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The process of developing health workforce strategic plans in Africa: a document analysis

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ABSTRACT

Background Many countries are faced with a multitude of health workforce-related challenges partly attributed to defective health workforce planning. Earlier efforts to guide the process and harmonise approaches to national health workforce policies and planning in the Africa Region included, among others, the development of the WHO Africa Regional Office (WHO/AFRO) Policies and Plans for Human Resources for Health Guidelines for Countries in the WHO African Region in 2006. Although this guideline has led to uniformity and rigour in developing human resources for health (HRH) policies and strategies in Africa, it has become imperative to synthesise the emerging evidence and best practices in the development of health workforce strategies.

Methods A document analysis was conducted using the READ (Readying materials; Extracting data; Analysing data and Distilling) approach.

Results Fourteen HRH policy/strategic plans were included in the study. The scope of the HRH strategic plans was described in three dimensions: the term of the strategy, sectors covered by the strategy and the health workforce considered in the projections. We found that HRH strategic plan development can be conceptualised as a cyclical, sequential multimethod project, with one phase feeding the subsequent phase with data or instructions. The process is very complex, with different interest groups and sectors that need to be satisfied. The HRH strategic plan development process comprises five main phases linked with external forces and national politics.

Conclusion There is a need for accurate and comprehensive HRH data collection, astute HRH leadership, and broad base and multisectoral stakeholder consultation with technical support and guidance from experts and major external partners for effective HRH strategic plan development.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Many human resources for health (HRH) challenges faced by countries in the African region have been traced to defective planning, leading to inadequate and misaligned investments.
⇒ In 2006, the WHO developed a regional guide for the development of HRH policies and strategies in the African region, which led to most countries developing HRH policies and strategies.
⇒ With evolving health system needs and HRH challenges, it has become imperative to synthesise the emerging evidence and best practices in the development of national HRH strategies.

WHAT THIS STUDY ADDS

⇒ This study identifies the common patterns in the process adopted by countries in developing HRH Strategic Plan (HRHSP), which is a cyclical, sequential, multimethod enterprise, with one phase feeding the subsequent one with data or instructions; countries have adapted the process in diverse ways.
⇒ Countries tend to develop medium-term (up to 5 years) HRH strategies, but with health workforce projections beyond 5 years.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE AND/OR POLICY

⇒ A 5-year HRH strategy seems too 'short-term' to allow policy and investment decisions in curriculum and training related interventions as well as employment to yield results within the horizon of the plan.
⇒ A number of countries are beginning to develop 10-year HRH strategic plans with midterm reviews.
⇒ Countries need to invest in robust evidence generation and policy dialogue to align their investment in the health workforce with the current and future needs of the population.

BACKGROUND

The attainment of Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs) will largely depend on the responsiveness and resilience of health systems, especially Primary Healthcare[1] that are underpinned by adequate, fit-for-purpose, motivated and equitably distributed health workforce. In cognisance of this, SDG 3c sets a target to substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries. However,

many countries are faced with a multitude of health workforce-related challenges such as absolute shortages (not enough health workers), relative shortages (skills mix imbalances), inequitable distribution, inadequate training capacity and insufficient incentives, as well as unsatisfactory working conditions often leading to labour unrest.[2 3] These have been partly attributed to defective planning, resulting in inadequate investments in the health workforce.[4 5] Thus, although health workforce planning is essential in building responsive and efficient health systems, its design, acceptance and resource commitment for implementation have remained the weakest link in many countries.

In 2006, the World Health Report shed light that the African region faced a disproportionate share of the global burden of disease as compared with its share of the health workforce. This has been linked to human resources for health (HRH) challenges, especially in the production and utilisation of the required number of the health workforce, maintaining a workforce motivated to provide quality services, and health workforce emigration resulting in high turnover rates. To guide countries towards the attainment of key global targets, WHO developed the Global Strategy on Human Resources for Health: Health Workforce 2030.[6] It has four main objectives of (1) optimising the performance, impact and quality of the health workforce; (2) aligning investment in the health workforce with the current and future health needs of the population and the health system; (3) strengthening institutional capacity for effective HRH public policy stewardship, leadership and governance; and (4) strengthening data and evidence capacity for monitoring and accountability.[6] To contextualise the global strategy in Africa, the Regional Committee of Health Ministers approved a *Regional Implementation Framework* in 2017 to guide countries to operationalise the *Global Strategy on Human Resources for Health*, taking into account the particular context of the region and the countries. The Regional Implementation Framework is fully aligned with the Global Strategy regarding objectives, key strategies and milestones.

In 2006, the WHO Regional Office for Africa, as part of efforts to guide the process and harmonise approaches to national health workforce policies and planning, developed a regional guide on *Policies and Plans for Human Resources for Health in the WHO African Region* 2006.[7] This contributed to several countries developing and adopting HRH policies and strategies[8] and, to a large extent, more excellent uniformity and rigour in developing HRH policies and strategies. However, it has become imperative to synthesise the emerging evidence and best practices in the development of health workforce strategies to align this guide with the new global aspirations as contained in the global strategy on health workforce and its implementation framework in Africa. To this end, this paper sought to synthesise the types, scope, process and critical evidence needed in developing HRH policies and strategic plans.

METHODS

Guided by the READ (*R*eadying materials; *E*xtraction of data; *A*nalysing data and *D*istilling findings) approach,[9] document analysis was conducted to describe the types, scope, processes and critical evidence in developing HRH policies and strategic plans. Document analyses are conducted to synthesise information from policy and other documents on a phenomenon.[10] The READ approach provides the framework within which the information in national human resources for strategic health plans could be synthesised.

Readying materials

Redying the documents involves defining the types of documents to include and exclude and the sources through which these documents could be accessed.[9] In this analysis, the review question clarifies the purpose of the study. The inclusion criteria were set to fit the purpose of the analysis and data search conducted to retrieve the available policy documents for synthesis.

Review question

The Joana Briggs Institute's approach of using Population, Concept and Context pneumonic guided the formulation of the review question.[11] The review sought to answer the following question: *What types, scope, processes and critical evidence are used in developing HRH policies and strategic plans in the WHO Africa region?*

Thus, these are as follows:
► Population considered is 'health workforce'.
► Concept being studied is the 'development of HRH policies, strategic plans and investment plans'.
► Context is 'WHO Africa region'.

Search strategy

The websites of Ministries of Health and Governments across Africa were searched for HRHSP. The WHO's internal sources were searched for strategic plans developed by African countries. Google Scholar was also searched for documents. The reference list of these documents has been checked for citation of other strategic plans for inclusion.

Inclusion and exclusion

Most current strategic plans of countries within the WHO Africa Regional Office were included. Strategic plans developed before 2006 were not included because we are looking at the period after publication of the *Policies and Plans for Human Resources for Health: Guidelines for Countries in the WHO African Region.*

Extraction of data

Relevant information from the policy documents included in this review was extracted into a data matrix (table 1). This reduced the relevant information from the policy documents included in a single datasheet that was easily handled.

The type, scope, development process, critical evidence and the methods used for projection were extracted from

Table 1 Data matrix A (human resource for health strategic plans in selected countries in Africa)

No	Author (year)/Country	Title of policy/strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
1	Botswana Ministry of Health **Botswana**[22]	Chapter 5 of the Integrated Health Service Plan: A Strategy for Changing the Health Sector For Healthy Botswana 2010–2020	HRH strategic plan embedded in an Integrated health sector strategy	Public, private for-profit, private non-profit and traditional medicine practitioners **10-year plan**	Developed alongside three key documents: (a) Essential Health Service Package with Norms and Standards (b) List of indicators to be used at various levels (c) Annual Operational Plans (to be developed for all departments and districts) An annual operational plan and review meeting is held to review the IHSP implementation and funding.	▲ Current HRH statistics retrieved from MoH Infinium HR system ▲ Qualitative research: key informant interviews and stakeholder consultation **Approach to projections** ▲ Staffing norms	The WHO Report 2006 highlights the need to make the most of existing human resources and the fact that without improved performance any recruitment and retention strategies will have limited effect.
2	Eritrea Ministry of Health[32]	Eritrea Human Resources for Health Strategic Plan 2017–2021	Strategic plan	▲ Public sector with less focus on private sector and NGOs **5years plan**	Senior management of the MOH collaborated and consulted with key stakeholders. A situational analysis was conducted: ▲ Review of various documents provided by the Ministry and other key stakeholders in Government and WHO ▲ Individual interviews with selected staff and stakeholders ▲ Strategic thinking sessions with the technical working group (TWG) ▲ A validation workshop organised by the policy, planning and HRD department to validate the policy ▲ Financial costing was done for each of the five aspects ▲ Then an implementation plan was developed for each of the five objectives	▲ National Health Policy (2010) ▲ Population distribution ▲ Health status or disease burden ▲ Economic outlook ▲ Governance of the health sector ▲ Heath worker densities per 1000 people **Approach to projection** ▲ HRH per population approach ▲ Staffing norms and comparison with international recommendations in the WHO Report (2006)	WHO Eritrea office was acknowledged for financial and technical support, but the WHO 2006 guidelines were not mentioned[7]

Continued

Table 1 Continued

No	Author (year) Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
3	Eswatini Ministry of Health *Eswatini*[35]	Human Resource for Health Department: 'Building a Competent Health Workforce for Effective Healthcare Delivery' *2018–2022*	HRH strategy with no implementation plan	▲ Public, private, faith-based, industry and NGOs *5-year plan*	**Prepare** ▲ Used an HRH Technical Working Group ▲ SWOT analysis followed by a Delphi ▲ Document review ▲ Extensive stakeholder consultations **Assessment** ▲ Evaluate of previous HRH strategic plan ▲ Determining HRH gaps from the previous implementation ▲ Brainstorming section **Create** ▲ Write up of a 5-year HRH strategic plan ▲ Using the data collected in the preparation and assessment stages ▲ Identified strategic priority areas the MoH intends to address in 5 years ▲ A programme logic model was developed to align the prioritised strategies with a costed implementation plan and timelines for implementation ▲ Develop M&E framework with performance indicators **Communicate** ▲ Sharing of the draft for stakeholder inputs and validation ▲ The vision, mission and goals of the HRH Unit of the Ministry of Health ▲ The strategic themes, the strategic goals, the guiding principles, the enablers and the major assumptions ▲ Thematic areas, the key challenges, the priorities, objectives and the key indicators for each thematic area ▲ Coordination mechanism and roles of stakeholders? ▲ M&E framework and indicators	▲ **Documents** Global HRH Strategy, WHO Framework on integrated people-centred health services, national health strategy, the 90-90-90 strategy for HIV epidemic control, midterm HRH strategy review report, the health workforce assessment report and the 2017 Population and Housing Census preliminary results ▲ SWOT analysis ▲ Structured interviews ▲ Delphi **Approach to projection** ▲ *HIV/AIDS WISN model was used to project workforce* ▲ *The model calculates target figures of patient loads* ▲ *The actual time that various cadres spend providing services to each patient* ▲ *Training projections are based on a 3-year trend of intake into the schools and*	The WHO was acknowledged for providing technical support. The processes used corresponds with the Guidelines for Countries in the WHO African Region, but the document was not cited.

Continued

Table 1 Continued

No	Author (year)/ Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
4	Ethiopia Ministry of Health **Ethiopia**[23]	National Human Resources for Health Strategic Plan for Ethiopia HRH Strategy 2016–2025	HRH Strategy with+annual operational plan	▲ Public, private, NGOs, faith-based organisations **10-year plan**	▲ Directorate of HR Development and Administration (DHRDA) ▲ Description of the Ethiopian context ▲ Situational analysis ▲ Strategic directions ▲ Outcomes objectives and actions ▲ Implementation plan ▲ Monitoring and evaluation ▲ Projections and costing	▲ Ethiopian Health Policy (1993) ▲ Health Sector Transformation Plan (2015–2020) ▲ Visioning Ethiopia's Path Towards Universal Health Coverage Through Primary Healthcare—Visioning 2035 ▲ Demographic profile ▲ Economic profile ▲ Health status ▲ Policy context ▲ Governance ▲ The capacity of education institutions ▲ Health workforce distribution and density ▲ HRH legislation and policy ▲ Partnerships ▲ SDGs **Approach to projection** ▲ *Population norms approach for health facility* ▲ *Staffing norms were used to project the health workforce based on population to health facility standards*	Though the Guidelines for Countries in the WHO African Region was not mentioned in the document, the strategic plan follows the guidelines
5	Kenya Ministry of Health **Kenya**[27]	Kenya Health Sector Human Resources Strategy (KHSHRS) 2019–2023	HRH strategy with an annual operational plan	Public, private and faith-based organisations **5-year plan**	▲ MoH, council of Governors and DoH from 47 countries collaborated. Description of Kenya health policy context. ▲ Conduct an in-depth HRH situational analysis to determining HRH priorities ▲ Formulation of strategic investment priorities ▲ Strategic priorities ▲ Workforce for UHC ▲ HRH leadership and management systems ▲ Resources required ▲ Implementation ▲ M&E ▲ Stakeholder consultations and inputs ▲ Technical input from local and international partners ▲ Approval from Cabinet Secretary of Health ▲ Dissemination and implementation	▲ SDG 3 ▲ Disease burden ▲ Health workforce in the public health sector ▲ Public health sector growth ▲ Workload, attrition and production outputs ▲ Capacity to employ **Approach to projection** ▲ *Workload Indicator Staffing Norms (WISN)* ▲ *Staffing norms*	Though the Guidelines for Countries in the WHO African Region was not mentioned in the document, the strategic plan follows the guidelines

Table 1 Continued

No	Author (year)/Country	Title of policy/strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
6	Liberia Ministry of Health and Social Welfare Liberia[19]	National Human Resources Policy and Plan for Health and Social Welfare 2011–2021	HRH Policy and strategic plan with a 2 yearly implementation plan	▲ Public, private-for-profit, and private not-for-profit and based organisations **10-year plan**	▲ Analysed the implementation of the previous strategic plan ▲ Conduct a situational analysis ▲ Develop the strategy ▲ Established HR Technical Committee (HRTC) to manage financing, implementation and M&E ▲ Develop terms of reference for the HRTC ▲ Determining risks and assumptions	▲ Number and type of facilities needed ▲ Population dynamics ▲ Overview of the current workforce ▲ HR challenges ▲ Health sector spending **Approach to projection** ▲ *The network of facilities, staffing norms by facility type must be multiplied by the number of facilities in each category (eg, clinics)*	Though the Guidelines for Countries in the WHO African Region was not mentioned in the document, the strategic plan follows the guidelines
7	Ministry of Health Human Population Malawi Malawi[28]	Malawi Human Resources for Health Strategic Plan, 2018 – 2022	HRH strategic plan with an annual operational plan	Public, Christian Health Association of Malawi, private sector **5-year plan**	▲ June 2017–July 2018 ▲ HRH Technical Working Group (TWG) ▲ Review of the previous strategic plan ▲ Structured regional stakeholder consultations ▲ Staff return data from at the district and central level ▲ Qualitative and quantitative data from training institutions ▲ Prioritisation workshop ▲ Methodology validation ▲ Development of draft ▲ Review of the draft by TWG	▲ Review report from previous strategic plan ▲ Malawi Growth and Development Strategy III ▲ National Health Policy, 2017 ▲ The Health Sector Strategic Plan II ▲ Other national policies ▲ Sustainable Development Goals ▲ The Global Fund HRH Guidelines ▲ Sociodemographic Context Malawi Health Status ▲ Health administrative structures ▲ WHO and international requirements ▲ The staff returns and training institution data ▲ (1) Malawi's current public sector and CHAM health workforce; (2) Malawi's current public sector and CHAM health workforce vacancy rate; (3) Updated projections for Malawi's public sector and CHAM health workforce over the next 5 years; ▲ (4) Malawi's training pipeline to develop, recruit and retain public sector and CHAM health workers **Approach to projection** ▲ *Workforce target setting was conducted using a Workforce Optimisation Model (WFOM)*	Though the Guidelines for Countries in the WHO African Region was not mentioned in the document, the strategic plan follows the guidelines

Table 1 Continued

No	Author (year) Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence Projection method	Reference to WHO HRH guide
8	Namibia Ministry of Health and Social Services Namibia[16]	National Human Resources for Health Strategic Plan 2020–2030	▲ HRSP with a 5-year implementation plan	▲ Public, Development partners, NGOs, private sector, quasi-government institutions, mission-based organisations **10-year plan**	▲ Nov 2017 to May 2019 ▲ **Conceptualisation phase** – HRH planning capacitation, consultant recruitment – Seeking technical support from WHO IntraHealth ▲ **Analyses** – Desk review of policies – Stakeholder interviews, – Technical working group sessions to conduct a comprehensive situation analysis – Health workforce demand and supply projections – Stakeholder validation**Formulation and adoption phase** ▲ Development of the draft strategic plan – Broad objectives – Strategic interventions – Implementation arrangements – Pindicators – M&E plan **Review** ▲ Review MOHSS and validated through consultations	▲ Available but not fragmented HRH database ▲ SDG 3/UHC ▲ National development plan ▲ The national health policy framework ▲ Policy environment ▲ Emerging HRH challenges ▲ Global agenda ▲ Population characteristics ▲ Socioeconomic status ▲ Disease burden ▲ Health system structure ▲ Age of health workforce ▲ Labour market dynamics **Approach to projections** ▲ Staffing norms ▲ This is adjusted annually based on service utilisation and expansion	▲ The WHO was acknowledged for providing technical support. The processes used corresponds with the Guidelines for Countries in the WHO African Region, but the document was not cited
9	Rwanda Ministry of Health[14]	National Human Resources for Health Policy	HRH policy with HRH strategic plan and annual operational plans	The public sector, private sector, NGO, faith-based organisations	Not explicitly described. ▲ Situational analysis ▲ Policy development ▲ Description of the governance framework ▲ Monitoring and evaluation plan ▲ Description of the source of funding	▲ Socioeconomic situation in Rwanda ▲ Health worker to population ratio ▲ Health workforce distribution ▲ Disease burden ▲ Economic Development and Poverty Reduction Strategy (EDPRS), Vision 2020 ▲ Workload estimated for each health facility in terms of size of the population served and the package of services offered **Projection method** Workload related to the population served and the package of services offered	The document did not follow the WHO guidelines.

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Table 1 Continued

No	Author (year) Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
10	Sierra Leone Ministry of Health and Sanitation *Sierra Leone*[29]	Human Resources for Health Strategy 2017–2021		Public, private-for-profit and private-not-for-profit *5-year plan*	▲ July 2016–2017 ▲ An inter-ministerial Steering Committee was ▲ Clinton Health Access Initiative and the WHO provide technical support ▲ Three technical working groups ▲ Desk review of interventions that work ▲ Situational analysis: regional HRH consultation workshops ▲ Generate activities based on priorities ▲ Costing of activities ▲ Draft strategy developed ▲ Stakeholders review and validation ▲ Launching the HRH Strategy 2017–2021 in 2017	▲ Civil Service Training Policy ▲ Payroll Verification ▲ Facility-level staffing norms ▲ Basic Package for Essential Health Services ▲ Human Resource Management Process Mapping ▲ Forecasting model to assess the impact of potential workforce interventions and verify the training capacity ▲ Work workforce production ▲ Recruitment, remuneration, governance of the health workforce ▲ HRH challenges *Approach to projection* ▲ *Facility-level staffing norms*	Though WHO provided technical support for the development of the strategy. The development process, however, resembles the WHO recommendations.
11	National Department of Health *South Africa*[15]	2030 Human Resources for Health Strategy: Investing in the health workforce for Universal Health Coverage *2020–2030*	Strategic plan with 5 years' implementation plan and an investment case	Public, private-for-profit and private-not-for-profit *10-year plan*	▲ **March 2019** ▲ Minister of Health appointed a Ministerial Task Team (MTT) to support the NDoH ▲ Literature review of national and international policies ▲ In-depth interviews with key informants ▲ Workshop with all the heads of provincial health HRH heads ▲ Technical analyses on the health labour market ▲ HRH stakeholders' consultations ▲ Recognition of future health workforce needs ▲ Five MTT work streams addressed various domains of HRH ▲ Review of HRH frameworks ▲ Adapted the Health Human Resources Conceptual Framework complemented with Health Labour Market Framework for UHC and a framework for HRH system development for fragile and post-conflict states ▲ Global and national context	▲ Local and international policy review ▲ Health labour market analyses ▲ Health workforce needs and costs ▲ Provincial density of specialist doctors ▲ Health workforce needs of primary healthcare (PHC) for National Health Insurance (NHI) system ▲ Burden of disease ▲ Cost of salaries ▲ Health sector budget ▲ Service utilisation ▲ Ranked province equity target ▲ SAC, HPCSA, pharmacy councils' data ▲ No database of employees in private sector *Approach to projection* ▲ *First projection: National public health workforce needed to improve equity (third Rank Province Equity Target)* ▲ *Second model: Health workforce needed for primary healthcare services (based on service utilisation)* ▲ *Third module focuses on the need for specialist doctors based on national density of medical specialists*	The processes used correspond with the Guidelines for Countries in the WHO African Region, but the document was not cited.

Continued

Table 1 Continued

No	Author (year) Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence Projection method	Reference to WHO HRH guide
12	South Sudan Ministry of Health South Sudan[18]	Strategic Plan for Human Resource for health 2007–2017	Strategic plan with decentralised operational plans	Public, NGOs, FBOs and the Private sector *10-year plan*	▲ South Sudan context – Demographic profile – Socioeconomic situation – Burden of disease – Healthcare system – Current HRH – Projected outputs ▲ Review of current strategic planTechnical advisory team and consultants team lead ▲ Situational analysis ▲ Literature review ▲ (ii) Consultations and interviews ▲ Financial projections ▲ (iii) Focus group discussions, and plenary sessions during a workshop held at AMREF Headquarters on the 30th ▲ Development of the first draft ▲ Draft reviewed by the technical advisory team ▲ Finalised strategic plan	▲ Development of institutional framework to clarify roles ▲ The estimated population, norms and standards for implementing the Basic Package for Health for Southern Sudan ▲ Number of health facilities and training institutions in the country ▲ Development of strategic objectives ▲ Focus on PHC **Approach to projection** ▲ *The policy statements on the Primary Healthcare approach and implementation of the Basic Package of Essential Healthcare are important in determining the required essential healthcare providers including the community-based workers.* ▲ *The use of staffing norms and standards for determining human resource for the implementation of the Basic Package of Essential Healthcare in Southern Sudan is an important tool in making projections for the required health workforce. However, starting with very little and aiming at major developments makes establishing a 'norm' very difficult as it should be improved constantly.* ▲ *Use projected population and basic service package provided to do initial estimate then establish staffing norms for future HRH projections*	The WHO was acknowledged in the policy, but the guidelines were not cited. The processes followed are in line with the WHO-AFRO requirements

Table 1 Continued

No	Author (year)/ Country	Title of policy/ strategic plan	Types	Scope	Process	Critical evidence / Projection method	Reference to WHO HRH guide
13	Tanzania Ministry of Health and Social Welfare **United Republic of Tanzania**[20]	Human Resource for Health and Social Welfare Strategic Plan 2014–2019	HRH strategic plan with operational plans	Public, private, faith-based organisations, NGOs **5-year plan**	▲ Description of the context ▲ **Situational analysis** ▲ Core Group formed to undertake the situational analysis ▲ Literature review ▲ Local, regional and national level stakeholder consultations ▲ Identification of gaps ▲ Development of draft ▲ Sharing draft for stakeholder inputs ▲ Review of draft ▲ Sharing with implementers for their views and inputs ▲ Finalising plan	▲ Institutional arrangements ▲ Health workforce projection: – Demographic projections – Macro-economic projections – Expected changes in the pattern of diseases – The vision, aspirations and expectations of policymakers of health services – Health system of the future to meet the changing disease pattern – Demands of the population in terms of access and quality of healthcare – Gaps in HRH recruitment and distribution – Basic Package of Essential Healthcare *Approach to projection* ▲ Supply, and Requirements Projection Model developed by WHO	WHO country office was acknowledged.2 Though the strategic plan followed the recommendations of the WHO 2006 guidelines, the guideline was not cited.[7]
14	Zambia Ministry of Health **Zambia**[30]	National Human Resources for Health Strategic Plan 2018–2024: Reshaping Zambia ' s Human Resources for Health to Become Self-Sufficient by 2030	HRH strategic plan with operational plans	Public, private, NGO **5-year plan**	▲ Scoping of existing policies and strategy frameworks ▲ Literature review ▲ District, provincial and national consultations ▲ Reviews of draft frameworks ▲ HRH evaluation workshops	▲ Geographical context ▲ Demographic ▲ Socioeconomic status ▲ Epidemiological transition/disease burden ▲ The health system ▲ The policy framework ▲ HRH situation and deficits ▲ Capacity for HRH planning and implementation ▲ Salary and incentives ▲ HRH training programme funding data, and ▲ National budget and external aid data *Approach to projection* ▲ Staffing establishments	

HRH, human resources for health; NGOs, non-governmental organisations; SDG, Sustainable Development Goal; SWOT, Strengths, Weaknesses, Opportunities and Threats analysis.
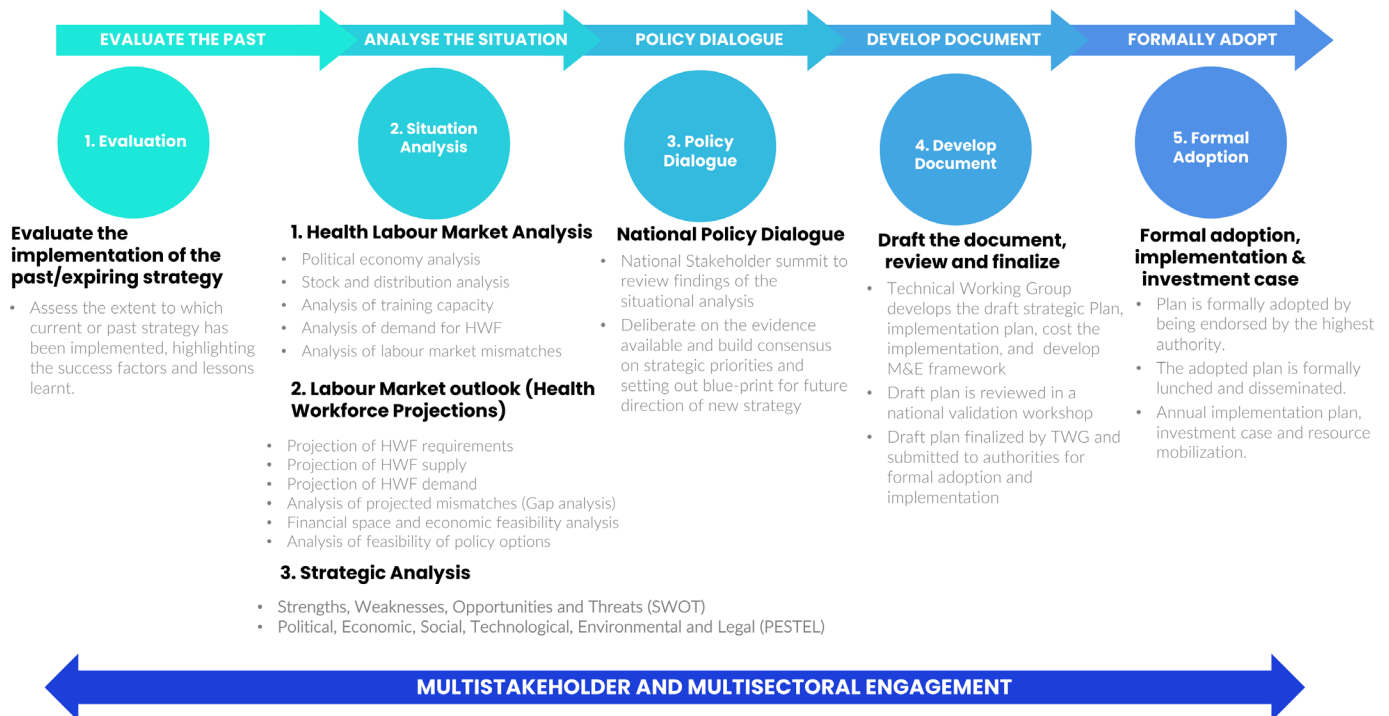
Figure 1 Process for developing Health Workforce Strategic Plan.

the data matrix. A column was inserted to compare the development process with the recommendations from the WHO-AFRO guidelines for the development of HRH policies and plans.[7] The data charted from the included policy documents were presented on the data matrices (table 1) for easy visualisation, synthesis and comparison.

Analysing data
An iterative process of data synthesis was explored in this study, guided by the purpose of the document analysis. A qualitative data synthesis outlined by Miles and Huberman[12] as applied by Christmals and Armstrong[13] was used to synthesise the type, process, scope and critical evidence in the development of HRH strategies from the studies and documents included in this review.

Data comparison
The data displayed were examined for patterns and relationships. The predetermined codes served as a guiding framework by which the data were synthesised. This allowed for creating clarity in the findings synthesised from the policy documents included in the review.

Drawing conclusions and verification
Conclusion and interpretations were drawn from the information charted from the papers and policy documents. The thematic diagram (figure 1) that depicted the HRH strategic plan development process was constructed.

Distilling the findings
Distilling the findings requires the refinement of the findings from the study.[9] In this analysis, the findings

were shared across various WHO Africa Regional Office levels for critical review and confirmation.

RESULTS
Characteristics of studies included
Fourteen HRH policy/strategic plans from English African countries were sourced and evaluated against the WHO Africa guidelines for developing HRH policies and strategic plans. This is to provide evidence of the rigour of the region's HRH policy and strategic plan development. Below is a narrative synthesis of the key findings from the HRH strategic plans.

National HRHSP compared with the WHO/AFRO guidelines
In table 2, the HRH strategic plan development process of 14 countries within the WHO-AFRO region was compared with the WHO-AFRO guidelines for policies and plans in 2006.[7] Apart from Rwanda's National Human Resources for Health policy,[14] all the strategic plans followed the guidelines[7] provided by the WHO with some variations in the processes, but the guideline document was not cited. Almost all the records were developed with the technical assistance of the WHO regional office for Africa or specific WHO country offices. Although the guidelines and the processes recommended by the WHO were followed, all of the strategies did not provide a reference to the guideline document.

Types and scope of HRH strategic plans
Types
The review found that some countries did not have overarching HRH policies but developed HRH strategy plans

Table 2 Comparison of the HRH strategic plan development processes with the WHO 2006 recommendation

WHO requirements		Botswana	Eritrea	Eswatini	Ethiopia	Kenya	Liberia	Malawi	Namibia	Rwanda	Sierra Leone	South Africa	South Sudan	Tanzania	Zambia
Situational analysis	Set up a multisectoral team	X	√	√	√	√	√	√	√		√	√	√	√	√
	Assign tasks, responsibilities, develop work plan and schedule	X	√	√	√	√	X	√	√		√	√	√	√	√
	Collect data and information from existing documents and key informants	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Compile and analyse findings into draft report	X	√	√	X	√	√	√	√		√	√	√	√	√
	Obtain feedback from stakeholders and partners	X	√	√	X	X	√	√	√		√	√	√	√	√
	Finalise the report and publish/print obtain	X	√	√	X	X	√	√	√		√	√	√	√	√
	Widely disseminate the report and use it for developing policy and plan	X	√	√	X	X	X	√	√		√	√	√	√	√
	Update/review the HR status document	X	√	√	X	X	X	√	√		√	√	√	√	√

Continued

Table 2 Continued

	WHO requirements	Botswana	Eritrea	Eswatini	Ethiopia	Kenya	Liberia	Malawi	Namibia	Rwanda	Sierra Leone	South Africa	South Sudan	Tanzania	Zambia
Developing the HRH strategic plan	HR head in MOH leads preparatory work, TOR	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Multidisciplinary/ sectoral working group set up	X	√	√	√	√	X	√	√		√	√	√	√	√
	Collecting all relevant documents, HR policy, situation	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Developing zero draft of HR plan	X	√	√	X	√	√	√	√		√	√	√	√	√
	Stakeholder inputs into HR Plan	X	√	√	X	√	√	√	√		√	√	√	√	√
	Revision of draft with stakeholder inputs	X	√	√	X	√	√	√	√		√	√	√	√	√
	Costing of the final plan led by health economist/ planners	X	√	√	√	√	√	√	√		√	√	√	√	√
	Final approval of the plan by relevant authorities	X	√	√	√	√	√	√	√		√	√	√	√	√
	Printing and dissemination of plan to all stakeholders	√	√	√	√	√	X	√	√		√	√	√	√	√
	Implementation and monitoring of plan at all levels	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Evaluation and revision in the last plan year plan	√	√	√	√	√	√	√	√	√	√	√	√	√	√

*Rwanda refers to HRH policy, but all the other countries are HRH strategies

HRH, human resources for health.

aligned to a broader health policy or health sector strategic plan.[8] In other countries, HRH policies gave rise to HRH strategic plans with annual operational plans. In the case of South Africa, an additional investment case document is being developed.[15] Countries also developed annual operational plans to operationalise HRH strategic plans to facilitate implementation, monitoring and evaluation.[16] No matter how scientific and context-relevant, HRH policies can be ineffective in producing the intended results due to many factors, including global and regional disturbances such as pandemics that promote out-migration of the health workforce from some African countries to the first world countries.[17 18] It is important to regularly evaluate the effectiveness of the HRH strategies during implementation to remediate any policies that are not producing desired results. However, the duration of these operational plans varied widely from one context to another. For instance, it was observed that the HRHSP for Liberia[19] came with a 2-year implementation of an annual operational plan in Ethiopia and whereas there was no operational plan developed for the Kingdom of Eswatini.[17]

Scope

The scope of the HRH strategic plans is considered in three dimensions: terms of the strategy, sectors covered by the strategy and the health workforce considered in the projections. It could also be explored in terms of the multisectoral nature of the implementation process, especially where the Ministries/Departments of Health have to depend on other sectors for funding, infrastructure development and services to implement the HRH strategic plans.[15]

Term of the strategy

There is no consensus on the term of the strategic plan. Eritrea, Kingdom of Eswatini, Kenya, Malawi, Sierra Leone, Tanzania and Zambia developed 5-year strategic plans. In contrast, Botswana, Ethiopia, Liberia, Namibia, South Africa and South Sudan has a 10-year strategic plan. Those with longer term strategic plans also have a midterm evaluation plan.[15 16]

Sectors/institutions/programmes

In terms of institutions and programmes, plans extend beyond the national public health sector to private-for-profit, private-not-for profit and faith-based healthcare facilities and programmes.

Health workforce

There are no boundaries in terms of the health workforce that the HRH strategic plans cover. The health workforce included in the strategic plans and empirical studies ranges from nurses/midwives, doctors, dentistry personnel, pharmaceutical personnel, laboratory health workers, and allied health professionals (such as physiotherapists, nutritionists, environment and public health workers), community and traditional health workers, health management and support health workers, and other non-clinical health service workers.

How should the HRH strategic plans be developed?

Lack of institutional capacity and suboptimal HRH governance are significant challenges faced by the HRH policy formulation and implementation in Africa.[15 16 20] Similarly, weak HRIS complicates the ability of countries to accurately analyse and predict the needed cadres of the health workforce to address the population needs and health system demands.[21–23] In some contexts, national conflicts strain the development process.[15 18] In contrast, in others, the inability of countries to institute a national entity with the responsibility also creates the situation where some policies and strategic plans expire before a new one is developed.[15]

We found that although most of the countries appear to be following the *Policies and Plans for Human Resources for Health: Guidelines for Countries in the WHO African Region*, there still exist variations in their approach to the development of HRHSPs. To fill in that gap, with the intent of proposing a standardised approach, we propose the following phases based on the findings of this document analysis: (1) evaluation of the current or expiring strategic plan; (2) situation analysis; (3) HWF policy dialogue; (4) development of the document; (5) formal adoption and implemenation; and (6) iterative multistakeholder engagement (see figure 1). The process is cyclical, and therefore a midterm review is an essential component of the implementation phase.

Constituting a technical working group

Generally, ministries of health lead the development of HRH policies and strategic plans by constituting technical committees which are sometimes called HRH Working Groups[16 17 22 24–30] and Advisory Committees[15 16 18 31] or Ministerial Task Teams.[15] These technical committees or working groups are normally appointed based on their technical, contextual skills or representing specific stakeholder constituencies. The technical working group (TWG) must be multisectoral and multistakeholder, and members may include representatives from human resources for health; planning, health professionals; eHealth; economics and finance; education and training; leadership and governance; labour relations; monitoring and evaluation as well as regulatory authorities across relevant ministries and agencies.[26 28] The TWG also needs to have the capacity to make an investment case and advocate for investment in HRH.

These ad hoc teams, committees or working groups are tasked to lead the development. They can be divided into smaller groups to tackle different strategic plans or policy components. For example, the ministerial task team of South Africa was split into workstreams for specific components of the strategic plan.[15]

Evaluation of the current or expiring strategy

Evaluating the active or expired HRH strategic plan is critical to inform the new one being developed. In the strategic plans in which the commencement and approval/launching dates were provided, it could be deduced that

the time taken for the completion of the strategic plan ranges from nine (9) months in Sierra Leone[29] to nineteen (19) months in Namibia.[16] In the case of Namibia, the process took so long because of the extended period (12 months) between the inception/conceptualisation phases and the start of situational analysis. It took Malawi 14 months to complete the HRH strategic plan development.[28] It could also be observed that in some instances, the current strategic plan expires while the development of the new one is ongoing; for example, in South Africa, the *HRH Strategy for the Health Sector: 2012/13–2016/17 expired before* the strategic plan *was launched 2020.*[15]

Comprehensive situation analysis

Situation analysis is defined as purposive commissioning and implementation of comprehensive research to identify, describe and analyse the current state of Human Resources for Health in a specified jurisdiction.[16 19 20 32 33] Although there is no consensus on what constitutes a situation analysis in the literature, the authors believe that the term encompasses all data collection and analysis activities that provide information for proper HRH decision-making.

All the HRH strategic plans proposed strengthening the HRH data collection systems. Two critical recommendations on data collection made by the countries in their strategic plans were: to empower the districts and regions/provinces to collect HRH data; and set up a single national human resource for a health information system for all the health sectors (public, private, faith-based organisations, non-governmental organisations, etc). The critical evidence needed was obtained from descriptive labour market assessment, health workforce modelling (predictive labour market analysis) and using strategic business tools.[16 19 20 32 33]

Descriptive health labour market analysis

To inform the conduct of situation analysis with an economic framework, the World Health Organization (WHO) published a guidebook for health labour market analysis. It provides a comprehensive view of the supply and demand for health workers and the mismatches between them,[34] and the key elements to include are political economy analysis, stock and distribution analysis; analysis of training capacity; analysis, demand for HWF; labour market mismatches, and efficiency of current distribution and utilisation of the health workers, which identified current and future gaps. Our review showed that some countries (eg, Namibia, South Africa, Benin)[15 16] had conducted labour market analyses as part of their HRHSP development processes.

Analysing the health labour market outlook: projecting the health workforce needs, supply, demand and gap analysis

Health labour market modelling or health workforce projections are essential in providing insights into the future trajectory of the health workforce in the country under a given set of assumptions. One of the significant HRH planning challenges African governments face is accurately projecting the needed mix of the health workforce to tackle healthcare challenges. Isolated projection of the need for specific or single health professionals also creates difficulties in the HRH management as considerations for other professionals are not made. It is recommended that the need, demand and gaps in all significant health cadres workforce are modelled together.[15 16 29]

Various projection methods and tools were used in the studies included in the review. These include WISN,[27 35] health facility staffing norms,[16 18 19 22 30 36] Health Service Development Analaysis (HeSDA) with staffing norms based on population to health facility standards,[23 32] Human Resources for Health planning and Projection Tool (HRHPPT) developed by WHO',[20] 'Workload related to the population served and the package of services offered'[37] and Workforce Optimisation Model.[28] Of particular interest is the South African projection method which was split into three with different foci[15]: Third (3rd) Rank Province Equity Target was used to project for health workforce needed for equity, Service utilisation model was used to project for Primary Healthcare and a model based on health workforce density for specialist physician needs.

Eswatini and some countries with 5-year strategic plans made projections for 10 years.[17] Current strategic plans being developed are taking the global HRH 2030 direction—a for 10-year projections and beyond.[15 16 29]

Analysis with strategic business tools

To harness the health system's strengths while mitigating the weaknesses that have the potential to impede the realisation of the strategic goals and objectives, there is a need to analyse the strengths and weaknesses of the health system.[22 27] Strengths, Weaknesses, Opportunities and Threats analysis (SWOT) and Political, Economic, Social, Technological, Environmental and Legal (PESTEL) analyses were identified as the standard processes in the analysis of strengths and weaknesses.[17 22 27] Botswana,[22] Eswatini[35] and Malawi[28] conducted SWOT analysis, while Kenya[27] conducted both SWOT and PESTEL analyses. Other countries also analyse the health system's strengths and weaknesses but have not titled it under a system such as PESTEL or SWOT.[15 16]

National HWF policy dialogue

At every critical milestone of developing HRH policy or strategy, there is the need to engage and dialogue with the relevant stakeholders.[15 16] At the inception and conceptualisation phase, key stakeholders are gathered to deliberate on developing the new strategic plan—this is a political process. Through the Minister of Health or the appropriately delegated representative, the government initiates the HRH strategic plan development process through a ministerial stakeholder summit where the outcomes of the previous strategic plan are reviewed, and the technical processes towards the development of the new strategic plan are initiated.[16] Key among these

processes is the appointment of the TWG.[16 17 22 24–30] A vital component of the inception and conceptualisation phase is to develop clear terms of reference for the TWG and any consultant to be recruited and a roadmap for the development of the new policy/strategy.[22 28 31]

An essential stakeholder consultation process is the national HWF policy dialogue, where stakeholders are gathered at this phase to review the outcomes of the situational analysis conducted by the TWG. At this stage, the stakeholders will be well informed of proposed strategic directions for HRH in the country. Constituency interests and preferences are also registered by all interest parties, especially the health professional groups and labour organisations.[15 16 19 29] At this gathering, consensus is reached on strategic goals, objectives and policy direction. Essential instructions and directives are given to the TWG to guide them in developing the draft strategic plan. For example, the HRH Summit in Sierra Leone,[29] Presidential Health Summit in South Africa[15] and working sessions in Tanzania.[20]

Developing the strategic plan document
Formulating strategic goals and directions/objectives or priority areas

A strategic goal is an overarching purpose for the human resources for a strategic health plan. It stipulates or projects, based on current situation and opportunities, the state of the HRH in the foreseeable future.[15 16] In some instances, the goals are preceded by an overarching national vision for HRH.[15]

Strategic objectives/priorities/directions are the key areas and policy choices that the government makes through the technical TWG to address HRH challenges or population health needs and fulfil HRH goals.[16 20] Strategic directions are driven by the situational analysis strategic projections made by the Ministry/Department of Health regarding future HRH.

Generally, strategic goals and objectives are influenced by global health and HRH policies. The WHO also provides technical support for all its member countries in their efforts to reach such goals. Key among these global policies include the Alma-Ata Declaration for primary healthcare,[38] the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs)[39] and the Global Strategy on Human Resources for Health.[6 6] National population dynamics, national economy, national health sector policies and national human resource policies also influence the strategic goals and objectives to a large extent.[15 16]

Developing interventions and programmes to reach the strategic objectives

The interventions are developed to respond to a current and emerging HRH situation or projections. They must be specific, measurable, achievable, realistic and have time-bound deliverables that the strategic plan seeks to implement and evaluate. Designing the interventions

must collaborate with frontline health workers, managers and all implementors to avoid resistance.[37]

Developing a financial budget for the implementation of the strategy

Based on the HRH projections made, a team led by a health economist then costs the strategic plan and projects how much it will take to implement the interventions proposed.[15 16 20] This component is critical because under or over budgeting may lead to funding and implementation problems. Specialists must lead the team in the field of health economist and financial planning to avoid under-over budgeting.[15 16]

Developing a monitoring and evaluation plan including indicators

After establishing the strategic goal, strategic directions, interventions and cost of the strategic plan, it is essential to develop how the strategic plan will be implemented, and who (a team of high-level health officials led by a monitoring and evaluation practitioner) will police the process of implementation. Because the objectives are measurable, the team assesses the indicators at regular (annual, midterm) time intervals. Generally, a monitoring and evaluation framework is developed by the TWG to guide the process.[15 16 20 28 32]

Validation of the final HRH strategic plan developed

This is when the stakeholders evaluate the draft HRH strategic plan for inputs, suggestions and concerns. After the interventions are formulated and the cost and monitoring and evaluation framework have been developed, the draft framework is circulated for review and input from stakeholder groups and individuals. The review reports are analysed, and the results are used to finalise the strategic plan. In some countries, the draft strategic plan is circulated among all stakeholders, and the public is given an opportunity for input.[15 30] The overall process has been summarised in figure 1. A stakeholders meeting is convened for final validation and endorsement before the document is submitted to the authorities of the Ministry of Health for formal adoption, dissemination and implementation.

Formal adoption of the strategic plan for implementation

This process is also purely political. This phase determines whether the work done from the beginning could be implemented or not. In some cases, the strategic plan has to be endorsed by the Minister of Health or the parliamentary committee on health.[15 16 28 29] When the HRH strategic plan receives approval from the government, it can then be implemented with the necessary budget allocation. It is important to evaluate the policy midway to ascertain if the strategies are producing desired results or if there is a need to review the interventions.

Multistakeholder and multisectoral engagement

Stakeholder engagement is a critical aspect of health policy. Hence, comprehensive stakeholder mapping and involvement promote the formulation of evidence-informed and

acceptable strategies to respond to the population health needs. All the strategy plans included have mapped out stakeholders to various extent. In HRH strategic plan development, it is essential to employ an approach that ensures multistakeholder and multisectoral inputs on the current and future health system demands across public and private sectors and what should constitute the prioritised health needs.[30][31] Because the HRH policy/strategy development processes are iterative and take place over a long period, it is necessary to sustain the engagement with the broad-base, intersectoral and multidisciplinary stakeholders at various stages of the process, as was observed in Kenya, Namibia, South Africa and Zambia.[15][16][27][30]

DISCUSSION

This review describes the types, scope, processes and critical evidence used in developing HRH policies and strategic plans in the WHO Africa region. We employed the READ approach to document analysis[9] in synthesising information provided in 14 national human resources for health strategic plans.

We also found that the HRHSP included in this study is largely consistent with the guidelines developed by the regional office in developing their HRH strategic plans. However, it is not clear why there was no explicit mention that the guideline was used in the development of the HRHSPs. The review focused on HRH strategic plans because there were too few HRH policy documents available; as also pointed out in a recent assessment by Afriyie et al[8]—it could be deduced that countries within the Africa region focus on the development of the HRH strategic plan without HRH policy.[8]

The scope of HRH for strategic plan covers the whole health system-including private-for-profit, private-not-for profit and faith-based organisations. It is worth noting that planning and projecting for all these institutions is a complex process, especially in the era of shrinking funding from donor organisations and governments. This is compounded by the fact that some nongovernmental organisations that provide health services in Africa are short-lived. The lack of or lack of capacity to collate comprehensive data on the HRH in lower-middle-income countries makes the planning processes difficult. Due to the need to have health workforce projections beyond 5 years, it will be helpful to have 10 years of HRH strategic plans with midterm reviews. A multisectoral approach to stakeholder consultations will be essential for the effective implementation of the HRHSP. For example, the Ministry of Finance, which is responsible for national budgeting, will be able to suggest practical information on available funding for the recruitment of the health workforce.

Many challenges have been reported in developing and implementing HRH policies and strategic plans. Research has shown that most of these challenges are universal, although the extent to which it influences the processes may differ.[40] For example, the Organisation for Economic Co-operation and Development (OECD)[41] stated uncoordinated policy development and training of health professionals in many of their member countries. Similarly, Murphy et al[42] reported that data many OECD countries experience data challenges in planning for HRH hence settling for readily available conventions in predicting workforce needs. Data availability is central to HRH planning; therefore, a comprehensive and efficient HRIS are non-negotiable.[43]

This study proposed an ongoing, cyclical HRH policy and strategic plan development process, predicting the needs of the health workforce over a minimum of 10 years with regular monitoring, evaluation and reviews to ensure the plans remain germane over time. Our findings corroborate that of Murphy et al[42] which stated that "HRH plans must be regularly updated to accommodate changes in planning variables over time". As a result of the complex nature of HRH policy development, it requires astute leadership to coordinate all the stakeholders and interest groups. Extra leadership capacity is much needed in crises such as electoral/civil/tribal conflicts and crimes against humanity.[24][25] de Oliveira et al[44] outlined factors that influence HRH policy, including institutions, national elections, health professional group interests; government priorities; foreign organisations and institutions; civil society and scientific evidence. A leader must have the capacity to cope and deal with all these interested parties to navigate the HRH strategic plan development process.

Regarding the projection of HRH of health, we found varying projection methods. Many of these projection methods are developed and validated in the first world countries in low-resourced Africa. Other challenges included an unsystematic planning process, making projections that neglect fiscal space and are unaligned with national health strategy, and superimposing planning models developed and high-income countries. Amidst the many projecting methods[45] and to fill in the relevance gap, Asamani et al[46][47] developed and validated an open access Microsoft Excel model in Africa. This model provides a guide for countries in their bid to accurately project HRH needs. Mathematical models developed to predict the need of the health workforce should constitute the demand side, need side and gap analysis with different scenarios simulated to ensure informed decision-making by the policymakers. Using a context-specific needs-based mathematical model developed and validated for use in Africa will improve standardise HRH projection processes and make projections contextual.[47]

We also discovered that some strategic plans were developed with 5-year projections. It is a common principle for the time frame of the projection to coincide with the term of the strategic plan. From an evidence point of view, it is challenging to implement a 5-year forecast. For example, suppose the projections involve training a bachelor's level nurses/midwives or medical doctors whose training takes 4 and 6 years (on average), respectively. In that case,

it will be difficult for these health professions to be ready for practice before the end of the strategic plan term.[48 49]

One critical discovery was some strategic plans expiring before the endorsement of the new one. A typical example is South Africa, where the *HRH Strategy for the Health Sector: 2012/13–2016/17 expired before* the strategic plan *was launched in 2020*.[15] Some strategic plans also took so long to develop because of the break in the processes leading to the development of the plans. This is a result of the use of ad hoc committees and technical working groups to develop strategic plans. Smith *et al*[50] and Wishnia *et al*[51] argued that the HRH strategic plan development should be institutionalised with a dedicated agency to manage the development process. For continuity, it essential that the political processes leading to the development of the strategic plan are initiated at least a year before the end of the old strategy so that the new strategy can be ready and approved before the old one expires. One critical factor that needs to be considered in choosing when to initiate the process is completing the HRH strategy before the national budgets are made for the year in which the implementation starts to receive a budgetary allocation.

Limitations

We also acknowledge that the HRH strategic plans included in this review are from only Anglophone African countries; therefore, the application of this process in Francophone and Lusophone countries should be made with caution.

CONCLUSION

Although HRH strategic plan development can be conceptualised as a cyclical, sequential multimethod project, with one phase feeding the subsequent phase with data or instructions, it is a complex process with different interest groups and sectors that need to be satisfied. The influence of external forces and national politics cannot be overemphasised. There is a need for accurate and comprehensive data collection, astute leadership and a broad base and multisectoral stakeholder consultation. Technical support and guidance from experts and major external partners such as the WHO have been very helpful to the courtiers within the WHO region.

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