

## Report on gaps and needs assessment of cancer, a priority disease area in Cote d'Ivoire, Kenya and South Africa

### 1. Background and rationale

Non-communicable diseases (NCDs) are becoming increasingly challenging to the health system across Africa. Africa is expected to have 1.27 million new cancer cases and 0.97 million cancer-related deaths per year according to certain projections (Nyagabona et al 2021, Sylla 2012). Most governments have declared NCDs, including cancer, to be among the major public health concerns that threaten economic development (Siddharthan 2015, WHO 2019). To address this increasing crisis, the World Health Organization (WHO) recommends the development of national cancer control plans that are systematic, equitable, and evidence-based (National Cancer Control Programs 2002). Despite the responsibility of national policymakers to create cancer control plans based on evidence, there is a paucity of data on the epidemiology, etiology, biology, and management of cancers from within Africa. Instead, the control plans are developed based on data from high-income countries, which may not be relevant in the African context (Dalal 2011).

There are three levels of cancer prevention (Gu et al 2020):

- (a) Primary prevention is the process of reducing the incidence of cancer by removing risk factors for the disease, such as physical activity, a balanced diet, abstaining from alcohol or tobacco use.
- (b) Screening to detect diseases in their early stages (such as preneoplastic lesions) and preventing them from developing into malignancy are examples of secondary prevention.
- (c) Tertiary prevention is the process of lowering or managing the morbidity and symptoms of cancer that has already been detected or the morbidity brought on by cancer treatment.

However, cancer management encompassing multiple costly therapeutics, medical technologies, and diagnostics is exacerbated by limited allocation of public funds for screening, diagnosis, and treatment and the fact that majority seeking treatment pays out of pocket.

Since the 1940s, innovative technologies have significantly improved cancer outcomes, from new forms of chemotherapy which can cure many childhood and adult haematological malignancies to surgical advancements like total mesorectal excision, improving rectal cancer mortality rates. These technological improvements in surgery, radiotherapy, pathology, and imaging have led to earlier diagnosis and better screening, such as in cervical cancer, laying foundations for improved population outcomes. Point-of-care visual inspection with acetic acid for cervical screening targeted



at the most vulnerable female populations, is an example of how technology can reduce inequalities in outcomes (Sullivan 2019). Other frugal innovations, such as oral cancer screening devices attached to smartphones, lab-on-a-chip devices, and folding microscopes, can also reduce inequalities by providing diagnostic and pathological tools to rural health centers, improving early diagnosis in vulnerable populations. These technologies can help deliver pathology services outside major centers (Sullivan 2019).

Nevertheless, the benefits of these technologies are not equally shared among countries or among specific groups of people (such as the elderly, low-income, and ethnic minorities) within countries. Clinical practice cultures, care pathways, and models all incorporate technology. Therefore, it is impossible to achieve equality in access to cancer technologies in a health system that is primarily driven by the market, fails to meet its obligations under national law to ensure that cancer patients have access to high-quality care, and takes inadequate steps to address the underlying socioeconomic causes of late-stage diagnosis (Sullivan 2019).

Even though low middle income countries (LMICs) bear about 80% of the burden of cancer as assessed by disability-adjusted life years, they receive less than 5% of the global resources for combating cancer (WHO 2018). According to this WHO technical report, countries with lower national incomes had less access to anti-cancer medications, or merely had increased out-of-pocket patient expenses, particularly for more expensive medications, such as targeted treatments.

The Model of Essential Medicines List of WHO for adults and Essential Medicines List for children however, provides a list of the minimal medicine requirements for a basic health-care system. This list includes the most cost-effective, safe, and efficacious medications for priority conditions. It may be used as a reference to assist countries in the development of the national and institutional essential lists and reimbursable lists for the public sector. The purpose of these lists is to enhance the accessibility, availability, and affordability of essential medicines required to treat curable adult and childhood cancers, respectively (Magrini 2015, Ocran Mattila et al 2021). Patients in lower-middle income countries and low-income countries could only obtain 32.0% and 57.7% of the cancer medications on the essential pharmaceutical list, respectively, if only they were prepared to pay the full cost. This restricted access to medications in LMICs is due to either inadequate availability or the requirement that patients pay for their prescriptions. The cost of treatment is borne by a significant number of patients in the absence of government reimbursements, insurance, or any exclusive access schemes in these countries leading to early mortality, poverty, or deprivation (WHO 2018, Ocran Mattila et al 2021).

Government underfunding of medicines and institutional weaknesses in the pharmaceutical sector for procuring and supplying medicines in LMICs constrain access to medicines for patients, resulting in suboptimal utilization and poor inventory control. Current pharmaceutical pricing policies or their absence thereof have resulted in considerable variability in the prices of cancer medicines within a country and across regions (Ocran Mattila et al 2021). One of the primary barriers to the development of effective and transparent pricing policies in LMICs is the scarcity of affordability data. To ensure that cancer medicines are priced fairly and transparently, it is necessary to establish the necessary systems to produce high-quality, dependable data and required evidence which will guide the selection of the most appropriate pricing model for cancer medicines (Ocran Mattila et al 2021). Hence, access to innovative treatments could be improved through the methodical use of evidence to evaluate the impacts of an innovation of interest, including its cost- and clinical-effectiveness, hence providing evidence-based information for price settings.

To understand the challenges in current access to and utilization of the health technologies for underfunded disease areas such like cancer in selected countries in the African region (South Africa, Cote d'Ivoire and Kenya), a rapid review of the literature needs to be conducted. Furthermore, the review included information on the healthcare system and priority cancer areas in these countries, which would provide relevant background information on the respective countries.

## 2. Method

The search was initiated based on a systematic review undertaken by Ocran Mattila et al, 2021 on Availability, Affordability, access, and pricing of Anti-cancer Medicines in Low- and Middle-Income Countries. The search was conducted in October 2024 in PUBMED and Google Scholar to identify published peer-reviewed articles in English. Due to the dearth of literature on the topic, it was deemed necessary to conduct an open search until August 2024. Keywords were availability, affordability, accessibility, access, prices, cancer medicines, cancer medications, oncology medicines, guidelines, protocols, LMICs, Kenya, South Africa, Cote du Ivoire. Various combinations of the above search terms were used to glean information on (a) health systems of the 3 countries (b) priority cancer areas in the respective countries (c) access, availability and affordability issues. References of retrieved articles were evaluated for relevant articles when needed. The search yielded additional considered to be relevant and have been included in the references.

Studies reporting on availability, affordability, access, and pricing were eligible for inclusion according to the following definitions as analyzed by Ocran Mattila et al, 2021:

- (a) Affordability: the ability to purchase a necessary quantity of a product or level of service without suffering undue financial hardship. It was also considered in terms of the value of

the product, within the context of healthcare system budgets and whether products are affordable in a given country based on economic factors

- (b) Availability: A patient can obtain when needed, for free or for a fixed fee, a pharmaceutical product that is listed on the national formulary
- (c) Price: Price components observed or derived, along the value chain from the manufacturer, distributor, service providers to patients. Pricing also refers to the price paid by the government, wholesalers, retailers, other purchasers, and consumers to procure medicines
- (d) Access/Accessibility is the ability of an individual to access care when needed

Magazines, editorial letters, workshop proceedings, and conference abstracts that did not provide the relevant data or any of the outcomes listed as part of the inclusion criteria were excluded, as well as those articles not available as full text.

Furthermore, a questionnaire (Appendix 1) was developed to collect further data on the literature, protocols, and guidelines that are available in the respective countries, as well as to address the issues of access, availability, and affordability of healthcare technologies. SAHTAC and Campaigning for Cancer distributed the questionnaires to healthcare professionals and patient advocates via email. This questionnaire was also translated to French for the intended responders of Ivory Coast. A narrative synthesis of the relevant literature, documents, protocols, and guidelines were conducted.

### 3. Results

#### *(a1) Health system Côte d'Ivoire (JICA 2022,*

In the Republic of Ivory Coast, the North-South division that resulted from the civil war has resulted in disparities in the development of health care system. There are challenges associated with the government's healthcare budgetary policies. The ratio of healthcare expenditure to total government expenditure was only 5.4% in 2018, which was less than the 15% required by the 2001 Abuja Declaration. Given the malfunction of the free medical care system and the rise in the number of medical services that are not covered by the free medical care system due to the changes in disease structures, the proportion of health expenditures that patients bear is high, approximately 40% in recent years.

The health system includes both public and private sector facilities. The public sector facilities primarily funded by the state, donations and subsidies are health centers, general and specialized hospitals, university hospitals, infirmaries, specialist practices. However, despite the government's efforts to increase the availability of health and medical services to the public and vulnerable groups, there is inadequate coverage in rural areas outside major cities and personnel



who can provide high-quality health and medical services. Additionally, the supply of basic medical equipment and essential medicines remains inadequate.

The patients bear a high out-of-pocket payment. The *Couverture Maladie Universelle* (CMU), which translates to universal health insurance, is the primary mechanism by which the medical security system is under development. Conversely, the Ministry of Labor and Social Protection (MEPS) is responsible for insurance premiums for impoverished populations in CMU, and despite its independence from CMU, the free medical care system for specific population groups or medical requirements is implemented under the budget of MoH. Consequently, internal revenue is spent to constitute medical security, in addition to social insurance. The government intends to consolidate the parallel health security system into the CMU. In addition to CMU, there is a separate social security system for civil servants.

In Ivory Coast, infectious diseases, maternal and child health-related diseases, and malnutrition are the primary causes of disability and death, comprising 63% of the disease burden, a decrease from 72% in 1990. HIV, tuberculosis, and malaria collectively account for 24% of annual fatalities, suggesting that infectious diseases continue to be a significant medical burden. In addition, the burden of disease has been doubled due to the rise in non-communicable diseases (NCDs) and the prevalence of unhealthy lifestyles and urbanization. Compared to the Sub-Saharan average, maternal mortality, perinatal mortality, under-five mortality, and other critical health indicators are all worse. Simultaneously, the proportion of deaths attributed to NCDs is on the rise, while the proportion of deaths attributed to maternal and child health-related diseases and infectious diseases is on the decline in 2019 compared to 1990.

*(a2) Health systems Kenya (Barasa et al 2019, Economic survey 2019, Health Sector Human Resource Strategy 2012, Kenya health policy 2012, KEMSA 2016, Mueller et al, 2023)*

Kenya's health care system is decentralized and hierarchical, commencing with primary health care at the community level and progressing to more complex cases that are referred to higher levels of care. Health services are administered by 47 county governments. Primary care units consist of dispensaries and health centers with referral facilities available at secondary and tertiary level. The health care system in Kenya can further be divided into three namely the public, private and faith-based sectors. The public sector is the largest in terms of the number of health facilities and is followed closely by the private sector.

Kenya has public insurance coverage under the National Hospital Insurance fund (NHIF). The fund generates cash through statutory deductions from registered members aged



18 years and above who earn at least 1000 Kenya shilling monthly. The fund covers both inpatient and outpatient care in accredited hospitals and health facilities across the country. The benefit package Kenyans can access under UHC, the “UHC Supacover” covers renal dialysis, cancer treatment, emergency treatment, all surgical procedures including travel overseas for specialized treatment and rehabilitation for drugs and substance abuse in addition to in and outpatient services at a contribution of Kshs 500 per month for the principal member and beneficiaries.

Health financing collects funds from taxation, National hospital fund (NHIF), private insurances, employer schemes. Community Based Health Financing (CBHF), out of pocket expenses, development partners and Non-Governmental Organizations. The government expenditure on health care has remained constant with between 6 -8 % of the GDP over the last decade. Only 25% of Kenyans are covered by a public, private or community-based health insurance scheme, resulting in a high amount of out-of-pocket spending.

Kenya Medical Supplies Authority (KEMSA) is a state corporation under the Ministry of Health that is mandated to procure pharmaceuticals for public facilities. The procurement process is mainly done through a competitive tendering process. Items procured vary from county to county based on needs assessment. However, demand is usually higher than supply resulting in a shortage of drugs from time to time.

The priority areas of health include both communicable and non-communicable diseases; HIV/AIDS, lower respiratory infections, diarrheal diseases, diabetes, hypertension, cancer, malaria and tuberculosis disease.

*(a3) Health system South Africa (Achoki et al 2022, Mueller 2019, Mueller et al. 2022, Pharasi et al, 2013)*

South Africa’s public health system is decentralized and serves most of the population (approx. 84%). The national Department of Health, provincial health departments, and municipal health departments share authority and service delivery. The government funds public services, but the level of subsidy depends on the patient's income and ability to pay. The private sector serves medium to high-income earners and approximately 16% of the population. Private care is accessible through insurance and direct payments. Medical insurance plans cover a list of



preselected benefits, and some plans offer access to private hospital facilities. SA government is planning to implement a national health insurance over the next 14 years to be implemented in 2034 aiming to give all South Africans the same level of affordable health care.

Health services are delivered through primary health care services at (a) home and community-based care (b) primary care services (c) intermediate care and acute hospital services at a district hospitals (first line), regional hospitals (referral), or tertiary hospitals/central hospitals with sub-specialist care.

The World Health Organization recommends that procurement be conducted in accordance with a list of essential medicines (EMLs). The National Essential Medicines List Committee (NEMLC) and provincial and facility-based Pharmacy and Therapeutics Committees (PTCs) are responsible for the selection of medicines that are available for procurement in the public healthcare sector of South Africa. The provincial PTCs may provide input to the NEMLC and receive advice from that structure; however, there is no formal central advisory body that applies evidence-informed and health economic principles to make recommendations. Inequitable access to pharmaceuticals and other health-related products may result from the fact that decision-making regarding the selection of health products may vary from province to province.

In the private sector, clinical decisions concerning the selection of medications for formularies are typically made within each medical scheme, as implemented by medical scheme administrators. The selection process may involve a single medical advisor or teams of evaluators composed of pharmacists, nurses, medical practitioners, and other specialists in public health or health economics, depending on the level and breadth of expertise employed. Medicines are chosen for private sector formularies based on their type or class. However, when high-cost medications are assessed for selection, they are subject to a more comprehensive assessment that encompasses clinical efficacy and effectiveness, cost-effectiveness, and budgetary implications.

The impact of HIV/AIDS and concurrent tuberculosis still dominate much of the quadruple burden of disease and remain major drivers of changes in population health in South Africa. Although maternal and child health has been a successful area since 1990, it appears that the majority of provinces are not on pace to meet the SDG targets. Injuries, particularly those resulting from interpersonal violence have been a consistent feature of the South African landscape over the past 25 years. However, despite the significant progress made in reducing age



specific NCD mortality rates, a rapid increase in nonfatal disease burden and NCD risk factors has been observed in all provinces.

According to the WHO Health expenditure atlas 2023 a gradual improvement in domestic general government spending on health as a share of total government expenditure has been observed. This indicates that several countries are allocating more financial resources to health from domestic sources, reflecting an increased prioritization of health by African governments. Nevertheless, South Africa is the sole nation to have successfully implemented and maintained the Abuja Declaration's objective of allocating and spending a minimum of 15% of government expenditure on health from 2014 to 2020. In 2020, the level of domestic general government spending on health as a percentage of total government expenditure varied from 2.1% to 12%, underscoring the substantial disparities among countries and the restricted ability of many African countries to increase public resources for health.

*(b) Priority cancer areas in the countries*

NCDs have been on the rise in all the three countries. The cancer incidence burden is expected to rise to over 85% in sub-Saharan Africa by 2030. The most prevalent cancer in women was breast cancer and cancer of the cervix, while for men cancer of the prostate and liver in Ivory coast (Echinmane et al. 2000), oesophagus and prostate in Kenya (Wambalaba et al 2019), and lung and prostate in South Africa. This is also confirmed by the Global Cancer Observatory 2022 of these countries: Incidence in Cote d'Ivoire for prostate (41.3%) and liver (9%), Kenya for prostate (21.9%) and oesophagus (9.9%) and South Africa for prostate (24.6%), lung (11.6%),

*(C) Challenges in current access, availability, affordability of treatment (medications)*

Barriers to access and use of innovative cancer medicines are linked to the limited coverage of public insurance schemes non-inclusion in the EML, non-availability of the medicine at the facilities, and updated clinical guidelines. The innovation field for anticancer medicines is growing. Yet, most of the time, the high prices tagged to these innovations are not affordable for patients and health systems, thus limiting access to new cancer medicines (.

considering the acceptability, affordability, accessibility, and availability of late-stage pipeline of

In Kenya, one of the primary hurdles was the difficulty of accessing cancer screening and treatment, as most of the cancer care services were located within a 5-km radius of Nairobi. The restricted capacity for diagnosis and treatment has implications for availability, proximity, and accessibility. It is

therefore imperative a thorough examination of the current public and individual perceptions regarding cancer issues and mitigation strategies.

One of the patient advocacy groups responded to the questionnaire and stated that the major challenges to access to cancer care for patients in South Africa are:

- Lack of knowledge of the extent of the cancer crisis
- Lack of access to treatment and preventative measures (scans/testing)
- Lack of knowledge of their medical status
- Lack of access to treatment that is available internationally (approval process and costs are a major issue)
- Lack of collaboration amongst all players (Gov, medical profession, NGO's and NPO's, advocates, pharma)
- Lack of sufficient funding and allocation there of as it is not known what is available or where
- Underutilised resources – equipment is not being used due to limited capacity

#### 4. Discussions

The World Health Organization constitution states that 'informed opinion and active co-operation on the part of the public are of the utmost importance' in improving population health. Hence, it may seem obvious that the perspectives of individuals who have been affected by a condition should be considered essential in the formulation of policies that influence the provision of healthcare and the improvement of their health. However, the evidence, decision frameworks, governance, and processes that influence our health systems and the policies that regulate them are frequently devoid of their voices and perspectives.

Patient advocates, who are individuals with personal experience of a disease or condition or may be caregivers or members of the public advocating for the perspectives of individuals impacted by a disease and/or patient organizations who provide information and support for those affected by a condition, play an important role in provision of healthcare services to patients. To support them in their role, it is imperative that they are empowered with evidence-based information.

One such patient advocacy group, who responded to the questionnaire, mentioned that when asked for reports, health professionals provide (a) Pathology and/or histology test results, (b) Scan results and X-ray reports. Civil society organizations may receive information annually through subscription to newsletters or emails from pharmaceutical organizations about a specific NICDs. This advocacy group *"have been invited to participate in congresses, workshops and the National Cancer Registry has been supportive of the work done"*.

This advocacy group further mentioned that civil society organizations could play a role in improving access to treatment and care for patients with certain conditions through

- Collaboration and joining forces for more support
- Removing the “competition” attitude between the NGO/NPO cancer community
- Adhere to the law the Regulation no. 380 of the National Health Act no. 61 of 2003
- Improve visibility by sharing data.
- Improve insight of situation by participating in more studies to understand the SA situation

#### Limitations:

This study would have benefitted from further responses from health professionals’ and patient advocates’ perspective and their positions in relation to need and gaps accessing and utilizing safe and quality innovative treatments including pharmaceuticals. This would provide specific country specific relevant information from those affected by the challenges to access to treatments. Another limitation is that the retrieved literature is only in English, since the researchers’ knowledge in French is minimum, which may have provided relevant information regarding the health system and access issues in Cote du Ivoire.

## 5. Conclusions

Cancer is contributing to an increased burden of disease throughout Africa including the 3 priority countries, Cote d’Ivoire, Kenya and South Africa, where it is named a health priority area. This rapid review summarizes the research on the challenges in the current accessibility, availability and affordability of innovative health technologies pertaining to cancer treatment in these countries. Barriers to access and use of medicines are linked to their high cost, limited coverage by public insurance schemes, non-inclusion in the EML, and limited or unavailability of specific medications at the facilities. To holistically address these issues regarding cancer treatment, evidence-based recommendations are required to guide decision-making processes to improve health outcomes in the region.

Health technology assessment (HTAs) is such a formal, systematic, and transparent, process using state-of-the-art methods considering the best available evidence. It’s use results in comprehensive information on the value of a HT by examining the intended and unintended consequences of using the health technologies in a particular setting compared to existing alternatives. This process includes topic identification and scoping, selection, prioritization followed by assessment and appraisal (Bidonde 2024). Therefore, it was essential to conduct a needs assessment and gap analysis before the assessment to identify topics and conduct scoping to ensure that the assessment aligns with the healthcare needs. The assessments can be conducted at different levels of the



healthcare systems based on the perspective of service providers, national and provincial decision-makers as well as that of the end-users.

With the emerging themes of priority cancer areas in these countries and limitations noted, further studies should holistically address the development of a pragmatic fit-for-purpose HTA to provide evidence-based recommendations for the adoption, implementation, and scale-up of the health technologies in these countries taking a societal perspective. These health technologies will encompass those necessary during primary, secondary and tertiary prevention of cancer.

## 6. References

1. Achoki T, Sartorius B, Watkins D, et al. 2022. Health trends, inequalities and opportunities in South Africa's provinces, 1990–2019: findings from the Global Burden of Disease 2019 Study *J Epidemiol Community Health* 76:471-481.
2. Barasa E, Rogo K, Mwaura N, Chuma J. Kenya National Hospital Insurance Fund Reforms: Implications and Lessons for Universal Health Coverage. *Health Systems & Reform*. 2018 Oct 2;4(4):346-61.
3. Bidonde, J., Lauvrak, V., Ananthakrishnan, A. *et al.* Topic identification, selection, and prioritization for health technology assessment in selected countries: a mixed study design. *Cost Eff Resour Alloc* 22, 12 (2024). <https://doi.org/10.1186/s12962-024-00513-8>
4. Dalal S, Beunza JJ, Volmink J, et al. Non-communicable diseases in sub-Saharan Africa: What we know now. *Int J Epidemiol*. 2011;40(4):885–901. doi: 10.1093/ije/dyr050
5. Echimane AK, Ahnoux AA, Adoubi I, Hien S, M'Bra K, D'Horpock A, Diomande M, Anongba D, Mensah-Adoh I, Parkin DM. 2000. Cancer incidence in Abidjan, Ivory Coast: first results from the cancer registry, 1995-1997. *Cancer*. 89(3):653-63. doi: 10.1002/1097-0142(20000801)89:3
6. Economic Survey. Kenya National Bureau of Standards. 2019
7. Global Cancer Observatory. 2022. Globocan. Cote D'Ivoire. <https://gco.iarc.who.int/media/globocan/factsheets/populations/384-cote-divoire-fact-sheet.pdf>
8. Global Cancer Observatory. 2022. Kenya.
9. Global Cancer Observatory. 2022. South Africa. <https://gco.iarc.who.int/media/globocan/factsheets/populations/710-south-africa-fact-sheet.pdf>
10. Health Sector Human Resource Strategy. Ministry of Health. Republic of Kenya. 2014-2018
11. JICA 2022. Data Collection Survey on Health Sector Policy for Universal Health Coverage toward Women, Children and Lower Income People in Ivory Coast. Final Report. <https://openjicareport.jica.go.jp/pdf/12369005.pdf>
12. KEMSA (nd) New Business Model <http://www.kemsa.co.ke26/5/2016>
13. Kenya health policy 2014 to 2030. Available online: [http://publications.universalhealth2030.org/uploads/kenya\\_health\\_policy\\_2014\\_to\\_2030.pdf](http://publications.universalhealth2030.org/uploads/kenya_health_policy_2014_to_2030.pdf) Ministry of Health MOH. (2012).
14. Magrini N, Robertson J, Forte G, Cappello B, Moja LP, de Joncheere K et al. 2015. Tough decisions on essential medicines in 2015. *Bull World Health Organ*. 93:283–4. doi: 10.2471/BLT.15.154385
15. Maongezi S, Mwaiselage J, Balandya E, Leyna GH, Van Loon K, Mmbaga EJ. A mixed methods needs assessment and gap analysis for establishment of a cancer research training program in East Africa. *J Glob Health Rep*. 2021;5:e2021028. doi: 10.29392/001c.22120.
16. Mueller D, Alouane L, Jameleddine M, Lenoir-Wijnkoop I. 2023. Scaling up health technology assessment capacities in selected African countries – A conceivable route ahead. *International Journal of Technology Assessment in Health Care*. 39(1):e9. doi:10.1017/S0266462323000016
17. Mueller D. 2020. Addressing the challenges of implementing a Health Technology Assessment Policy Framework in South Africa. *International Journal of Technology Assessment in Health Care*. 2020;36(4):453-458. doi:10.1017/S0266462320000562

18. National Cancer Control Programme. POLICIES AND MANAGERIAL GUIDELINES.; 2002. <https://www.who.int/cancer/media/en/408.pdf>.
19. Nyagabona SK, Mushi BP, Selekwana M, Philipo GS, Haddadi S, Kadhim EF, Breithaupt L, Siddharthan T, Ramaiya K, Yonga G, et al. Noncommunicable diseases in East Africa: Assessing the gaps in care and identifying opportunities for improvement. *Health Aff.* 2015;34(9):1506–1513. doi: 10.1377/hlthaff.2015.0382
20. Ocran Mattila P, Ahmad R, Hasan SS and Babar ZUDD 2021. Availability, Affordability, Access, and Pricing of Anti-cancer Medicines in Low- and Middle-Income Countries: A Systematic Review of Literature. *Front. Public Health* 9:628744. doi: 10.3389/fpubh.2021.628744
21. Pharasi B, Miot J. 2013. Medicines Selection and Procurement in South Africa. *SAHR* 2012/2013.
22. Sullivan R, Aggarwal A. Technology and cancer systems: creating better policy to enhance equality. In: Vaccarella S, Lortet-Tieulent J, Saracci R, et al., editors. *Reducing social inequalities in cancer: evidence and priorities for research*. Lyon (FR): International Agency for Research on Cancer; 2019. (IARC Scientific Publications, No. 168.) Chapter 18. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK566180/>
23. Sylla BS, Wild CP. A million africans a year dying from cancer by 2030: What can cancer research and control offer to the continent? *Int J Cancer*. 2012;130(2):245–250. doi: 10.1002/ijc.
24. Wambalaba FW, Son B, Wambalaba AE et al. 2019. Prevalence and capacity of cancer diagnostics and treatment: a demand and supply survey of health care facilities in Kenya. 26:1-12. Sage. DOI: 10.1177/1073274819886930
25. WHO. 2017. Noncommunicable diseases: the slow motion disaster. World Heal Organ. <http://www.who.int/publications/10-year-review/chapter-ncd.pdf?ua=1>.
26. WHO 2010. Medical Devices: Managing the Mismatch. A stepwise approach to identify gaps in medical devices (availability matrix and survey methodology). [https://iris.who.int/bitstream/handle/10665/70451/WHO\\_HSS\\_EHT\\_DIM\\_10.1\\_eng.pdf?sequence=1](https://iris.who.int/bitstream/handle/10665/70451/WHO_HSS_EHT_DIM_10.1_eng.pdf?sequence=1)
27. WHO 2018. Technical Report: Pricing of Cancer Medicines and its Impacts: A Comprehensive Technical Report for the World Health Assembly Resolution 70.12: Operative Paragraph 2.9 on Pricing Approaches and Their Impacts on Availability and Affordability of Medicines. Geneva.
28. WHO African Region Health Expenditure Atlas 2023. Brazzaville: WHO African Region, 2024. Licence: CC BY-NC-SA 3.0 IGO.

## 7. Appendix 1

**SURVEY GUIDE:** for healthcare professionals, patient & patient advocates interviews.

### Objectives

To understand bottlenecks of access to treatment which will result in the development of the regulatory and policy elements for a transparent and evidence-informed approach to healthcare prioritisation and formulation of health system policy by utilizing tools such as Health Technology Assessment (HTA) and value-based reimbursement techniques.

### *INTRODUCTION*

Thanks for agreeing to talk with us today.

We are conducting a needs assessment by interviewing you and asking to fill out a questionnaire about access to treatments which will contribute to Health Technology Assessment processes, policy development and ultimately to HTA institutionalisation, and guide the activities of the project.

[Health technology assessment \(HTA\)](#) refers to the systematic evaluation of properties, effects, and/or impacts of health technology. It is a multidisciplinary process to evaluate the social, economic, organizational, and ethical issues of a health intervention or health technology. The main purpose of conducting an assessment is to inform a policy decision making.

Considering the definition of health technology, as the application of organized knowledge and skills in the form of medicines, medical devices, vaccines, procedures, and systems developed to solve a health problem and improve quality of life.

### *Survey Questions*

1. Do medical schemes, Government, and healthcare professionals, in their individual capacity or through their associations, share specific information with patient advocates or patients on certain aspects of the disease?

If yes, how?

Examples:

2. Do medical schemes, Government and healthcare professionals, in their individual capacity or through their associations, invite civil society groups to share information or concerns with them?

a. If so, can you provide examples of how a group shares information or concerns with these stakeholders?

b. How often?

Examples:

3. Do medical schemes, Government, or healthcare professionals, in their individual capacity or through their associations, work with a civil society group to solve community problems?

a. If yes, please give examples

Examples:

IMPROVED ACCESS TO TREATMENT AND CARE

4. Do you know if there's a national cancer policy or plan pertaining to this disease?
  - a. If yes, what specifics do these policies or guidelines contain?
  - b. If no, what specific policies and guidelines deal with cancer and the treatment and care thereof?
5. Do you know of any existing laws that could help ensure improved treatment and care for patients? Yes  
Examples:
  6. What do you see as major challenges for access to care and treatment for patients?
  7. How do you think improved access to treatment and care for patients with certain conditions could be achieved?
    - a. What role would civil society play in this?
  8. Does your group have specific programs designed to make an impact on improving access to treatment and care?
  9. What is your biggest challenge in advocating for patients requiring treatment and access?

In French :

GUIDE D'ENQUÊTE : pour les professionnels de la santé, les patients et les défenseurs des patients.

Objectifs

La compréhension des goulets d'étranglement dans l'accès au traitement se traduira par l'élaboration des éléments réglementaires et politiques nécessaires à une approche transparente et fondée sur des données probantes de la hiérarchisation des soins de santé et de la formulation de la politique du système de santé, en utilisant des outils tels que l'évaluation des technologies de la santé (ETS) et les techniques de remboursement basées sur la valeur.

**INTRODUCTION**

Merci d'avoir accepté de remplir ce questionnaire.

Nous procédons à une évaluation des besoins en vous demandant de remplir un questionnaire sur l'accès d'un traitement qui contribuera aux processus d'évaluation des technologies de la santé, à l'élaboration de politiques et, en fin de compte, à l'institutionnalisation de l'évaluation des technologies de la santé, et guidera les activités du projet.

L'évaluation des technologies de la santé (ETS) fait référence à l'évaluation systématique des propriétés, des effets et/ou des impacts des technologies de la santé. Il s'agit d'un processus pluridisciplinaire visant à évaluer les aspects sociaux, économiques, organisationnels et éthiques d'une intervention ou d'une technologie de santé. L'objectif principal de l'évaluation est d'éclairer la prise de décision politique.

Les technologies de la santé sont considérées comme l'application de connaissances et de compétences organisées sous la forme de médicaments, de dispositifs médicaux, de vaccins, de procédures et de systèmes mis au point pour résoudre un problème de santé et améliorer la qualité de vie.

#### *Questions de l'enquête*

1. Les régimes médicaux, le gouvernement et les professionnels de la santé, à titre individuel ou par l'intermédiaire de leurs associations, partagent-ils des informations spécifiques avec les défenseurs des patients ou les patients sur certains aspects de la maladie ?

a. Si oui, comment ?

Exemples :

2. Les régimes médicaux, le gouvernement et les professionnels de la santé, à titre individuel ou par l'intermédiaire de leurs associations, invitent-ils les groupes de la société civile à partager des informations ou des préoccupations avec eux ?

a. Si oui, pouvez-vous donner des exemples de la manière dont un groupe partage des informations ou des préoccupations avec ces parties prenantes ?

b. Quelle est la fréquence de ces échanges ?

3. Les régimes médicaux, le gouvernement ou les professionnels de la santé, à titre individuel ou par l'intermédiaire de leurs associations, collaborent-ils avec un groupe de la société civile pour résoudre les problèmes de la communauté ?

a. Si oui, veuillez donner des exemples.

Exemples :

#### L'AMÉLIORATION DE L'ACCÈS AUX TRAITEMENTS ET AUX SOINS

4. Savez-vous s'il existe une politique ou un plan national de lutte contre le cancer concernant cette maladie?

a. Si oui, quelles sont les spécificités de ces politiques ou lignes directrices?

b. Si non, quelles sont les politiques et lignes directrices spécifiques concernant le cancer, son traitement et sa prise en charge?

5. Connaissez-vous des lois existantes qui pourraient contribuer à améliorer le traitement et les soins des patients?

Oui / Non

Exemples :

6. Quels sont, selon vous, les principaux défis en matière d'accès aux soins et aux traitements pour les patients?

7. Comment pensez-vous que l'on pourrait améliorer l'accès aux traitements et aux soins pour les patients souffrant de certaines maladies?

- a. Quel rôle la société civile pourrait-elle jouer à cet égard?
8. Votre groupe a-t-il des programmes spécifiques conçus pour avoir un impact sur l'amélioration de l'accès aux traitements et aux soins?
9. Quel est votre plus grand défi dans la défense des patients qui ont besoin d'un traitement et d'un accès?