods less affordable [43]. However, despite the regular price increase of these dangerous goods, the consumption keeps increasing at a geometric rate. It therefore becomes logical that the prices increases should focus on generating funds for UHC rather that making the goods less affordable.

Recommendations

Usually, the expansion and construction of health facilities is usually in the budgetary plans of the state. If the state therefore budgets for expansion with the current budget designated for healthcare, these additional finances can contribute in the following ways towards attainment of UHC:

- Ensure equitable distribution of health facilities, at least in the conflict-free zones
- Redeploy the workforce to the rural communities, and designate special incentives to encourage them remain in these areas for the health of the population
- Ensure the timely availability of pharmaceuticals products and health commodities in the rural communities
- Optimise the las mile delivery of commodities with alternative means like helicopters during the seasons that the facilities are inaccessible from bad road networks
- Ensure good governance to rekindle the trust that has been lost on the government as the lead actor in the provision of health care

- Subsidize all healthcare costs by 50% to ensure financial risk protection and reduce OOP
- Explore all possible means to resolve the current socio-political crises hitting the country since over seven years already

Conclusions

This article has elaborated Cameroon's progress towards UHC. It is clear that Cameroon is off- track in its progress towards UHC considering the current level of healthcare financing with 70% out-of-pocket financing. This article has highlighted some weaknesses in the system that need to be addressed in an attempt to bring us back to the track and move towards UHC. Particularly, the need for alternative, dedicated funds for UHC through taxation of dangerous goods will contribute to this goal. UHC is difficult to achieve, but it is very achievable through concerted effort and appropriate political will, especially in implementing the recommendations enumerated above.

Conflicts of Interest

The author declares No conflicts of Interest

References

1. UNDP (2016) Sustainable Development Goals; Background on the goals. Transitioning from MDGs to SDGs. Denmark: SDG Accelerator https://www.undp.org/sdg-accelerator/.
2. Hales R, C Birdthistle N (2023) The Sustainable Development Goal – SDG#3 Good Health and Well-Being. In R. Hales, C N. B. (Ed) Attaining the 2030 Sustainable. Development Goal of Good Health and Well-Being (Family Business on a Mission) Leeds: Emerald Publishing Limited https://doi.org/10.1108/978-1- 80455-209-420231001.
3. United Nations (2023) Take Action for the Sustainable Development Goals. Geneva https://www.un.org/sustainabledevelopment/sustainable-development-goals/.
4. United Nations (2015) The 17 Goals. Geneva: Department of Economic and Social Affairs https://sdgs.un.org/goals.
5. WHO (2018) Millennium Development Goals (MDGs). Geneva https://www.who.int/news-room/fact-sheets/detail/millennium- development-goals-(mdgs).
6. World Health Organisation (2023) Universal health coverage (UHC) https://www.who.int/.
7. Lawrence R (2014) Understanding Environmental Quality Through Quality of Life (QOL) Studies. In Reference Module in Earth Systems and Environmental Sciences. Elsevier https://doi.org/10.1016/B978-0-12-409548-9.09139-9.
8. Crouch E, Yell N, Herbert L, Browne T, C Hung P (2024) Availability and Quality of Dialysis Care in Rural versus Urban US Counties. American journal of Nephrology 55: 361-368.
9. Glick R (2020) The UK National Health Service: A Rural Versus Urban Perspective. Birmingham: Southern Medical Association https://sma.org/the-uk-national-health-service/.
10. Institute of Medicine (US) Committee on the Consequences of Uninsurance (2002) Health Insurance is a Family Matter. Overview of Public Health Insurance Programs, B. Washington (DC): National Academies Press (US) https://www.ncbi.nlm.nih.gov/books/NBK221009/.
11. World Health Organisation (2020) Quality health services. Geneva https://www.who.int/news-room/fact-sheets/detail/quality-health- services.
12. AHRQ (2021) National Healthcare Quality and Disparities Report. Rockville. https://www.ncbi.nlm.nih.gov/books/NBK578537/.
13. Weiss DJ, Nelson A, Vargas-Ruiz CA, Gligorić K, Bavadekar S, et al. (2020) Global maps of travel time to healthcare facilities. Nature Medicine pp: 1835-1838.
14. Bolongaita S, Lee Y, Johansson KA, Haaland ØA, Tolla MT, et al. (2023) Financial hardship associated with catastrophic out-of-pocket spending tied to primary care services in low- and lower-middle-income countries: findings from a modeling study. BMC Medicine 35c.
15. WHO (2024) Universal health coverage. Geneva https://www.who.int/health-topics/universal-health-coverage#tab=tab_1.
16. WHO (2023) Primary Health Care. Geneva. https://www.who.int/.
17. Nwankwo ON, Ugwu CI, Nwankwo GI, Akpoke MA, Anyigor C, et al. (2022) A qualitative inquiry of rural-urban inequalities in the distribution and retention of healthcare workers in southern Nigeria. PLoS One https://doi.org/10.1371/journal.pone.0266159.
18. WHO Executive Board (2023) Universal health coverage, Report by the Director- General. Geneva: WHO https://apps.who.int/gb/ebwha/pdf_files/EB154/B154_6-en.pdf.
19. Kodali PB (2023) Achieving Universal Health Coverage in Low- and Middle-Income Countries: Challenges for Policy Post-Pandemic and Beyond. Risk Manag Healthc Policy https://doi.org/10.2147/RMHP.S366759.
20. SeyedAlinaghi S, Mirzapour P, Pashaei Z, Afzalian A, Tantuoyir MM, et al. (2023) The impacts of COVID-19 pandemic on service delivery and treatment outcomes in people living with HIV: a systematic review. AIDS Research and Therapy https://doi.org/10.1186/s12981-022-00496-7.
21. Cioboata R, Biciusca V, Olteanu M, C Vasile CM (2023) COVID-19 and Tuberculosis: Unveiling the Dual Threat and Shared Solutions Perspective. Journal of Clinical Medicine https://doi.org/10.3390/jcm12144784.
22. Olu OO, Petu A, C Usman A (2024) Leaving no one behind in armed conflict- affected settings of Africa: is universal health coverage a possibility or mirage? Global Health Research and Policy https://ghrp.biomedcentral.com/articles/10.1186/s41256-024-00360-3.
23. Management Sciences for Health (2023) The Journey Towards Universal Health Coverage in Cameroon: Forging a Path to Equitable Health Care Access for All. Management Sciences for Health https://msh.org/wp- content/uploads/2023/11/RISE-Cameroon-UHC-EN-Tech-Brief-Sept2023.pdf.
24. Nkafu Policy Institute (2024) Universal health coverage in Cameroon: One year on, what works? Yaoundé, Centre Region https://nkafu.org/m-events/.
25. Cynthia AN, C Kılıç B (2022) Management of Universal Health Coverage in Cameroon. Journal of Basic and Clinical Health Sciences pp: 673-681.
26. NKAFU Policy Institute (2022) Health Care Financing in Cameroon: Challenges and Opportunities https://nkafu.org/m-events/.
27. Risal N (2013) Health Care Financing Through Taxation: Central Issue in Developing Countries. The Pancea Journal 3: 25-27.
28. WHO (2022) The role of government in supporting health.
29. Kapoor N, Kumar D, C Thakur N (2014) Core attributes of stewardship; foundation of sound health system. Int J Health Policy Manag 3: 5-6.
30. UNICEF (2024) Child survival and the SDGs https://data.unicef.org/.
31. Macrotrends (2024) Cameroon Healthcare Spending https://www.macrotrends.net/global- metrics/countries/CMR/cameroon/healthcare-spending.

32. Cholong BJ, Mayin KB, Aloysius C NM (2022) The Determinants of Catastrophic Health Expenditure and Coping Strategies for Households with People Living With HIV/AIDS in the Nkambe District Hospital, Cameroon. European Journal of Health Sciences 7: 36-48.
33. OECD (2023) Financial hardship and out-of-pocket expenditure. In OECD, Health at a Glance 2023 OECD Indicators. Paris: OECD Publishing https://doi.org/10.1787/745397ba-en.
34. Jobarteh M (2024) Lower middle-income Africa. ISS African Futures https://futures.issafrica.org/geographic/income-groups/lower-middle-income- africa/.
35. UNICEF (2023) Health Budget Brief: Sustainable Financing of Healthcare Delivery UNICEF for Every Child. Lusaka https://www.unicef.org/esa/media/12571/file/UNICEF-Zambia-Budget-Brief- Health-2023.pdf.
36. World Health Organisation (2024) Health financing progress matrix assessment, Zambia 2024. World Health Organization https://www.who.int/publications/b/68078.
37. Oyono JB (2023) The Contribution of Private Health Insurance to the Financing of Healthcare in Cameroon. On Policy Africa https://onpolicy.org/.
38. USAID (2023) Supporting Universal Health Coverage in Cameroon: The U.S. Government's Impact Through the PEPFAR/USAID RISE Project for Equitable Access to Health Care for All. Yaoundé. Retrieved Oct 18, 2024, from https://www.usaid.gov/.
39. Strategic Purchasing African Resource Center (2021) Strategic Health Purchasing in Cameroon. Multiple Fragmented Schemes and Opportunities for Alignment in the Universal Health Coverage Context. Nairobi https://sparc.africa/.
40. Bama B (2024) The Top 5 Beer Consuming Countries in Africa. The HotJem Media LLC https://thehotjem.com/.
41. Fongang CL (2020) Epidemiologic Approach of Alcoholic Drinks in Cameroon. Journal of Internal Medicine & Emergency Research https://doi.org/10.37191/Mapsci-2582-7367-1(1)-006.
42. Business in Cameroon (2015) Cameroon inaugurates FCfa 15 billion ultra-modern hospital financed by China. Newsletter https://https://www.businessincameroon.com/public-management/.
43. World Health Organisation (2025) Health Taxes.World Health Organisation: https://https://www.who.int/health-topics/.
44. AHRQ (2021) National Healthcare Quality and Disparities Report. Rockville. https://www.ncbi.nlm.nih.gov/books/NBK578537/.
45. Crouch E, Yell N, Herbert L, Browne T, C Hung P (2024) Availability and Quality of Dialysis Care in Rural versus Urban US Counties. American journal of Nephrology 55: 361-368.
46. Enel Group (2021) Sustainable Development Goals (SDGs): Our history and close relationship. Viale Regina Margherita, Rome https://www.enelamericas.com/.
47. FreshBooks (2024). How Much Does It Cost to Build a Hospital: Construction Cost Totonto https://www.freshbooks.com/hub/.
48. Macrotrends (2024) Cameroon Infant Mortality Rate 1950-2024 https://www.macrotrends.net/.
49. Nkiese, JK, C Wirba SK (n.d.) (2023) Perspective Chapter: Armed Conflict and Its Impact on Human Migration – The Healthcare Perspective. In A. Michaud, S. P. Stawicki, C R.I. (Ed) bal Health Security-Contemporary Considerations and Developments. InTech Open https://doi.org/10.5772/intechopen.112791.
50. SeyedAlinaghi S, Mirzapour P, Pashaei Z, Afzalian A, Tantuoyir MM, et al. (2023) The impacts of COVID-19 pandemic on service delivery and treatment outcomes in people living with HIV: a systematic review. AIDS Research and Therapy https://doi.org/10.1186/s12981-022-00496-7.
51. Social Health Publication Network (2024) Health Financing Strategy: 2017 – 2027, Towards Universal Health Coverage for Zambia. P4H https://p4h.world/fr/documents/strategie-de-financement-de-la-sante- 2017-2027-vers-la-sante-universelle-pour-la-zambie/.
52. Statistica (2024) Health Indicators - Cameroon https://www.statista.com/outlook/co/health-indicators/cameroon#healthcare- resources.
53. The World Bank Group (2024) Current health expenditure (% of GDP) – Cameroon https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?loca.
54. US Center for Disease Control and Prevention (2024) Social Determinants of Health (SDOH) Atlanta https://www.cdc.gov/about/priorities/why-is-addressing-sdoh-important.html.
55. World Bank Group (2024) Physicians (per 1,000 people) - Cameroon https://data.worldbank.org/indicator/SH.MED.PHYS.ZS?locations=CM.
56. World Health Organisation (2022) Targets of Sustainable Development Goal 3. Sustainable Development Goals. Geneva https://www.who.int/europe/.
57. Yuan H, Wang X, Gao L, Wang T, Liu B, et al. (2023) Progress towards the Sustainable Development Goals has been slowed by indirect effects of the COVID-19 pandemic. Communications Earth & Environment https://doi.org/10.1038/s43247-023-00846-x.