

**STRATEGIC INITIATIVES ON UNIVERSAL HEALTH COVERAGE
PROGRAM'S PERFORMANCE IN KENYA**

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DEDICATION

I dedicate this research thesis to my family and friends for their support to this far.

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In pursuit of academic excellence, it gives me great pleasure with humility to thank the Almighty God who has made it possible for me through to this day in this journey. I also express deep gratitude for the support I received throughout my academic journey from the following persons and institutions. I extend special thanks to my thesis supervisors, Professor Geoffrey Kamau and Dr. Njenga Gitahi, whose guidance was instrumental in bringing this work to fruition, as well as to my coursework lecturers and the thesis examination team. This work was not going to be possible without the moral support of my wife and children Edrian, Jada and Tara, thank you. To my Father and Mother, you have supported my career goals since day one in my school life. I am also thankful for the mentorship of Bishop Denis Odhiambo Okang', Professor Zachary Bolo, and Dr. Daisy Bowen. My friends, colleagues, and relatives provided encouragement through challenges, for which I am truly grateful. I appreciate the Institute of Postgraduate team, the Higher Education Loans Board, the National Commission for Science, Technology & Innovation, and the institutions that contributed data. Finally, I thank Kabarak University for nurturing my academic growth.

ABSTRACT

Universal Health Coverage (UHC) in an economy is a critical component of sustainable development and poverty reduction and a key element of any effort to reduce social inequalities (Kodali, 2023). Kenya's UHC was anchored in its Health Policy 2014-2030. The policy implementation process adopted a multisectoral approach involving different stakeholders at the national and county levels, regulatory bodies and service providers; and non-state actors who included professional associations, health workers unions, civil society organizations, health providers as well as health insurers; and development partners. The piloting of UHC was subsequently undertaken in 4 counties; Kisumu, Nyeri, Isiolo and Machakos from December 2018 until it was abandoned with the introduction of the new Universal Health Care plan of 2023. Although it was intended to ensure that all Kenyans accessed and received essential health services without financial hardships, its success was unclear. The study, therefore, endeavored to determine the effects of selected strategic initiatives that were undertaken during the UHC's piloting on the expected performance outcomes of the program. Specific objectives were to determine the effect of Health research and development initiatives, Health policy and planning initiatives, National health strategic plans monitoring, and Sustainable health financing initiatives. The research was anchored on the Conflict Theory, Theory of Strategic Balancing, Institutional Theory, and Resource Based Theory. It adopted the explanatory research design in an attempt to explain how the strategic initiatives affected the program performance. The target population for this study comprised 744 management members of healthcare organizations obtained from a sampling frame with the Director of Medical Services office. Data for each institution was collected from appointed organizational senior management representatives with a sample size of 260 respondents obtained using stratified sampling technique. Data was collected through semi-structured questionnaires and analyzed using descriptive statistics and inferential statistics, which included Pearson product-moment correlation and multiple linear regression analysis. The study found that research and development strategy initiatives ($r = 0.374$; $p = 0.000$), Health policy ($r = 0.122$, $p = 0.038$), Health Strategic Plan ($r = 0.334$, $p = 0.000$), Sustainable health financing ($r = 0.267$; $p = 0.000$) significantly influenced the performance of UHC pilot program. Environmental dynamism was found to significantly moderate the relationship between the strategic initiatives and the performance of UHC (R^2 change = 0.174, $p = 0.000$). The study, therefore, concluded that the strategic initiatives significantly affected the performance of UHC in Kenya, however, they were negatively affected by environmental dynamism variables Policy change and Financing models but positively affected by health Strategic Planning. Therefore, the study recommends that healthcare organizations should engage in more research and development activities to enable them overcome barriers to the implementation of UHC. There is need for improved resource allocation and deployment of support systems to support policy implementation in UHC. Further, UHC policymakers and implementers need to consider a range of sustainable health financing schemes that have high penetration rates and low volatility to achieve higher coverage. Finally, there is a need to create mechanisms to ensure stable policy implementation in the face of environmental dynamism.

Keywords: *Initiatives, Research, Dynamism, Policy, Planning, Sustainable, Financing*

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ABBREVIATIONS AND ACRONYMS

ACA	Affordable Care Act
AIDS	Acquired Immuno-Deficiency Syndrome
AR	Auto Regressive process
ARIMA-	Auto Regressive Integrated Moving Average Process
ARMA	Auto Regressive Moving Average Process of order
CHPS	Community-based Health Planning and Services
FHCI	Free Health Care Initiative
FY	Fiscal Year
GDP	Gross Domestic Product
GOK	Government of Kenya
HIV	Human Immuno-Deficiency Virus
ICU	Intensive Care Unit
K-CHIC	Kitui County Health Insurance Cover
KFY	Kenya Fiscal Year
KHSSP	Kenya Health Sector Strategic and Investment Plan
MA	Moving Average
MDG	Millennium Development Goals
NHA	National Health Agency
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
NHS	National Health Service
NRCMCS	New Rural Co-operative Medical Care System
OECD	Organization for Economic Cooperation and Development
OMS	Obligatory Medical Insurance

OOP	Out-of-Pocket
PACF	Partial Autocorrelation Function
PHC	Primary Health Care
RAMED	<i>Régime d'Assistance Médicale</i>
RBT	Resource-Based Theory
SDG	Sustainable Development Goals
SHI	Social Health Insurance
SSPSF	Social Security and Pension Scheme Fund
TB	Tuberculosis
THE	Total Health Expenditure
UHC	Universal Health Coverage
UK	United Kingdom
UNICEF	United Nations Children's Fund
US	United States
USAID	United States Agency for International Development
USD	United States Dollars
WB	World Bank
WHA	World Health Assembly
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Healthcare Service Delivery: Refers to the delivery of curative, promotive, rehabilitative preventive, and palliative services to individuals and communities (World Health Organization [WHO], 2015). The same meaning is assumed for this study.

Policy: Is a set of policies that are principles, rules, and guidelines formulated or adopted by an organization to reach its long-term goals and typically published in a booklet or other form that is widely accessible (Hausteinova, 2013). In this study, policy refers to a deliberate set of principles aimed at guiding decisions meant for Universal Health Coverage.

Strategic Initiatives: Are the means through which a vision is translated into practice through a collection of finite-duration discretionary projects and programs, outside of the organization's day-to-day operational activities, that are designed to help the organization achieve its targeted performance (Brache, 2016). This study refers to endeavors (research and development, health policies, strategic plans, and health care service delivery) by organizations aimed at achieving specific outcomes.

Sustainable Health Financing: Refers to the structures put in place to ensure that healthcare provision is funded effectively for long-term results (World Health Assembly Resolution, 2015). The study assumes the same meaning.

Universal Health Coverage: Refers to a state whereby every individual and community can use the curative, promotive, rehabilitative preventive, and palliative health services required by them, of sufficient quality to be effective while ensuring that financial constraints are not experienced while using the services (WHO, 2015). The study construed it to mean access to affordable health care.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter aims to lay an important background for the study, the identification of the research problem, and the development of objectives and testable hypotheses for the study. Therefore, the chapter comprises the background of the study followed by the research problem, purpose, objectives, hypothesis, significance, scope, limitations, and assumptions of the study.

1.2 Background of the Study

Healthcare is one of the most essential human requirements, and its disbursement should be addressed with the requisite sensitivity to prevent loss of life and a decrease in human capital (Shekarau, Uzoanya & Ogbulafor, 2024). Therefore, healthcare delivery needs to be anchored on a strategy for it to be effective. A healthcare strategy is a plan that guides the actions and goals of a healthcare organization or system. It can help improve the quality, efficiency, and effectiveness of healthcare services, as well as address the challenges and opportunities in the changing healthcare environment. Universal Health Coverage (UHC) is one of the important national and transnational health strategies of recent times (Darrudi, Khoonsari & Tajvar, 2022). It is a critical component of sustainable development and poverty reduction and a key element of any effort to reduce social inequities for the shared prosperity of any nation. It is based on the principle that all individuals and communities should have access to quality, essential health services without suffering financial hardship.

Universal access is achieved through the progressive elimination of the barriers that impede all people from using the integral health services, equitably established at the

national level (Derakhshani, Doshmangir, Ahmadi, Fakhri, Sadeghi-Bazargani & Gordeev, 2020). Universal access to health and the UHC are necessary to improve the health results and other fundamental objectives of the health systems and are based on all people's right to enjoy the maximum level of health, equality, and solidarity (Kodali, 2023). The UHC strategy is being used to bring all program interests in health under an inclusive umbrella and explain its relation with the increased healthy life expectancy, according to the most recent discussions on the millennium development goals after 2015 (Cassiani, 2014; Okungbowa, 2023).

The objectives of WHO on Universal Health Coverage are equitable access to health services which states that not only those who can access funds for care services should get the services but also those who need them, the care services quality should be sufficient to recuperate the health of those getting the services and protection against financial risk by making sure that the cost of using health care services does not put people at risk of financial constraints (Endalamaw, Gilks, Ambaw & Assefa, 2022; Okungbowa, 2023). However, the WHO (2023) reports that the world is off track to make significant progress towards universal health coverage (Sustainable Development Goals (SDGs) target 3.8) by 2030. Improvements to health services coverage have stagnated since 2015, and the proportion of the population that faced catastrophic levels of out-of-pocket health spending increased continuously since 2000. This global pattern is consistent across all regions and the majority of countries. The UHC service coverage index increased from 45 to 68 between 2000 and 2021. However, recent progress in increasing coverage has slowed compared to pre-2015 gains, rising only 3 index points between 2015 and 2021 and showing no change since 2019.

The proportion of the population not covered by essential health services decreased by about 15% between 2000 and 2021, with minimal progress made after 2015 (WHO,

2022). This indicates that in 2021, about 4.5 billion people were not fully covered by essential health services. About 2 billion people are facing financial hardship including 1 billion experiencing catastrophic out-of-pocket health spending (SDG indicator 3.8.2) or 344 million people going deeper into extreme poverty due to health costs (Endalamaw, Mengistu, Khatri, Wolka, Erku, Zewdie & Assefa, 2024). The COVID-19 pandemic further disrupted essential services in 92% of countries at the height of the pandemic in 2021. In 2022, 84% of countries still reported disruptions. Before the COVID-19 pandemic, progress toward UHC was already faltering. The impressive pace of progress in expanding service coverage before 2015 did not continue as the UHC service coverage index (SDG indicator 3.8.1) increased only 3 points to 68 by 2019 and stagnated at this level through 2021 (WHO, 2023).

1.2.1 Global View of Universal Health Coverage Performance

All but 43 countries in the world have free healthcare or access to universal healthcare for at least 90% of their citizens according to Hudson's Global Residence Index. In most places, there are usually limitations to the benefits of the free healthcare provided. However, Brazil is the only country in the world that offers free healthcare for all its citizens. Also, Norway is the first country in the world to implement a free healthcare policy as far back as 1912. Coincidentally, Norway is recognized as one of the healthiest countries in the world. Although each country has some form of universal health coverage, the healthcare models vary widely. Individuals living in these countries may experience different levels of coverage and taxation and may or may not be required to purchase supplementary health coverage. Furthermore, universal coverage often only extends to citizens who pay taxes and contribute to social funds. Employers may be required to offer individuals residing in foreign countries additional health coverage if they cannot buy into the universal system in their country.

Interestingly, the United States does not currently have UHC, and whether it should, is still an ongoing debate. Given that the current US healthcare system has created significant medical debt, exacerbated inequality, and left many people without access to the medical care they need, UHC may provide better coverage for everyone. Strategy-wise, Zieff, Kerr, Moore, and Stoner (2020) argue that universal healthcare coverage could improve the health of the people in the United States, which means that the government's healthcare costs would become lower, and eventually UHC would result in lower government spending on healthcare as a whole.

A study by Riley (2022), however, noted that two of the clearest problems with the current United States healthcare system are the financial burden that healthcare can cause people (which often manifests as medical debt and disproportionately affects different racial, income, and ability groups) as well as a lack of access to care when people are uninsured. Further, Zieff et al. (2020) established that implementing universal healthcare coverage in the United States would not be a simple process as there are complexities and expenses associated with UHC in the US. These factors would make the process of implementation extremely complicated. However, from a strategic perspective, Riley (2022) argued that this problem was not unsolvable. The studies, however, did not show whether there were any current strategic initiatives such as research and development being used by the US government to establish the feasibility of UHC in the country.

In the EU, Giovanella, Mendonça, Buss, Fleury, Gadelha, Galvão and Santos (2019) noted that the striking feature in European countries is the universal guarantee of access to health services through publicly-funded national health systems that are one of the pillars of welfare regimes. The classic European models for universal healthcare are Bismarckian-type social insurance, which is funded on the basis of mandatory social contributions from employees and employers, and membership depending on

participation in the labor market; and the Beveridgian model of a national health service, with universal access based on citizenship and financed by fiscal resources with a predominance of public providers. In terms of strategy, countries like Germany opted for a hybrid system comprising elements of both models where funding is predominantly public via compulsory social contributions proportional to salary (15%) parity between employers and workers (70% social contributions, 7% fiscal resources). This has led to universal coverage with Social Security for Illness accounting to 90% while private insurance covers 10% including 4.4% of civil servants (Giovanella et al., 2019).

In the UK, however, the Beveridgian model of a national health service was adopted. Its funding strategy is predominantly fiscal and public (68% fiscal resources, 15% social contributions). According to Boyle (2011), the pioneering National Health Service (NHS) in the UK is an international reference for the universal access system; it is fiscally financed, with a centralized structure and regionalized coverage. It guarantees comprehensive care at all levels through robust with mandatory registration of citizens at a general practitioner's office; this is a pathway and filter for access to specialists who are situated at a second level in hospital outpatient clinics, most of which are public. In terms of organization structure strategy, the German system was not territorialized or organized in networks while the British system was integrated, centralized structure. Regionalized organization of services and resource allocation based on population health needs and regional specificities. Both countries, however, had identical healthcare service strategies which were characterized as being; implicit, comprehensive and uniform, guaranteed outpatient and hospital care at all levels of care including pharmaceutical assistance (Boyle 2011; Giovanella et al., 2019).

However, while countries in Europe generally have high population coverage, certain groups such as undocumented migrants are at times excluded. Service coverage, cost

coverage, and service access vary across European nations, and the lack of granular, standardized data makes cross-country comparisons difficult (Elmer, Endrei, Németh, Horváth, Pónusz, Kívés & Boncz, 2022). Apart from the financing models, service delivery and structural strategies, the studies did not highlight the strategic initiatives used by the countries to achieve UHC. In recent years in the UK, however, increasing workload and treatment costs have put a considerable strain on the NHS. There are several challenges faced by the NHS, ranging from staff shortages, retention, financial issues, patients care backlog, healthcare inequalities, social care issues, and evolving healthcare needs (Khan, 2023). In Germany, responses to demographic changes and economic challenges, health-care reforms have focused on cost containment and to a lesser degree also quality issues. In contrast, generational accounting, prioritization and rationing issues have thus far been completely neglected (Dietrich & Riemer-Hommel, 2012; Busse, Blümel, Knieps & Bärnighausen, 2017).

In 2009, the Chinese government launched a new round of healthcare reform towards UHC, aiming to provide universal coverage of basic healthcare by the end of 2020 (Tao, Zeng, Dang, Lu, Chuong, Yue & Kominski, 2020). China launched a major health-care reform and pledged to provide all citizens with equal access to basic health care with reasonable quality and financial risk protection. The government has since quadrupled its funding for health. The reform's first phase (2009–11) emphasized expanding social health insurance coverage for all and strengthening infrastructure. The second phase (2012 onwards) prioritized reforming its health-care delivery system through: systemic reform of public hospitals by removing mark-up for drug sales, adjusting fee schedules, and reforming provider payment and governance structures; and overhaul of its hospital-centric and treatment-based delivery system (Yip, Fu, Chen, Zhai, Jian, Xu & Chen, 2019). In the past two decades, China has made substantial progress in improving equal

access to care and enhancing financial protection, especially for people of a lower socioeconomic status.

However, gaps remain in quality of care, control of non-communicable diseases (NCDs), efficiency in delivery, control of health expenditures, and public satisfaction. Yip, Fu, Jian, Liu, Pan, Xu and Zhai (2023), however, observe that although strong political commitment and targeted financial investment have produced positive outcomes in reproductive, maternal, newborn, and child health and infectious diseases, a fragmented and hospital-centric delivery system, rising health-care costs, shallow benefit coverage of health insurance schemes, and little integration of health in all policies have restricted China's ability to effectively prevent and control chronic disease and provide adequate financial risk protection, especially for lower-income households. However, the existing WHO and World Bank global UHC monitoring framework is not fully compatible with China's health-care demand, a problem that high-income countries also encounter (Bergen, Ruckert & Labonté, 2019).

Singapore has "one of the most successful healthcare systems in the world, in terms of both efficiencies in financing and the results achieved in community health outcomes," according to an analysis by global consulting firm Watson Wyatt (Ahmed, Hasan, MacLennan, Dorin, Ahmed, Hasan & Khan, 2019). Singapore's system uses a combination of compulsory savings from payroll deductions (funded by both employers and workers) a nationalized health insurance plan, and government subsidies, as well as "actively regulating the supply and prices of healthcare services in the country" to keep costs in check; the specific features have been described as potentially a "very difficult system to replicate in many other countries." Many Singaporeans also have supplemental private health insurance (often provided by employers) for services not covered by the government's programs (Tan, Lam, Matchar, Zee & Wong, 2021). Tan and Earn-Lee

(2019) in their study established that Singapore has a universal health care system where government ensures affordability, largely through compulsory savings and price controls, while the private sector provides most care. Overall spending on health care amounts to only 3% of annual GDP. Of that, 66% comes from private sources. Moving ahead, the key challenge that Singapore faces is ensuring that good health outcomes continue to be achieved with an ageing population and projected increases in chronic conditions. To keep UHC financially sustainable, Singapore relies on income and service-differentiated patient copayments (Tan, Bilger & Ho, 2014; Ong, Tyagi, Lim, Chia & Legido-Quigley, 2019).

1.2.2 Regional View of Universal Health Coverage Performance

Currently, out of the 54 states in Africa, only a handful of 11 states have UHC. These include; Algeria, Botswana, Burkina Faso, Egypt, Ghana, Mauritius, Morocco, Rwanda, Seychelles, South Africa and Tunisia. Kenya piloted the UHC between 2018 and 2023 and re-launched it in 2023. For Africa, progress towards UHC involves ambitious goals for expanding access to a range of effective health services, a substantial increase in health expenditure, and establishing a greater reliance on prepayment and pooling mechanisms to finance healthcare (WHO, 2018). According to one set of calculations, achieving UHC requires countries to spend at least \$86 per capita in 2012 dollars on healthcare, and a minimum of 5% of the Gross Domestic Product (GDP) (Mc Intyre, Meheus & Røttingen, 2017). Expanding the ‘fiscal space for health’ will be key to the success of UHC (McIntyre, Obse, Barasa & Ataguba, 2018). Currently, total health expenditure (THE) in Africa is on par with that of low-income countries worldwide. However, regional averages hide substantial heterogeneity across the continent, and the degree of inequality in total health spending across countries has increased over time. On average, THE has grown more rapidly than GDP—five percent per year over the last two

decades, compared to two percent for GDP. As a result, THE as a share of GDP has increased from five percent in 1995 to six percent in 2014, albeit with significant variation across countries. However, only four countries were above the Abuja target in 2014, even though some development assistance for health (DAH) is included in estimates of government spending. None of the five countries that achieved the 15 percent target in 2002 were able to maintain the target level of domestic health spending.

While South Africa technically complies with the objective of UHC, various pooling and purchasing weaknesses remain which may only be addressed through institutional reform (Day & Zondi, 2019). The question for South Africa, and countries roughly at the same level of development, is whether it is feasible to resolve these weaknesses by resorting to a single scheme that combines both pooling and purchasing functions, or whether they are better addressed, at least for the medium-to long-term, through mechanisms that pool across multiple purchasers (Michel, Tediosi, Egger, Barnighausen, McIntyre, Tanner & Evans, 2020). Sustaining change and preserving gains achieved in the move towards UHC in South Africa is a mammoth task. Policy implementation is not linear and unintended consequences, resistance by some interest groups, need to be negotiated and managed particularly the private sector with vested interests (Buse, Mays, Colombini, Fraser, Khan & Walls, 2023). There are ambitious reforms planned for financing and purchasing arrangements through the NHI (Pauw, 2022). Achieving UHC requires the right policies many of which South Africa is yet to implement. Some of the unresolved issues are: The economy is unsustainably resource intensive (Whyle & Olivier, 2023); the public health system cannot meet demand or sustain quality currently; public services are uneven and often of poor quality; corruption levels are high; and South Africa remains a divided society. The underlying political and social determinants that undermine access to care must also be tackled to achieve the broader equity and

effectiveness goals of UHC (Govender, Girdwood, Letswalo, Long, Meyer-Rath & Miot, 2021).

According to a study by Akhnif, Hachri, Belmadani, Mataria and Bigdeli (2020) on Morocco's policy choices to achieve Universal health coverage, it emerged that despite the goodwill of all stakeholders, significant reforms implemented respond only partially to the needs of the population. Morocco established several public insurance schemes, of which one focuses on the poorest, to achieve financial-risk protection for its population. Tuck, Maamri, Chan and Babar (2019) in their study observed that Morocco operates a public health sector run by the government that operates 85% of the country's hospital beds and deals mainly with the poor and rural populations, who cannot afford private healthcare. In addition, a non-profit health sector operated by the National Social Security Fund covers 16% of the population. Private medical care is available for those who can afford it. Nevertheless, achieving universal health coverage through one of its dimensions is not sufficient, and all the effort being is concentrated in one area and has shown the deterioration of equity in access to and quality of health services. Moreover, the insurance schemes did not reach their objectives of protecting a majority of Moroccans from financial hardship.

In Ghana, a study by Awoonor-Williams, Apanga, Bawah, Phillips and Kachur (2022) found that coordinated cycles of implementation research, planning, and testing innovations and policy reforms have contributed significantly to the Community-based Health Planning and Services (CHPS) initiative achieving national scale and improving geographic access to primary health care services at the community level. Achieving and maintaining high levels of financial access through the National Health Insurance Scheme (NHIS) has been more elusive, although research and evaluation evidence has also been utilized to support implementation reforms and refinements. Although the

NHIS contributed to increased use of CHPS services among the poorest, this increase is skewed toward curative care treatment, rather than comprehensive primary health services that include promotive and preventive care. An earlier study in the same context by Amoah and Phillips (2018) established that there was limited access to healthcare even among majority who had subscribed to the National Health Insurance Scheme. The studies showed that there was significant research and development as well as national health planning and policy strategies in delivering UHC in Ghana. However, other strategic initiatives like sustainable financing and national strategic planning were not examined.

The ambitious Universal Health Insurance Bill, signed into law by Tanzanian President Samia Suluhu Hassan on December 6, 2023, aims to guide the country towards achieving Universal Health Coverage and shield its 60 million citizens from unaffordable medical costs (Buguzi, 2024). The government of Uganda has ratified a number of international agreements designed to improve the country's residents' access to high-quality healthcare and to increase funding for the health sector (Medic East Africa, 2019). Uganda's health-related policies and plans show that the government has been working towards universal access for some time, therefore UHC is not a very new concept in the nation. However, there are still a lot of deficiencies that have affected the healthcare system (Nannini, Biggeri & Putoto, 2022). In Uganda, access to healthcare is still restricted, and 41% of costs are covered out of pocket. People have been maintained in poverty as a result of occasionally having to sell their investments in order to pay for healthcare.

1.2.3 Local View of Universal Health Coverage Performance

Together with other United Nations member states, Kenya is working towards worldwide universal health coverage by the year 2030. The Universal Health Coverage Policy 2020-2030 conveys the health sector policy directions, strategies and

implementation framework for the period between 2020 and 2030. Its goal is 'To ensure all Kenyans have access to essential quality health services without suffering financial hardship' (Kabia, Mbau, Oyando, Oduor, Bigogo, Khagayi & Barasa, 2019). UHC program in Kenya was aimed at ensuring that all Kenyans accessed and received essential quality health services through a single unified benefit package without suffering the risk financial hardship (Wangia & Kandie, 2018). The Kenyan government made a commitment to achieve UHC by the year 2022. The country's strong political commitment to UHC was embodied in the then government's Big 4 Agenda that included healthcare for all as one of the key development priorities (Jaramillo & Chatterjee, 2019).

Universal Health Coverage is, however, not entirely new to Kenya and has, in fact, been in the governments' agenda since independence in 1963. The then government in with support of various stakeholders, initiated policy reforms and strategies earmarked towards universal health coverage. Some of these are outlined in various policy documents including Kenya Health Policy Framework (KHPF 1994–2010), Health Sector Strategic Plans, Vision 2030 (operationalized through the medium-term expenditure framework of 2008-2012), the Constitution 2010, the Health Bill of 2015, and finally, the launch of the Kenya Universal Health Coverage Policy 2020 – 2030.

Over the decades, however, the country's health indicators though showing a mixed trend since independence in 1963 to present, have continued to lag behind those of the rest of world including sub-Saharan Africa (SSA) and were far above the targets set for the MDGs for the country. Among the notable indicators of these mixed trends are; life expectancy (PRB, 2015), Infant mortality (PRB, 2015) under-five-year mortality (GoK, 2008) and maternal mortality rates (GoK, 2014; PRB, 2015). Statistics also shows that malaria accounts for almost half of morbidity in the country. Other leading causes of

deaths are; HIV/AIDS, Conditions arising during perinatal period, lower respiratory infections, Tuberculosis, Diarrheal diseases, cerebrovascular disease and ischemic heart disease. The disability-adjusted life year (DALY) losses in the country are largely attributable to HIV/AIDS, Conditions arising during perinatal period, Malaria, Lower respiratory infections, Diarrhoeal diseases and Tuberculosis.

Salari et al., (2019) argues that the health system in Kenya has failed in promoting equity, especially among the poor and disadvantaged. The number of Kenyans who continue to suffer from communicable diseases such as HIV/AIDS, malaria and TB, as well as the increasing burden of non-communicable diseases like diabetes, cancer and hypertension, present formidable challenges to the country (Anthonyraj, 2016). Among the poorest in Kenya, only 3% have health insurance, which is provided by the National Hospital Insurance Fund (NHIF). Among the wealthiest, many who also have private cover, this rises to 42%, indicating again that the poorest are at risk of being left behind even further, and do not have an appropriate safety-net to fall back on (Jaramillo & Chatterjee, 2019).

An earlier national survey by Barasa, Nguhi and Di McIntyre (2019) revealed that the Universal Health Coverage index for Kenya was 52% in 2014. This meant that about half of Kenyans had coverage with both essential healthcare services and mechanisms to protect them from financial hardship or poverty because of out-of-pocket healthcare payments. Even though there was improvement in coverage between 2003 and 2014, inequalities in both service coverage and financial risk protection persist 6 out of 10 Kenyans did not have access to essential healthcare services in 2014. 4 out 10 Kenyans were at risk of getting into financial hardship or poverty because of out-of-pocket healthcare payments in 2014. The installation of UHC as a global and country health policy goal has highlighted the need to measure it, and to track progress over time.

On December 13, 2018, the Kenyan pilot scheme for universal health coverage was introduced in the counties of Nyeri, Kisumu, Machakos, and Isiolo. Based on the frequency of special health requirements among their populations, these counties were chosen as test locations. The selection of Nyeri County was based on the high rate of non-communicable diseases; Kisumu was chosen because of the high rate of infectious diseases like malaria; Machakos was chosen because of the high rate of injuries from traffic accidents; and Isiolo was chosen because of the alarming rate of maternal fatalities. But only Isiolo and Machakos, out of the four counties, helped the limping pilot to a safe and uneventful end. Kisumu was a non-start from the beginning and Nyeri eventually terminated the pilot due to financial constraints. Fortuitous as it might have been, launching the National UHC program in the year where the World has experienced the biggest Health Crisis in a Century would have been a master stroke by the Ministry of Health but alas the failure to effectively transition the pilot into a fully functional national project presented instead another opportunity for private allies to cash in and citizens to keep wallowing (Mwaniki & Ogoti, 2024).

Studies have been done on the impact of the pilot UHC in Nyeri and other counties and mostly reported an increase in outpatient attendance in health facilities enrolled in the pilot UHC program (Republic of Kenya, 2022; Shano & Vilcu, 2020; Mbogo et al., 2020). Another study by Njuguna (2023) comparing the effect of the pilot UHC on hospital workloads in Nyeri County where UHC was piloted and Embu County where UHC was not piloted found that the workload of health facilities implementing the pilot UHC program increased compared to similar health facilities not implementing the pilot UHC program. This means that the pilot UHC program may have led to increased utilization of health services. According to Njuguna (2023), the increase in workload may infer that the pilot UHC program improved non-communicable diseases control in

Nyeri County. An earlier study by Kiragu, Rockers, Onyango, Mungai, Mboya, Laing and Wirtz (2022) in the same context showed that the pilot UHC program in Nyeri led to a significant increase in free non-communicable disease medicines in Nyeri County meaning that the beneficiaries did not have to buy their own medicine. This may have provided some protection from catastrophic health expenditure. Arguably, the pilot UHC program increased workload firstly through provision of health insurance and secondly by abolishing user fees.

UHC was meant to be scaled up afterwards across the country based on learnings from the pilot, and reforms made to the national hospital insurance fund (NHIF) in order to establish a mandatory universal health coverage scheme. However, there are indications from the dismal performance of the pilot study that scaling up the program could be problematic if a number of structural issues and challenges are not addressed. For instance, a study by Muriithi (2020) comparing Isiolo County which had the UHC piloted and Kiambu County which had not piloted the UHC, established that the challenges that Kenya faces in achieving UHC include; human resources challenges, lack of accreditation of health facilities, dilapidated health infrastructure, limited coverage by the NHIF, lack of a proper health information management system, improper governance, fraud and insufficiency of finance or funding. The study found out that provision of universal health care has its challenges in Kenya which are shortage of government budgetary resources, weak health systems, high poverty levels, reaching vulnerable people, selecting the right package of benefits, integration of the informal sector, and misuse of resource. Muriithi (2020), however, concluded that although primary health care has had a great impact on the progress of universal coverage within the two counties that were under study- Isiolo and Kiambu, the journey to achieving UHC still seems distant under the prevailing conditions and is currently not viable.

Close to 7 years after the launch of the UHC pilot programs in the four counties and one year after the official launch of the UHC to the entire country, the achievement of UHC still remains a mirage as pointed out by Muriithi (2020). The pilot study was meant to enable the government learn and guide the UHC strategy, however, it remains unclear whether the backdrop of the partially successful pilot results can be relied on to successfully inform the total rollout of UHC across the 47 counties in Kenya. Of particular to this study was whether the strategic initiatives in place such as research and development (R&D) strategy, health policy partnership strategy, strategic monitoring of National Health and Strategic Plans, and sustainable health financing strategy had any impact at all on the achievement and performance of UHC. Among the strategic initiatives, it is only the health financing strategy that has received considerable attention in literature, however, its sustainability aspect has not been discussed. While the UHC pilot was itself a crucial R&D exercise, its time scope and premature and limping ending leads to questions over its strategic aspect in guiding UHC. Health financing policy plays a key role in strengthening financial protection. However, its strategic effect was not fully established in the pilot. Therefore, it is against this background that the study sought to establish the effects of selected strategic initiatives for UHC performance of in Kenya.

1.2.4 Strategic Initiatives in Universal Health Coverage in Kenya

Strategic initiatives are key to achieving long-term organizational goals by guiding and managing strategic actions. These initiatives are measurable, action-oriented objectives that help implement a strategy, focusing on improving efficiency and achieving a vision (Ergene, Floyd & Ergene, 2023). They include corporate-level initiatives, functional-level efforts, and business-level strategies, each addressing specific organizational needs (Katey, Agyekum & Morgan, 2024; Ngampravatdee et al., 2023). Strategic initiatives

can also be corrective, innovative, or defensive, depending on their focus, such as addressing issues, implementing breakthrough ideas, or defending market positions (Handayani & Pendrian, 2023). In the context of government policy, strategic initiatives are crucial for effective governance and public service delivery, as seen in the Kenyan government's use of such initiatives to drive policies like Universal Health Coverage (UHC). These initiatives, when properly executed, align with national goals and support improved service delivery (Mitchell, 2018). The successful implementation of strategic initiatives, however, depends on clear goal-setting and overcoming political and organizational barriers (Piccoli & Ives, 2015; Lechner & Floyd, 2022). While the role of strategic initiatives in organizational control and learning is acknowledged, further exploration of their implementation, particularly in national health strategies, remains essential (Ergene et al., 2023; Abdul-Azeez et al., 2024).

Strategic initiatives aim at achieving organizational goals (Sharma, Borah & Moses, 2021). In the context of universal health coverage (UHC), initiatives focus on expanding access to quality health services, improving governance, and addressing social health determinants. For example, Kitui and Makueni counties in Kenya have implemented subsidized health insurance schemes, such as K-CHIC and Makueni Care, to provide affordable healthcare to residents. Despite successes, challenges include limited funding, high poverty, and a large informal economy, which hinder access to healthcare and impede progress toward UHC. These issues are compounded by the low formalization of the labor market and insufficient economic development, which are critical for achieving sustainable health financing in Kenya (Deloitte, 2013). The effectiveness of these initiatives in contributing to the national UHC scheme remains a key question.

In Kenya, several strategic initiatives are crucial for the successful implementation of Universal Health Coverage (UHC). These initiatives include research and development,

health policy frameworks, National Health and Strategic Plans, and sustainable health financing. Research and development (R&D) play a pivotal role in enhancing Kenya's health system by fostering innovations that improve healthcare delivery. R&D supports the identification of cost-effective healthcare models, technologies, and interventions tailored to Kenya's needs, such as addressing the rising burden of non-communicable diseases and the COVID-19 pandemic (Sarpong, Boakye, Ofori & Botchie, 2023). By supporting evidence-based policy decisions, R&D contributes to refining healthcare strategies that directly impact UHC.

The national health policy and strategic plans are foundational to achieving UHC in Kenya. The Kenya Health Policy (2014-2030) emphasizes equitable, affordable, and high-quality healthcare. This policy serves as the cornerstone for national health strategies that align with the UHC agenda (Aguilar-Gaxiola et al., 2022). Additionally, the Kenya Health Sector Strategic and Investment Plan (KHSSP) lays out detailed goals and actions for improving health systems across the country, ensuring that UHC progresses through various reforms, including the expansion of essential health services (DiPiro et al., 2022).

Health financing is another critical element in the UHC journey. Sustainable health financing mechanisms are central to ensuring that healthcare services are affordable and accessible to all citizens, particularly the most vulnerable groups (Saxenian, Alkenbrack, Attaran, Barcarolo, Brenzel, Brooks & Ranson, 2022). Kenya has made strides in expanding domestic resource mobilization to fund its health sector, as evidenced by the integration of innovative financing strategies into the Kenya Community Health Strategy. Financial protection, including reduced out-of-pocket payments, aims to prevent households from facing catastrophic health expenses, which is a key barrier to equitable access to care (Agustina, Dartanto, Sitompul, Susiloretni, Achadi, Taher &

Khusun, 2019). Together, these strategic initiatives form a cohesive framework that supports the progressive realization of UHC in Kenya, ensuring that health services are more accessible and financially sustainable for the population.

1.3 Statement of the Problem

Together with other United Nations member states, Kenya has been working toward the goal of universal health coverage by the year 2030. The Universal Health Coverage Policy 2020-2030 states that the goal of UHC is to ensure all Kenyans have access to essential quality health services without suffering financial hardship. The policy stipulates the health sector policy directions, strategies and implementation framework for the period between 2020 and 2030. However, achieving the milestones of the UHC in Kenya has remained a huge task demanding massive commitments in terms of political goodwill, a robust policy framework and both financial and physical resources. Subsequently, the pilot phase of the UHC was launched in 2018 in 4 counties namely; Machakos, Nyeri, Isiolo and Kisumu.

The overall results of the UHC pilot study in Kisumu, Nyeri, Machakos, and Isiolo were mixed, with both positive and negative outcomes. On the positive side, the pilot successfully increased awareness and access to healthcare services, especially in the early stages. There were reductions in maternal mortality and traffic accident-related deaths in some counties, particularly Machakos. Additionally, the decongestion of high-volume health facilities and the introduction of community-based health strategies helped in optimizing resource use. However, the study also revealed significant challenges. The initial surge in healthcare utilization was not sustained, and patient numbers declined over time. This was partly due to inadequate staffing, poor resource management, and logistical issues such as drug shortages. Overcrowding at referral

hospitals, delays in service delivery, and slow recruitment of healthcare workers were significant setbacks.

The pilot test was partially successful, however, for the most part it was terminated early especially in Kisumu and Nyeri Counties while in Isiolo and Machakos the pilot staggered to an uneventful conclusion and replacement with a new program in 2023. Despite the initial increase in the number of patients seeking services, this surge largely fizzled out over time. Reports indicate that while the number of patients accessing healthcare rose initially (from about 20% to 58%), the growth slowed in subsequent months, with patient numbers even declining between April and June 2019 (Njuguna, 2023). Factors contributing to these outcomes included inadequate staffing (with only 17% of the targeted healthcare workers recruited), slow resource disbursement, and logistical issues such as drug shortages (Owino, Wangong'u, Were & Maleche, 2020). The influx of patients also led to overcrowding at referral hospitals, highlighting the need for better coordination between levels of care.

It has been unclear whether the new program might suffer similar fate. Previous studies on UHC implementation such as Kirgotty and Gitari (2022), Yip and Hsiao (2020), and Mutai, 2020) noted that high failure rates due to unclear strategic initiatives, organizational culture, organizational structure, resource limitations and composition of the management team. Mwaniki and Ogoti (2024), Shano and Vilcu (2020), Mbogo et al., (2020), Njuguna (2023), Kiragu et al. (2022) and Muriithi (2020) examined effects of healthcare delivery workloads and the financing aspects on UHC.

Nevertheless, the gap on how the extant initiatives undertaken during the UHC pilot and their effect of the program for eventual scaling up has not been addressed. Notable is that some of the reasons cited for termination of the program for instance in Nyeri County were inadequate financing, thus pointing to unsustainable financing model.

Environmental dynamism was also noted in that gave mixed performance of the program between the counties piloted. Therefore, this study sought to establish the effect of selected strategic initiatives of UHC on the program performance in Kenya.

1.4 Purpose of the Study

The purpose of this study was an assessment of the impact of selected strategic initiatives for Universal Health Coverage Program Performance in Kenya.

1.4.1 Specific Objectives of the Study

- i. To examine the effect of Research and Development Program on the performance of Universal Health Coverage in Kenya.
- ii. To determine the effect of Health Policy on the performance of Universal Health Coverage in Kenya.
- iii. To establish the effect of National Health Strategic Plan on the performance of Universal Health Coverage in Kenya
- iv. To evaluate the effect of Sustainable Health Financing on the performance of Universal Health Coverage in Kenya.
- v. To examine the moderating effect of Environmental Dynamism on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya.

1.5 Research Hypothesis

H₀₁: Research and Development has no statistically significant influence on the performance of Universal Health Coverage in Kenya.

H₀₂: Health Policy has no statistically significant influence on the performance of Universal Health Coverage in Kenya.

H0₃: National Health and Strategic Plan has no statistically significant influence on the performance of Universal Health Coverage in Kenya.

H0₄: Sustainable Health Financing has no statistically significant influence on the performance of Universal Health Coverage in Kenya.

H0₅: Environmental Dynamism has no statistically significant moderating effect on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya.

1.6 Justification of the Study

The study seeks to address the gaps in understanding the effectiveness of strategic initiatives for the Universal Health Coverage (UHC) program in Kenya. Despite Kenya's commitment to achieving UHC by 2030, the implementation of the UHC pilot program has faced significant challenges, with early terminations in certain counties and mixed results in others. Previous studies have identified key factors contributing to failure, including unclear strategic initiatives, inadequate resources, and organizational challenges. However, the specific impact of strategic initiatives, such as research and development, health policies, national health plans, and sustainable financing, on the performance of the UHC program remains underexplored. This research aims to fill that gap by examining how these initiatives influence the program's success. The study will also investigate the role of environmental dynamism in shaping the relationship between strategic initiatives and UHC performance, offering insights into how external factors impact program outcomes. Given that the UHC pilot faced financial challenges and varying performance across counties, understanding these dynamics is critical for scaling the program and ensuring its sustainability. The findings will contribute to policy and

practical recommendations for refining UHC strategies, enhancing its long-term impact, and improving healthcare access for all Kenyans without financial hardship.

1.7 Significance of the Study

The overall wellbeing and happiness in any household is determined by the health status. Across the globe, developing economies such as Kenya have identified access to health services as a basic human right. Greater strides in sustainable economic growth and development in any country is determined by the health of the population since such population will have a productive workforce. This has heightened the efforts towards universal healthcare coverage (UHC) this is to that citizens satisfy their right to health and right to life. The importance of better health as a catalyst to sustainable economic growth and development therefore justifies the need to conduct research in UHC to enable policy makers to formulate policies that will improve the health status of a country's population. This can also enable the government and other key development actors to prioritize and undertake more investments in the health sector.

The findings of this study are, therefore, meant to address the concerns of various stakeholders notably the healthcare service providers, citizenry, policy makers and implementers, such as, the legislature both national and county and the implementers including the healthcare system financiers and healthcare providers both public and private sector. This will enable them to have a fair appraisal of the system and estimate the impact of their initiatives towards promoting UHC.

For the healthcare service providers, the findings are meant to amplify their concerns about the implementation of UHC and also provide learning points from other healthcare providers and stakeholders through which they may address emerging issues in healthcare service delivery under UHC. The local citizenry who are the main

beneficiaries of UHC are also set to benefit from the findings as through advocacy and sensitization by the civil societies with access to this report, they will be better informed about UHC and, hence, have realistic expectations of the program and take appropriate measures such as early registration to health financing schemes such as the NHIF or other local mechanisms and also practice good healthcare habits that go a long way in mitigating healthcare costs.

Other stakeholders like the NHIF, private insurance companies and donors like WHO and World Bank will find crucial information on the strategic initiatives on which they can appraise and premise their financing models towards the achievement of universal health care in Kenya. The study is meant to enlighten the government on the various ways of health care financing and therefore the policy makers can identify mechanisms for UHC financing in Kenya.

Through the strategic initiatives, policy makers and implementers are expected to evaluate the strategic initiatives in place for the implementation of UHC and find mechanisms to strengthen them for the improvement of UHC implementation. The outcome of the study is also expected to be of importance to policy implementers at the Ministry of Health at an early stage such that they will ensure mechanisms are in place to allow for the equal access of health care for all the Kenyan citizenry despite financial hardships for the poor in the society.

Finally, the findings of this study are intended to add value to the existing body of knowledge on universal health coverage in Kenya and can, therefore, act as future reference point to the researchers and scholars who intend to pursue the subject in the future.

These findings will empower stakeholders—governments, financiers, and providers—to refine UHC strategies, bolster sustainability, and enhance healthcare delivery nationwide in the new Social Health Authority (SHA).

1.8 Scope of the Study

The study sought to examine the effects of selected strategic initiatives for Universal Health Coverage on the Program Performance in Kenya. Specifically, it was delimited to research and development, health policy, National Health and Strategic Plans, sustainable health financing and environmental dynamism. The study was conducted across UHC stakeholders in the country and targeted the management of the organizations who were involved in the formulation and implementation of UHC strategies. The study's pilot study, actual data collection and analysis were undertaken over a period of 10 months, that is, between July 2021 and May 2022 and was done in the four UHC pilot study counties of Kisumu, Machakos, Isiolo and Nyeri.

1.9 Limitations and Delimitations of the Study

The study adopted a descriptive survey research design and as such limited it only to describing the problem using views from the respondents of various populations. This meant that the variables of interest in the study were not manipulated at any point during the study so as to examine their effects. This limitation was addressed through appropriate instrument design and comparing the information from the respondents with other published documents.

The study also used systematic random sampling while purposive sampling to obtain the required sample size and also select the organizations and respondents from the target population. However, it only focused on policy makers and healthcare service providers and medical insurers as including the general population of beneficiaries across the

country would have made the target population very sufficiently large and difficult to sample accurately under the circumstances. This meant that the sample size and sampling methods needed to be representative enough to allow for generalizations. A large sample size could transform small differences into statistically significant differences even when they are significant while very small differences undermine the internal and external validity of the study. To avoid these limitations, the study avoided going far beyond or under the determined sample size. Biases in the sample size determination and sample selection could impose some limitations. However, this limitation was overcome by ensuring that the sample selection was done across the study area in the most representative manner possible.

The length of the study may also impose additional limitations. There is the likelihood of increased participant attrition and consequently of reduced sample size. Moreover, substantial changes in the policy environment over a long time may affect the validity of the findings. Further, the study was also carried out during the Covid -19 pandemic which imposed limitations on respondents' participation owing to the Ministry of Health social distancing guidelines.

Finally, the response rate may impose limitations to the study if it is way too low. This could affect the validity of the results. To address this, the researcher first established a rapport with the respondents on the data collection exercise. Sufficient explanations and authorizations to carry out the study was given to the respondents too in this regard. Further, in various public health agencies, there are regular changes in management as well as personnel and this means that the results may not be generalized to private health care providers, this may limit the gathering of accurate and relevant data for the study. Further, many respondents maybe be reluctant in providing information needed for the study, this could hinder the gathering of adequate and relevant data necessary for the

study. However, the researcher assured the respondents of confidentiality during the whole research process.

1.10 Assumptions of the study

The study assumed that the successful implementation of Universal Health Coverage (UHC) in Kenya relies heavily on the stability and adequacy of resources, effective strategic initiatives, and political commitment. It presumed that disparities in outcomes across counties during the UHC pilot phase were due to variations in local conditions such as resource availability, management, and environmental factors. It also posits that the challenges observed in the pilot, like inadequate staffing and financial constraints, reflect systemic issues that require targeted policy interventions. Additionally, the study assumed that strategic initiatives taken during the UHC pilot have a direct impact on the scalability and long-term sustainability of the program. However, as at the time of the completion of this study, the government was in transition from National Health Insurance Fund (NHIF) which was implementing the 2018-2023 UHC pilot program, now in the process of being replaced with Social Health Insurance Fund (SHIF).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of variables identified in the study from both a conceptual and empirical perspective and the associated research gaps. It also presents the theoretical framework highlighting the anchoring theory. The conceptual framework explaining the various variables and their relationships also presented and discussed.

2.2 Theoretical Review

This study is anchored on The Conflict Theory, Theory of Reasoned Action, Institutional Theory, Strategic Balancing Theory, and Social Health Insurance (SHI) Model.

2.2.1 The Conflict Theory

The anchoring theory of the study is the Conflict Theory. Of the classical founders of social science, conflict theory is most commonly associated with Karl Marx (1818–1883). C. Wright Mills (1916 –1962) has, however, been called the founder of modern conflict theory. In Mills' view, social structures are created through conflict between people with differing interests and resources. Individuals and resources, in turn, are influenced by these structures and by the “unequal distribution of power and resources in the society.” The core argument of the conflict theory is social inequalities. According to the core arguments of the conflict theory, the economic and political structures of a society create social divisions, classes, hierarchies, antagonisms and conflicts that produce and reproduce inequalities.

In relation to healthcare, these inequalities lead to differential access to healthcare services in terms of quality and quantity (Ghebreyesus, 2017). Jison (2015) explains that patterns of health and disease follow the line of social stratification. As income

distribution and poverty rate vary across countries and social classes, access to healthcare varies from one person to another. People in higher income categories are more likely to enjoy a quality, personalized healthcare than those who are in the lower income categories. To mitigate these inequalities, the UN articulated the universal health coverage under Section 3.8 of SDG3 which seeks to achieve this by including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Unlike the functionalist approach, conflict theory emphasizes the political, economic and social forces that affect health and the health care delivery system. Among the issues of concern to conflict theorists are the ability of all people to obtain health care; how race, class, and gender inequalities affect health and health care; power relationships between doctors and other health care workers; the dominance of the medical model of health care; and the role of profit in the health care system (Schaefer & Grekul, 2008). Capitalism is also another concern in the conflict perspective. Private hospitals and clinics may first and foremost consider themselves as commercial enterprises, and the focus on profits could deny people from receiving the care they need. The poor are eliminated from the competition for healthcare services by the wealthy, who can afford more expensive medication and procedures. This perspective highlights such issues of inequalities and capitalism, which could lead healthcare professionals to think about the need to improve equitable access to healthcare.

The conflict theory is important to the treatment of the UHC by addressing the conflicting interests of stakeholders in the healthcare system that are dominated by both capitalist and socialist interests. To achieve this, it first seeks to answer the question, who is responsible and who benefits from the healthcare system as it is currently constituted? Imperatively, this question is fundamental in mapping the forces in the healthcare

industry and crafting strategic initiatives to mitigate their impact on the delivery of the UHC. For example, using the US as their case, many conflict theorists relate the problems in US health care delivery are rooted in the capitalist economy, which views medicine as a commodity that is produced and sold by the medical-industrial complex. The medical-industrial complex encompasses both local physicians and hospitals as well as global health-related industries such as insurance companies and pharmaceutical and 'medical supply companies (Angell & Relman, 2002). A similar argument might hold for Kenya which has a significantly large private healthcare industry and which contributes substantially to the national healthcare grid. Such forces are important determinants to UHC delivery as and even strategies like subsidization of healthcare subscriptions alone without addressing the issues in the private sector may not be sufficient to deliver on the UHC. Universal Health Coverage is more than just eliminating the out-of-pocket expenditure; it is also about ensuring access to quality health care. This means that capacity in both structural and resource must be increased to handle the needs of the population.

Conflict theory, while highlighting healthcare disparities, is critiqued for oversimplifying the dynamics of healthcare provision by focusing heavily on class struggles and economic inequality. Critics argue that it neglects the complexity of social factors like culture, individual behavior, and institutional roles in shaping health outcomes (Holmes, 2020). Additionally, it is seen as overly deterministic, often portraying healthcare professionals as agents of oppression rather than recognizing their role in improving public health (Smith & Lee, 2021). The theory's emphasis on power and inequality can also overlook positive collaborations between stakeholders aimed at reducing disparities (Jones, 2019).

Nevertheless, from evident UHC implementation gaps which result from among other things policy discordance, uncertainty and market failure, the theory provides meaningful insight into the current environmental dynamism that affects the strategic initiatives and consequently impedes the achievement of UHC in Kenya. Therefore, this theory provides a theoretical perspective of examining the reach of the moderating effect of environmental dynamism on the relationship between strategic initiatives towards the realization of the UHC in Kenya.

2.2.2 Theory of Reasoned Action

Theory of Reasoned Action (TRA) is a social psychology model developed by Ajzen in the 1980s, and explains the intention behavior reasons (Ajzen, 1985). This theory widely used by many scholars to determine the intention of individual behavior in a multidisciplinary area. The intention of an individual or organization to perform a behaviour influenced by positive attitude and social norms is the degree to which an individual perceives how others approve the individual's or organization's participation in a specific behaviour (Bock, Zmud, Kim & Lee, 2005). This theory represents the attitude and social norms influences the individual intention of knowledge sharing behaviour. Attitude defines as disposition to respond favorably or unfavorably to the self, others and the environment (Ajzen, 1985).

While social norm defined as the way individuals think and expectation from others towards individual actions. Some studies had been done by using TRA to explore the different variations in knowledge sharing behaviour. According to Bock and Kim (2002) explored the relationship between (i) expected associations and contributions and (ii) expected rewards as variable in determine the individual attitude and social norm represent as well as business climate. The result highlights that attitude toward KS and subjective norms have a positive effect on knowledge sharing behaviour. In the recent

study exploring the sense of self-worth (Teh & Yong, 2011), while another studied such as in role behaviour (Brock, Zmud, Kim & Lee, 2005) and business citizenship behaviour (Williams & Anderson, 1991).

The current knowledge economy requires companies to create new business structures and new concepts for the management of its resources to remain competitive. In an increasingly globalized world, the survival of business management depends on their organizational intelligence, which is the result of information and knowledge systems they have, the skills of its employees and how they relate to its stakeholders (Durst & Edvardsson, 2012). A knowledge strategy defines the overall approach an organization intends to take to align its knowledge resources and capabilities to the intellectual requirements of its strategy. A strategic attitude is necessary to achieve a sustainable competitive advantage. From a practice perception, businesses are seeing the prominence of managing knowledge if they are to persist competitive and grow. Consequently, several firms everywhere are starting to dynamically manage their knowledge and innovation (Ferreira et al., 2015). Knowledge does matter, but the question is when, how and why? (Caravannis & Campbell, 2009). Today, knowledge matters further and in forms that are not always predictable or even controllable. Knowledge systems are so highly complex, dynamic and adaptive (Caravannis & Campbell, 2009).

The Theory of Reasoned Action (TRA) faces criticism in healthcare due to its reliance on rational decision-making, potentially overlooking emotional, social, and environmental factors that influence health behaviors (Ajzen & Fishbein, 1980). Critics argue that TRA assumes individuals have complete control over their actions, disregarding barriers like socioeconomic status, cultural beliefs, or healthcare access (Ogden, 2003). Additionally, TRA's focus on intention as the primary predictor of behavior may not account for habitual actions or the influence of past experiences, which

are often pivotal in healthcare settings (Conner & Sparks, 2005). These limitations reduce its applicability in complex, real-world health scenarios.

The Theory of Reasoned Action (TRA) can guide research and development in Universal Health Coverage (UHC) by predicting health professionals' behavior regarding the adoption of new health interventions. TRA posits that behavioral intention, influenced by attitudes and subjective norms, drives actions (Ajzen & Fishbein, 1980). In UHC, understanding attitudes toward innovative health solutions and the influence of peers or policymakers can optimize R&D strategies. For instance, positive attitudes towards technology adoption can encourage implementing cost-effective and accessible health solutions, advancing UHC goals. Peer endorsement and cultural norms also shape acceptance, making them critical for research (Montano & Kasprzyk, 2015). Therefore, in this study the Theory of Reasoned Action provided insight on the effect of Research and Development Program on the performance of Universal Health Coverage in Kenya.

2.2.3 Institutional Theory

According to Greenwood, Hinings and Whetten (2014), institutional theory evolved as an antidote to the overly rationalist and technocratic perspective of 1960s. Institutional theory analyzes the organizational behavior since it can respond to empirical mismatch, whereby what is observed in the world is not aligned with contemporary theories. The central theme of the institutional theory is that organizational structures developed in industrialized countries are viewed by policy makers, donors, and other states as signals of progress towards modern institutional development and hence worthy of financial support (Silva, Macedo & Thompson, 2024). Institutional theory is a relevant theoretical tool to describe the linkages, networks, and couplings of institutions coping with fragmentation, disarticulation, asymmetries between public problems and public jurisdictions, and their high interdependence (Frederickson et al., 2016).

The ideal institutional structure ensures property rights, reduces transaction costs, and reduces conflict between agents. Property rights are constructs in economics for determining how a resource or economic good (like UHC) is used and owned (Silva et al., 2024). There are, however, situations in which the State fails to ensure efficient property rights. Some governments, along their historical processes, create property rights for their own benefit, making them inefficient and high in transaction costs. Some countries have evolved at a slower pace because they lack an efficient institutional configuration with a set of rules, laws, and customs capable of stimulating economically productive activities. Countries must then devise policies that create and enforce efficient property rights and an institutional matrix that adapts to evolving technologies and demographic changes (North, 2010).

According to North (2010), the state establishes the rules of the game, implicit in its policies. Policy action is crucial for the assurance of efficient property rights and for minimizing transaction costs, thus enabling generation of positive externalities and “efficient market freedom”. However, according to Chang (2011), the state is a strategic actor which plays an essential interventionist role as a market planner and coordinator. The state is an institution capable of creating new institutions, besides being responsible for the control of the existing ones. In this sense, it is evident that the state is a very important agent in determining the success of UHC by coming up with policies that can help reduce the transaction costs which have been a major hindrance to achieving universal health coverage.

This can be achieved through health policy partnership strategy which is necessarily institutionalized in order to give it legitimacy and structure (Meyer & Höllerer, 2014). A partnering policy does not determine the content of a strategy; instead, it is subordinate to strategy in that it helps in the implementation of an organizational strategy. It also

does not provide detailed guidance for implementation of activities – its focus instead is on the principles and rules for decision-making (Vogel et al., 2022). Policy partnerships between practitioners and policy makers are a necessary strategy to address complex challenges that require multiple stakeholders to work together toward the same goal (Anheier, 2014), including the development and execution of global health policies and programs such as national costed implementation plans (CIPs). Strategic partnerships on UHC can also be between the countries and larger bodies such as the UN or regional economic blocks. The Kenya government has partnered with several stakeholders such development agencies, the private sector, donors, health workers and the society at large to ensure that Universal Health Coverage is achieved in the country.

Institutional Theory, which explores how institutions influence behavior and structures, faces criticism in healthcare for its potential to perpetuate inefficiencies. The major criticisms of institutional theory have been its assumptions of organizational passivity and its failure to address strategic behaviour and the exercise of influence in its conceptions of institutionalization. Critics also argue that healthcare institutions often prioritize conformity to norms and regulations over innovation, limiting adaptability and responsiveness to patient needs (Scott, 2008). Additionally, the theory may overemphasize stability, neglecting the dynamic nature of healthcare environments that require frequent updates to best practices (Greenwood et al., 2011). This can lead to resistance to change, where adherence to institutional norms undermines the implementation of new, evidence-based approaches, ultimately impacting quality of care (DiMaggio & Powell, 1983).

However, the theory was still relevant to the study in providing insight on the effect of health policy partnership strategy on the performance of Universal Health Coverage in Kenya. Institutional theory can be applied to health policy initiatives in universal health

coverage (UHC) by examining how norms, rules, and cultural-cognitive frameworks shape the adoption and implementation of policies. Institutions—formal laws, informal norms, and shared beliefs—influence how stakeholders perceive and support health initiatives (Scott, 2014). For instance, regulatory frameworks set by governments create legitimacy for UHC programs, while professional norms among healthcare providers affect compliance (DiMaggio & Powell, 1983). The cultural-cognitive dimension addresses how shared values, like equity and access, drive public support for UHC reforms (Meyer & Rowan, 1977). Thus, institutional forces collectively shape UHC outcomes, impacting policy success. Thus, the Institutional Theory was applied in this study to examine the effect of health policy partnership strategy on the performance of Universal Health Coverage in Kenya.

2.2.4 Strategic Balancing Theory

David L. Deephouse developed the strategic balance theory in 1999 in recognition of the premise that organizational performance is how a firm negotiates unavoidable institutional pressures and unavoidable competitive environments- that there is value for organizations to be both the same and to be different. The theory of Strategic Balancing is based on the principle that an organization's strategy as well as that of individuals leading an organization is partially equivalent. Indeed, the success of strategy implementation is influenced by the behaviors of the actors within an organization as well as values of the leaders. The strategic balancing is anchored on three models which include, deployment, symbiotic and relational models. In describing the theory, competition is considered part of the relational and deployment models. It can be subject to alternation between the two antagonistic strategies, the one being predominantly cooperative as described by the relational model and the other being predominantly

competing as characterized by the model of deployment. An institution or organization can adopt the two strategies in turns in order to balance them (Deephouse, 1999).

Effective monitoring of key development within a business environment is very important, managers must therefore focus on the integration of competitive intelligence work with marketing intelligence work. Within an organization, corporate intelligence needs to work closely with the strategy implementation team to ensure that intelligence activities are undertaken within a strategic context. The focus of attention may remain the analysis and interpretation of potential risk and countering risks. Initiatives in corporate intelligence results in the intelligence team being at the centre of the change process within the organization. Corporate intelligence is majorly focused on three functions within an organization which include: marketing, planning and R&D (Prescott, 2001). Melchert, Winter and Klesse (2004) approach is useful since it allows corporate intelligence team to identify strategic issues and as a result senior management can undertake intelligent interventions at the right time.

The strategic balancing theory has been criticized by Hong and Park (2021) whose analysis of US manufacturing firms from 1984 to 2019 by using a firm-specified fixed effect panel data model, showed that the strategic balance mechanism is strengthened in the context of economic crisis. The study also found that the strategic balance mechanism is weakened for technological leaders. Also, according to Deephouse (1999), strategic balance theory directs our attention to intermediate levels of differentiation where firms balance the benefits of reduced competition against the costs of reduced legitimacy. Gong, Yu and Huang (2021), similarly pointed out that the theory's major implication is that firms should be as different as legitimately possible and that the strategic balance perspective was replicable, but with context limitations.

This theory is relevant to the study since all government agencies involved in the implementation of UHC strategies require some form of corporate intelligence to identify the obstacles that might hinder effective implementation of UHC in order to achieve the desired results. Managers in public agencies and departments implementing the Universal Health Care initiatives must therefore develop relationships, inspire key stakeholders, and create a culture where everyone strives to give their best in delivering health services to the citizens. This theory is relevant to this study since it explains how the involvement of stakeholders can effectively improve strategy implementation through effective monitoring. Therefore, the strategic balancing theory was instrumental in providing insight on the effect of National Health and Strategic Plan on the performance of Universal Health Coverage in Kenya.

2.2.5 The Social Health Insurance (SHI) model

The Social Health Insurance (SHI) model originated in Germany under the leadership of Otto von Bismarck in the late 19th century. In 1883, Bismarck introduced the Health Insurance Act as part of a broader effort to create a social welfare system. This act mandated employer and employee contributions to health insurance funds, forming the foundation of what is now known as the Bismarck model of health insurance (Busse, Schreyögg, & Gericke, 2007). The SHI model emphasizes several key principles, including mandatory health insurance, the use of multiple insurance providers, solidarity-based contributions, and state regulation to maintain the system's integrity (Saltman, Busse, & Figueras, 2004).

The Social Health Insurance model has been championed by proponents who emphasize its capacity to pool risk and provide equitable access to healthcare. Key supporters, such as the World Health Organization (WHO), argue that SHI promotes sustainability by spreading financial risk across contributors, ensuring that healthcare financing does not

overly burden individuals or governments (WHO, 2010). With mandatory contributions from employers and employees, SHI is particularly effective in countries with a sizeable formal workforce, where stable premiums can sustain healthcare services (Kutzin, 2013). It fosters inclusivity by subsidizing coverage for vulnerable populations through government or donor funds, supporting the goal of Universal Health Coverage (UHC) by offering financial protection and reducing out-of-pocket payments (Carrin & James, 2005).

The SHI model has been implemented with success in several developing nations transitioning towards UHC. Countries like Ghana and Rwanda have developed SHI schemes to improve healthcare access, financed through a mix of payroll taxes, premiums, and government subsidies (Gottret & Schieber, 2006). These implementations demonstrate that SHI can generate a sustainable revenue stream while improving health outcomes. Additionally, SHI encourages formal employment, boosting economic stability and health coverage expansion (Evans et al., 2012). However, sustainability requires effective administration and broad coverage to prevent system fragmentation, which remains a challenge in developing nations with a large informal sector.

Despite its strengths, the SHI model faces criticism, particularly regarding its applicability in low-income settings. Critics argue that SHI's reliance on formal employment limits its reach in economies dominated by informal workers (McIntyre, 2010). Without substantial government subsidies, low-income populations might be excluded from coverage, undermining UHC goals. Administrative costs can also be high, requiring robust infrastructure to manage funds and claims (Lagomarsino et al., 2012). Additionally, inequalities may persist if the rich receive more comprehensive coverage due to higher contributions, leading to inequitable service quality and access (Kutzin, 2013). For sustainable financing, hybrid models combining SHI with tax-based

mechanisms may address these limitations. This theory, was however, relevant to this study as it looks at the sustainability of the health financing models aimed at achieving Universal Health Coverage.

2.3 Empirical Literature Review

2.3.1 Research and Development and Universal Health Coverage

Research and development is fundamentally about identifying a need or a problem, generating an idea or solution, converting that idea into a product or service, testing the product or service for efficacy, effectiveness, and value, launching the product or service, continuing to monitor, evaluate and improve the product or service, and then finally sunsetting the product or service when it becomes obsolete (Wouters, McKee & Luyten, 2020). Health research and development is really important to the health sector. It provides clinical practitioners and health system investors with innovation and associated evidence for prevention interventions, effective treatments, and care pathways (Young, 2015). Research helps determine the best treatments and practices for various conditions.

Research helps to identify new and better ways to prevent, diagnose, and treat diseases and conditions. It provides insights into the causes of illnesses as well as potential treatments that can be applied in clinical practice (Qoronfleh, 2020). Typically, products include medical devices, drugs, and vaccines, gene therapy solutions, diagnostic tools. They can also include services and care pathways including prevention, treatment and care, and rehabilitation. R&D allows a company to stay ahead of its competition. Without an R&D program, a company may not survive on its own and may have to rely on other ways to innovate such as engaging in mergers and acquisitions (M&A) or partnerships. Through R&D, companies can design new products and improve their existing offerings (Sofrankova, Kiselakova, Cabinova & Onuferova, 2018).

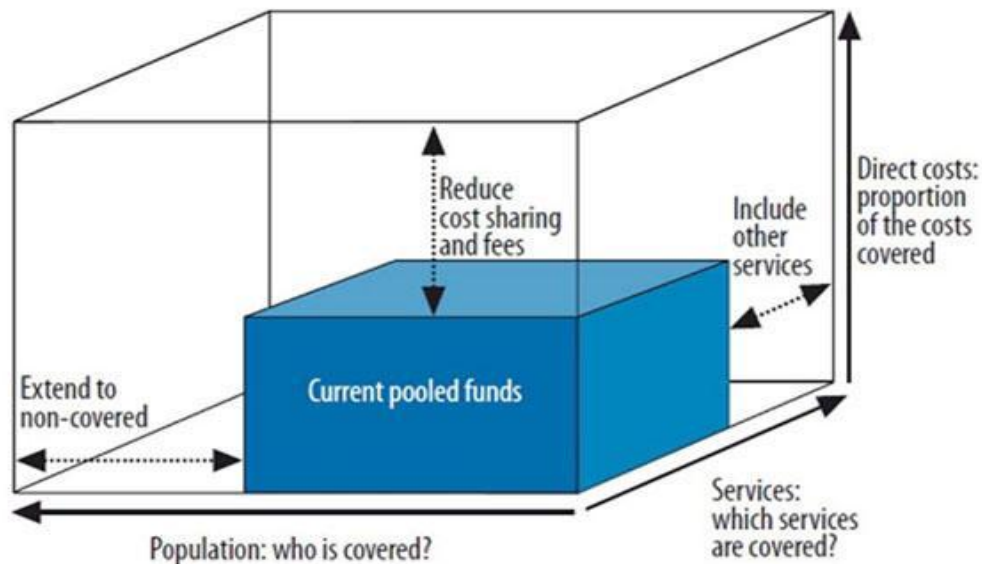
Taking a closer examination at UHC structures, the evidence available reveals these three lessons, of which all have impact on both the future UHC research and policies (Owoye & Onafowora, 2023). Foremost, the available literature reveals that the affordability of health care is important. Even though the UHC schemes have improved the affordability of the health services, these improvements do not always translate into increase in healthcare access. This implies that the intervention design needs to understand and incorporate a more holistic method to the aspects of health care access. Second, the literature reveals that although UHC interventions target the poor the interventions should also need to keep an eye on the rich people (Day & Zondi, 2019). While the normal UHC intervention designs are less efficient to the rich when extending medical coverage to them, other aspects of access may benefit the rich in a relative significance, and consequently, various approaches may be required.

Furthermore, in expanding the medical coverage to the rich, it is essential to examine at how moral threat effects may vary across income groupings. Finally, the benefits should be linked closely to the population that needs to be targeted. Policymakers should have a precise budget to control the tradeoffs between how much and what is covered. In doing so, the policymakers should vigilantly scrutinize the health needs of the target population by examining the indicators such as the major causes of financial adversity, the unsatisfied health demand, major health access barriers, and the epidemiological profile of the population (Savedoff, 2012). According to Mukherjee, Satti, Mugunga, Almazor, and Jerome (2016), three important coverage dimensions are encompassed in the Universal Health Coverage. The three dimensions include population, services, and cost. The population coverage dimension seeks to know the persons covered, the services dimension seeks to know the services that are covered and the quality of those services,

and the cost dimension seeks to know the proportion of the covered cost. Figure 1 depicts these three dimensions.

Figure 1

The Three Dimensions of Universal Health Coverage



Source: World Health Organization (2015)

From Figure 1, the population who are the persons in need of health services is represented by the population axis. The quality of health services that these people need within the main causes of bad health are depicted by the services axis. The services include unfinished agendas of Millennium Development Goals (MDGs), injuries, mental health, and non-communicable diseases. Since this isn't solely treatment, Universal Health Coverage must also include palliation, rehabilitation, treatment, promotion, and prevention. Furthermore, the universal coverage of the required services cannot be achievable without universal access to health technologies and essential medicines, motivated sufficient health workers situated at the right places, and information systems that permit making of informed decisions (Baral & Dieleman, 2015).

The total cost of ensuring that the population gets all the health services they require is represented by the vertical axis. According to Mukherjee et al, (2016), if the population has to pay the full costs of obtaining health services out of their own pockets poor people will not be able to access these services and in the event of long-term or severe illnesses even the rich would be exposed to financial constraints. To spread the financial risks of illnesses across the population, funds are pooled through insurance contributions, tax, and other government revenues.

Research and development has become a crucial tool for change in organizations today. To be innovative, research and development (R&D) is paramount. In a healthcare setting, research and development play an important role in establishing better ways of dealing with diseases. In a study to determine the role played by research and development in the healthcare sector, Mickan and Wenke (2016) established that R&D plays an important role in an organization by sharpening the research skills of healthcare professionals. In a study linking R & D on health care outcomes, Kuruvilla, Mays, Pleasant and Walt (2006) argue that research and development helps in shaping and changing the values and beliefs of people hence the success of the attainment of universal health care. Different communities have different values and beliefs that would act as a barrier to attainment of UHC. Research and development help in reconciling these values, beliefs, and practices held by community members.

It has increasingly been recognized that R&D is strongly supported by technological capabilities. The rapid change and advancement in technology have changed the way healthcare operations are conducted. Today, technology is applied in almost all aspects of operations in an organization. Technology acts as a catalyst of R&D in the healthcare sector, which helps in the achievement of UNC. Technology helps in reducing paperwork, facilitates the storage of huge volume of information of the patients whole at

the same time reducing the time taken to retrieve the information of the patients from the database. This is according to Štaras, Mačiulienė, and Stokaitė (2013) in a study relating information technology and service delivery in a healthcare context.

In a similar study linking technology as a driver of R&D strategy for the attainment of UHC, Gupta (2008) identified key areas that ICT would likely impact on the healthcare sector. First, technology is a key driver of offshore health care services through outsourcing. Some of these services that can be outsourced through technology include diagnostic services covering X-rays and specialists. Secondly, technology helps in the integration of the health care systems and operations that speed up the flow of records and other information of the patient's seeking treatment. Gupta further notes that through technology, health care is able to effectively monitor drugs through the available database in place. The other significant role of technology is that it results in quality information both to patients and doctors. Thus, technology as a driver of R&D positively influences UHC.

Research and development strategy is the basis of innovation in health care. This is according to Omachonu and Einspruch (2010) in a study determining how innovation influences service delivery in a health care setting. The study revealed that innovation in a health care context is majorly driven by technology. It was established that through technology, health centres are able to offer treatment and diagnostic options, enhance effectiveness and efficiency in terms of costs and enhance life expectancy that basically translates into UHC. The health care sector has realized increased complexity coupled with rapid advancement in technologies. These changes have transformed R&D in the health care sector through enhancement and modification of the systems and processes that are in place. In spite of the significant role played by the above changes in technologies in R&D, there exist challenges that include issues of privacy, legal and ethical

issues that affect the attainment of UHC through R&D. These findings are according to Beresniak, Schmidt, Dupont, Sundgren, Kalra and De-Moor (2015) in a study to determine how to improve performance of clinical research.

Research and development strategy informs the established of progressive policies and guidelines on how best to achieve UHC. This is best achieved through partnership programs aimed at establishing policies, practices and health interventions that are less costly for patients. Through this, UHC would be achieved with ease. These findings were established from a study by Cochrane, Jones, Marjanovic, MacLure, Varnai, Jongh and Nooijen (2017) in an assessment of how European Union funding of research has impacted on disease prevention and poverty.

Akhnif, Macq and Meessen (2019) in their study in Morocco confirmed the importance of learning during the different stages of the *Régime d'Assistance Médicale* (RAMED) policy process. There was evidence of a leadership encouraging learning, the introduction and adoption of knowledge management processes, and the start of a transformation of the administrative culture. However, study showed some major shortcomings, especially the lack of structure of the learning, and insufficient effort to systemize and sustain a transformation of practices within the health administration. The studies, however, did not show any strategic initiative by the Moroccan government towards achieving UHC in the country.

2.3.2 Health Policy and Universal Health Coverage

The government of Kenya upon attaining independence in 1963, acknowledged the central role of health care towards socioeconomic growth and embarked on broader strategy reforms targeted at improving access to quality health care. National development policies and successive government strategy documents were established wherein strategies and policies were mooted towards improving geographical access to

health care, which was then limited to the white people who were the minority. These policies resulted in the improvement of health indicators such as life expectancy and infant mortality (GoK, 2012). This improvement was partly accredited to the continued training of competent health workforce and improved delivery of primary health care services.

There was a shift to cost sharing care from government provided in 1980's followed by health services structural and institutional reforms as well as market orientation in 1993. However, this period coincided with strategy reversals resulting in equity mixed implications. Following the macroeconomic setbacks experienced by the country over this period and donor financing reduction, the government was unable to handle the health sector single-handed. Cost sharing was introduced in public health by the government to cope with the mentioned problems. With the support of key stakeholders, the government introduced the system of exemptions and waivers to caution the vulnerable communities and the poor. However, there was least realization of the envisioned goals hence these systems screened with implementation weaknesses (Oketch & Lelegwe, 2016).

In mid-1990's, the Kenya Health Policy Framework Implementation Action Plan was developed, followed by the establishment of the Health Sector Reform Secretariat (HSRS). This was intended to direct the application of policies in the health funding for harmonized implementation and planning. The ministry of health initialized a rationalization program targeted at responding to the funding of public health to improve quality health care access among the vulnerable communities and the poor (Oketch & Lelegwe, 2016). The government of Kenya launched in 2007 the country's development blueprint 'Vision 2030' where the health sector was rendered the county's driving force towards an average income nation and a competitive environment (RoK, 2010). This was

to be executed through the establishment of strong health structure in terms of enhancement of risk pooling health funding systems, strengthening the delivery of health services and provision of the appropriate equipment in the health facilities.

The government abolished the user fees in primary health care facilities and free maternal health care services were introduced in public care facilities in 2013. This program may be pondered a populist strategy intended to improve quality health care access, particularly the vulnerable groups and the poor, its execution was technically unachievable. This was because at that time, the program lacked the necessary operational, legal and technical policies. It is necessary to have a technical contribution to advise the policy initiative otherwise the expected goals may possibly remain unachievable. For example, following the strategy announcement, instances of delays in funds disbursement to counties have been frequent with a few counties choosing for bank overdrafts to meet operating costs (Mtei, Makawia, Ally, Kuwawenaruwa, Meheus & Borghi 2012). As observed previously, a financing system for health services is essential in universal health coverage and if not addressed carefully, will hinder the achievement of universal health coverage. Many health care facilities nationwide have continued to experience incidences of lack of medical facilities and transport, poor equipment maintenance, stock out of medical supplies and drugs (Mtei et al., 2012).

One of the recent efforts towards universal health coverage is the Beyond Zero Tolerance Campaign for breast cancer, children and expectant mothers where various stakeholders have pulled resources to the initiative. While this is a positive step in the achievement of UHC, there is absence of strategies to support the program to ensure its sustainability in the occurrence of change in the political regime, which is certainly likely in a democratic country. It might be essential to learn from countries where such programs have been introduced and executed such as the Obama Care in the United States. The government

of Kenya has recently acknowledged and settled on the National Health Insurance Fund as the endorsed vehicle for successful UHC achievement (NHIF, 2015).

A stable health care system is strongly supported by policies, which are formulated by regulatory bodies in place. In Kenya, health care policies are formulated by the ministry of health which is devolved. In the Kenyan context, the government has formulated several policies aimed at increasing UHC including free maternity program, free registration with the National Health and Insurance Fund (NHIF) for pregnant women and plans to register secondary students under the NHIF program for free. Gitobu, Gichangi and Mwanda (2018) sought to determine how the free maternity policy in Kenya has affected the usage of facilities and health outcomes. The study documented that free maternity programs have reduced mortality rates and thus improving the quality of life at birth among women in Kenya.

In a related study by Mukabana (2016) who assessed the influence of the policy of free maternity in Kenya, it was revealed that this health policy has increased the use of facilities in health centres while at the same time improving the quality of life at birth among pregnant women in Kenya. Thus, it can be inferred that health care policies influence UHC. In an examination of how health care policies influence inequalities in health care and thus UHC, Thomson, Hillier-Brown, Todd, McNamara, Huijits and Bamba (2017) revealed that social economic inequalities in health could significantly reduce when adequate regulations and interventions are in place. This study was an empirical review in nature that was done covering past articles and journals.

In an assessment of how policies influenced the demand of health care services, Gaudette (2014) notes that a surge in costs of seeking health care and long time for queuing to receive medical treatment have increased concern in most countries. The study established that existence of health care policies helped in reducing costs of seeking for

health care and thus increasing the UHC. The study revealed that government put in place health care policies reduces costs of accessing health care services and facilities. Without policies in place, unscrupulous health care health care professionals would exploit people seeking for health care.

Health care policies are tool for distributing resources among people in the country which help in attainment of UHC. This is according to Sow, De-Spiegelaere and Raynault (2018) in a study seeking to find out how income support policies influence inequalities in the health care during birth. The study revealed that having in place sound policies especially those aimed at improving maternal health at birth as early as possible significantly influences UHC. The study further argued that the difference in inequalities between well devolved countries largely explain the discrepancies in health care outcomes in terms of mortality rates and adverse maternal outcomes at birth. While focusing on Indian states, Behera and Dash (2018) sought to find out how macro-economic policies impacted on expenditure on health by the public sector. The study reported that the key avenues of financing health care systems in India were the revenue collected from taxes. The findings showed that policies like increased base of tax would increase the collected revenue which can be used to fund health care services. Thus, strengthening the policy framework, accessibility to health is made possible. Hence, policies influence UHC.

2.3.3 National Health Strategic Planning and Universal Health Care Coverage

Strategic plans are crucial in attainment of any goals and objectives including realization of UHC in Kenya. Through strategic plans, the government is able to set strategic options and priorities to be realized within a stated timeframe. Strategic plans also help in identification of programs that aimed at positively improving the health care outcomes. This is well stated in the Health Sector Strategic Plan (2013-2017) in Kenya.

There are a number of reasons which can help strategic plans to positively influence realization of UHC. First, all stakeholders should be consulted in formulation of health care plans from the initial stage all through to the final step. The formulated plans should be attainable within the stated timeframe. The formulated plans should also be incorporated in the whole framework of strategic management where management will be in position to pay attention to all activities involved in the monitoring and implementation phase.

Health in Kenya is one of the devolved functions unlike in the past where it used to be under the national government unlike other countries. In Nigeria, Akande, Salaudeen and Babatunde (2014) analysed how national health insurance schemes (NHIS) influenced the use of health facilities. The study found that through the NHIS, the rate of use of health care facilities and seeking of health care services has increased. Thus, it can be inferred that national health influences UHC.

Wanjiru (2014) looked at challenges and issues affecting NHIF in attainment of UHC in Kenya. It was established that a number of challenges have adversely affected NHIF in attainment of UHC which include inadequate budgetary allocation from the government, increased levels of poverty and misuse of resources. Of particular concern is the issue of misuse of resource which points out the need for strategic plan. When strategic plans are effectively put in place, resources would be well utilized and thus attainment of UHC would be easier.

The national health strategic plan represents the UHC financing model that is ideal to the government in which every Kenyan is required to make premium contributions to the health insurance scheme. Most of strategy features of the present public insurance, National Hospital Insurance Fund (NHIF), has been retained in the financial scenario which is the chosen UHC government organization (GOK, 2016). The funding by the

Kenyan government plays a corresponding role to the contribution of the premiums. Since the majority of workers in the formal sector are already included in the NHIF medical cover, the future insurance scheme design is targeted at steadily registering and keeping the workers in the informal sector using a mix of approaches including, an expanded benefit package, devolved registration centers and wireless premium payments. Several of these approaches such as wireless premium payments are in place already.

The National Health Insurance Fund (NHIF) is the only public health insurance scheme in Kenya. At commencement, NHIF was intended to provide accessible health insurance for salaried private and public sector employees earning a monthly salary of ksh 1,000 and more (GoK, 2016). Several changes have since taken place in the structure of NHIF to include the informal sector and an outpatient package (Munge, Mulupi, Barasa & Chuma, 2017). In Kenya, the primary health insurance provider is NHIF, which aims at enabling all Kenyans to have access to health services that are affordable and of high quality. A resident of Kenya who has attained 18 years is eligible to be an NHIF member. A graduated scale based on an individual's income is used to calculate the contributions with a majority contributing between Kshs 30 to Kshs 320 per month. A board of directors comprised of representatives from the local government, employers and the civil society governs the NHIF fund.

The hospital network in NHIF is divided into three hospital tiers namely Contract A hospitals, Contract B hospitals and Contract C hospitals. The Contract A hospitals comprise mainly the government hospitals. In these hospitals, the beneficiaries of NHIF have access to a comprehensive cover that has no overall limit on the total benefits received. When the members visit these hospitals, they are treated at no additional payments. In this case the NHIF covers all the diseases as well as the maternity expenses.

The Contract B hospitals comprise of specific non-public health providers that include private hospitals in areas not served sufficiently by the public sector or in the rural areas, mission hospitals and non-profit private hospitals. In these hospitals, the beneficiaries of NHIF have access to a comprehensive cover with an annual limit of Kshs 434,000 per member. Finally, the Contract C hospitals include majority of the expensive private hospitals. In these hospitals, the NHIF beneficiaries only receive refunds. The insurance package includes a comprehensive maternity cover. According to Deloitte (2013), NHIF partners with over six hundred accredited mission, private and government health providers.

The workers in both the informal and formal sectors are required to pay regulated premium amounts but the indigent contributions are paid by the government (Deloitte, 2013). How the indigent will be identified is not clear yet, however, every group in the population is required to be governed by a single national pool with the goal of accomplishing universal population coverage by 2030. The benefit package proposed is very wide and incorporates the basic inpatient and outpatient health care services and including the maternity packages. Outpatient services include health care fee for personnel including surgeon, physicians and drugs, radiological examination, drug administration, laboratory examinations and consultation fees among others. As the number of the covered individuals' increases, the utilization of the outpatient services is anticipated to rise gradually. For the patients using public sector health facilities, there will be no co-payments, however for the patients who decide to use private sector health care services will be required to co-pay between 2% of the costs for low-cost private sector facilities to 90% of the cost for high-end private facilities (Munge et al, 2017).

2.3.4 Sustainable Health Financing and Universal Health Coverage

The financing of healthcare has been one of the biggest obstacles to UHC. For instance, in Kenya currently, the National government spending on healthcare is approximately 6% of the GDP which is low and falls short of the 15% proposed by the Africa Union's 2001 Abuja Declaration (Wamai, 2019; Olalere & Gatome-Munyua, 2020). This coupled with the growing disease burden of both communicable and non-communicable diseases means that substantial investments are needed in the healthcare sector in the country (Kukla et al., 2017). There is a significant healthcare provision gap that cannot be met by the government and its development partners and requires investment from other stakeholders in the private sector as well (Obwoye, 2018). Limitations in implementing an overall healthcare financing strategy have hindered effective planning, budgeting, and provision of health services. The health system has also struggled with stagnant or declining budgets for health, system inefficiencies, persistently poor service quality, and lack of equity (Chuma & Okungu, 2011).

This backdrop has called for innovative funding models that are premised on the trade-off between risk and cost in a quest to deliver quality and affordable healthcare to all. The WHA (2005), for instance, unequivocally called for the health financing mechanisms implementation based on pooling and prepaid systems directed towards achieving universal health care. The World Health Report in 2008 stressed that pooling and prepayment mechanisms are vital instruments in achieving UHC arguing that every country must improve equity and efficiency, minimize the dependence on direct payments to fund health care services and raise sufficient finances to fund health services (Theodorakis, 2013). The pooling of funds for UHC is viewed as a de-risking strategy for healthcare which has been largely characterized by out-of-pocket payments that sometimes prove unreliable in times of crisis.

Health insurance is one of the ways in which healthcare can be financed to improve access to healthcare since the financial risk is spread among the insured, therefore, out-of-pocket payments by patients is avoided (Kimani, Ettarh, Warren & Bellows, 2014). The concept of health insurance has become central to the promotion of UHC, in the belief that financial and risk pooling offers the best guarantee for cost-effective expenditure and protecting the most vulnerable from financial hardship (Wirtz, Hogerzeil, Gray, Bigdeli, de Joncheere, Ewen & Reich, 2017).

The country's health financing system, however, remains highly fragmented and regressive, promoting inequity with poor subsidizing for the rich (Anthonyraj, 2016). Major financial contributions constituting 51% of the total health expenses are borne by the people through out-of-pocket and user fees practices that has negatively impacted the health system (Lakin & Magero, 2012). Kenya's total health expenditure (THE) in fiscal year (FY) 2012/13 accounted for 6.8% of gross domestic product (GDP), up from 5.4% in FY 2009/10. Government health expenditure as a proportion of THE increased from 28.8% to 33.5% in the same timeframe, and the government health budget grew by 31% from FYs 2012/13 to 2014/15. While 4% of the total national government budget in FY 2014/15 was allocated to health, this excludes county allocations. Following the adoption of the 2010 constitution, the Government of Kenya (GOK) has devolved its governance system. This change has resulted in a 57% increase in health budget support at the county level from FYs 2013/14 to 2014/15.

Out-of-pocket expenditures as a proportion of total health expenditure increased from FYs 2009/10 to 2012/13. The World Health Organization estimates these expenditures represent nearly three-quarters of private expenditure on health. In 2007, 11.1% of households experienced catastrophic health spending, up from 10.3% in 2003 (Kimani & Maina, 2015). Despite increased domestic contributions to health, Kenya is still

dependent on donors, with 57% of the FY 2014/15 development health budget estimated to be funded by development partners. Healthcare is provided through a mix of public (49%) and private providers (48%). Different organizations purchase health services through several mechanisms. The Ministry of Health is the main purchaser of health services; others include local governments, the NHIF, community-based health insurance schemes, private health insurance, and employers. Three referral hospitals receive about half of the national government allocation for health. NHIF outpatient benefit payments are made on a capitation basis, based on the number of persons registered at a particular facility, whereas inpatient service benefits are fee-for-service and vary slightly according to the hospital category, diagnosis, and type of care required.

There exist various mechanisms for funding UHC. The main two categories of financing mechanisms for health care are pre-paying funding and out-of-pocket payments. In pre-paying funding, an individual pay towards the health care costs before the need to use the health services arises. When the need to use the health care services arises, the payment funds are used to pay the providers of the health services. In out-of-pocket payments, an individual uses funds directly from their pockets to pay for health care services (Fan & Savedoff, 2014).

In Kenya, there are three types of health insurance. The first is private which mostly caters for the relatively well-off people and it comprises 9.4% of all insured people. The second is community-based health insurance. This is relatively new and is estimated to cover 1.3% of those insured. The third is the public/social insurance scheme called the National Health Insurance Scheme which covers 88.4% of those insured (Government of Kenya [GoK], 2014). National Health Insurance Fund (NHIF) is the main insurance provider. However, health insurance coverage in Kenya is low. One national survey found that only 20% of Kenyans had some form of health insurance (GoK, 2014).

The National Hospital Insurance fund (NHIF) is a mandatory insurance scheme for formal employees and voluntary for informal sector. It is a state corporation established in 1966, required to provide affordable, accessible, quality and sustainable social health insurance to the Kenyan population. The insurance policy was reformed by the revoking the National Hospital Insurance Act (CAP 255) and the passing of the National Hospital Insurance Fund Act No. 9 in 1998 so as to contain the varying health care needs of the varied Kenyan population, employment and the constant reforms in the health sector. It is the responsibility of the NHIF to enroll and register every eligible member from both the informal and the formal sectors (NCLR, 2012).

Therefore, as the largest national insurer, the NHIF is best positioned to deliver UHC in Kenya. As such, the Kenya Government through the Ministry of Health mandated the national hospital insurance fund's (NHIF) to implement universal health coverage in Kenya. The role of NHIF is to provide affordable, accessible, quality and sustainable social health insurance to the Kenyan population. However, despite NHIF being the largest risk pooling system in the country, only 18% of the total populations are covered under the insurance scheme (Wamai, 2009). The insurance covers urban populations, while the poor and disadvantaged comprising around 46.6% of the population are not covered, resulting in appalling health expenses posing an enormous threat on their financial security. However, due to a number of corruption allegations, mismanagement, poor capacity, inefficiency, and weak governance and accountability mechanisms; stakeholders doubted the NHIF's capacity to deliver UHC in Kenya (GOK, 2016).

Community Based Insurance schemes exist for rural population; however, they are too small to cover 75-80% rural population (Mwaura & Pongpanich, 2012; Anthonyraj, 2016). Given that low-income countries' governments limited abilities to mobilize revenues, country and donor attention has turned to informal sector insurance

mechanisms, such as Community Based Health Insurance (CBHI), as a way to improve financial protection, mobilize revenues, and improve the efficiency of out-of-pocket spending (Gida, 2022). Previous studies on CBHI and access to health reveal contradicting results. Some authors argue that CBHI schemes are a potential instrument of protection from the impoverishing effects of health expenditures for low-income populations (Alemayehu et al., 2023; Eze, Ilechukwu & Lawani, 2023), while others argue that the poorest in the community are excluded by CBHI (Habte et al., 2022). Still, other studies say that the risk pool is often too small, that there are problems of adverse selection, the schemes depend heavily on subsidies, there are financial and managerial insufficiencies, and that the overall sustainability of schemes is questionable (Chernet, 2022; Lawal, (2020).

Out-of-pocket payment is the least attractive means of financing health care services. This is because the complete burden of paying for health care services is placed on the person requiring health care services at the time of need. Risk and income cross subsidies are not allowed in the out-of-pocket payment. This method of payment forms a major health care services barrier especially for the less fortunate households. According to the WHO (2013) estimates, in every year the out-of-pocket payment for health care services pushes around one hundred million people below the poverty line. Today, there is a global emphasis on increasing pre-payment financing for health care services, although with particular focus on obligatory pre-payment financing means. When the enrollment to the insurance scheme is voluntary, the world health care report states that the achievement of the universal health coverage would be impossible (Maruthappu, Ologunde & Gunarajasingam, 2013).

This can be attributed to several reasons. Foremost, voluntary health care services insurance scheme are unable to cover health care services for individuals who very poor

to fund the insurance premiums. African countries have high poverty levels and inability to fund the insurance premiums is a major concern. The second reason is that if the prepayment is not compulsory, the healthy and the rich would choose not to make funding contributions for the health services needed by the sick and poor hence strong cross subsidies can only be achieved through compulsory prepayment methods. Finally, voluntary insurance mechanisms are often divided into many small structures including community based and private commercial insurances. This creates sustainability and efficiency setbacks (Adebayo, Uthman, Wiysonge, Stern, Lamont & Ataguba, 2015).

For nations opting to initiate compulsory health care insurance, a crucial decision is whether compulsory health care insurance will attempt to cover everybody or will be limited to formal sector workers only. Around the world, several countries have introduced their mandatory health insurance by covering only the workers in the formal sector, with mandatory health insurance contributions being made by both the employers and the employees (Carrin, 2012). Some African countries have also adopted this approach. There are large numbers of workers in the informal sector in Africa thus the policy makers have a key problem of generating from this group. Therefore, it is important for the policy makers to consider other more equitable and efficient means of generating revenue from the workers in the informal sector that can be used to fund the health care services, such as indirect taxes.

The commitment of the government of Kenya towards funding health care can be shown through the raised allotment of resources to the health sector. However, the ministry of health reports indicates presence of elevated out-of-pocket expenditure, which is a major challenge to health care access as about fifteen percent of Kenyans spend above forty percent of non-food expenses on health care (P4H, 2014). The government share in country's budget show overall underfinancing for services provided in public health care

although some services such as non-communicable diseases are financed by the donors (Bultman, 2014). P4H (2014), observed that could be associated with the coexistence of various coverage structures with the major ones being free maternal services, free health care services at public health facilities, subsidized access to other services at referral facilities, public health insurance as well as NHIF. P4H further states that devolution additionally complicates UHC as counties are expected to fund health care for both secondary and primary health services from their grant allotments.

Sustainable health care financing is an important element laid down in the Health Sector Plan (2013-2017). Sustainable health care financing ensures that all people access health in the country. As countries undergo their health financing transitions, moving away from external and out-of-pocket (OOP) financing toward domestically sourced public financing, the issue of fiscal space – that is, of finding ways to increase public financing in an efficient, equitable, and sustainable manner -- is front and center in the policy dialogue around universal health coverage (UHC). Tandon, Cain, Kurowski and Postolovska (2018), therefore, carried out a study on inntertemporal dynamics of public financing for Universal Health Coverage. Analysis of data from 2000 to 2015 showed per capita public financing for health in low- and middle-income countries increased by 5.0 percent per year on average: up from US\$60 (2.2 percent of GDP) in 2000 to US\$117 (2.8 percent of gross domestic product [GDP]) in 2015. Some of the largest increases were in countries in the Europe and Central Asia (ECA) and East Asia and Pacific (EAP) regions.

At 3.1 percent per year, annual growth in public financing for health was lower among high-income countries, albeit from a much higher baseline in 2000 (Tandon et al., 2018), Increases in on-budget external financing comprised most of the changes among low-income countries, whereas domestic government revenues dominated changes in

composition of public financing among lower- and upper-middle-income countries. Public financing increased at a faster rate than OOP sources for health in most regions except for South Asia. Although there are important country-specific differences, it is notable that more than half of the increase in public financing for health was due to economic growth alone. For the remainder of the increase, aggregate public spending contributed more than reprioritization across low and lower-middle-income countries, whereas the reverse was true in high-income countries.

Effective strategies for financing healthcare are critical in achieving this goal yet remain a challenge in Sub-Saharan Africa (SSA). Drawing on this, Ifeagwu, Yang, JParkes-Ratanshi and Brayne (2021) carried out study on health financing for universal health coverage in Sub-Saharan Africa. The results indicated that a majority of health care revenue in SSA is from direct out-of-pocket payments. Another common financing mechanism was donor funding, which was reported by most of the studies. The average quality score of all studies was 81.6%, indicating a high appraisal score. The interrater reliability Cohen's kappa score, $\kappa=0.43$ ($p = 0.002$), which showed a moderate level of agreement. The study concluded that appropriate health financing strategies that safeguard financial risk protection underpins sustainable health services and the attainment of UHC. It is evident from the review that innovative health financing strategies in SSA are needed. Some limitations of this review include potentially skewed interpretations due to publication bias and a higher frequency of publications included from two countries in SSA. Establishing evidence-based and multi-sectoral strategies tailored to country contexts remains imperative.

In Ghana, the National Health Insurance Scheme (NHIS) was introduced in 2003 to reduce "out-of-pocket" payments for health care. Over a decade of its implementation, issues about the financial sustainability of this pro-poor policy remain a crippling fact

despite its critical role to go towards Universal Health Coverage. Therefore, Aikins et al., (2021) carried out a qualitative study among key stakeholders on positioning the National Health Insurance for financial sustainability and Universal Health Coverage in Ghana. The findings revealed that stakeholders admitted that the NHIS is currently unable to meet its financial obligations. The stakeholders suggested first the adoption of capitation as a provider payment mechanism to minimize the risk of providers' fraud and protection from political interference. Secondly, they indicated that rapid releases of specific statutory deductions and taxes for NHIS providers could reduce delays in claims' reimbursement, which is one of the main challenges, faced by healthcare providers. Aligning the NHIS with the Community-based Health Planning and Services and including preventive and promotive health is necessary to position the Scheme for Universal Health Coverage.

Okungu, Marshal and Janine (2019) aimed to understand whether financing for maternal, child health and immunization services are sustainable, efficient, effective and equitable. Data sources included various national and international reports related to financing maternal and child health services. The results show that funding for maternal and child health (MCH) services are unsustainable over the long term because the main financing source is out-of-pocket (67% of the total for MCH). However, Uganda shows higher efficiency in delivery as it has the lowest average cost per delivery (USD 50) compared to USD 70 (Kenya) and USD 95 (Ghana). Overall, MCH interventions being financed show some levels of effectiveness; e.g. maternal mortality rates dropped from 420/100000 live births in 2010 to 343/100000 live births in 2016; under-5 mortality rates reduced from 151/1000 live births in 2000 to 64/1000 live births in 2016. There were, however, inequities by region, age, education status and wealth index; e.g. 37% in the poorest quintile have unmet family planning needs compared to only 23% in the

wealthiest quintile. In conclusion, the study found that public financing for primary services such as MCH requires reforms to strengthen health sector performance. The reforms should address sustainable financing, efficiency, effectiveness, and equity in service delivery.

However, insufficient funding for the health sector (low budget allocation from the government) coupled with an increase in growth of the population has limited the ability of the government to realize UHC in Kenya. The health care sector has continually been financed by sources from the private sector including the amount raised by households at individual level. The largest population in Kenya (80%) is not currently enrolled in the NHIF program. The private insurers take up about 3% of the population in Kenya. Thus, a lot has to be done by the government for sustainable health care financing which would result into UHC in Kenya. Some of the steps to be taken include partnering with development agencies and partners including the World Bank establish new and innovative ways and channels of financing health care in Kenya. The establishment of NHIF was seen as a means of ensuring the funds are pooled together from development agencies, partners and the government. This was also meant to ensure that funds are availed directly to health care centres so that they can effectively implement their plans (Yu, 2015).

Oketch and Lelegwe (2016) analysed UHC and equity and how they influence accessibility to health care in Kenyan context. The study pointed out issues concerning governance at NHIF that include corruption and collusion at NHIF and facility levels have adversely realization of sustainable health care financing and thus negatively impacting on attainment of UHC. Okungu, Chuma and McIntyre (2017) assessed the financial sustainability of non-contributory and contributory mechanisms of financing in Kenya. The findings showed that both schemes were financially sustainable. The study

pointed out the need for more innovative health care financing strategies. Meessen (2018) analyzed the role those digital strategies played in health care financing for attainment of UHC. The study covered both developing and less developed countries. The focus of the study was on current changes and innovation in digital technologies including mobile health wallets and how they have impacted on financing of health care. It was established that for the strong partnership is required for the country to come up with the best way of financing health care.

2.3.5 Environmental Dynamism and Universal Health Coverage

An important topic in the field of strategic management is the issue of how to match a firm's internal resources and capabilities to the external environment (Andrews, 1971). In this process, environmental dynamism is most important contingent variable. The relevant literature indicates that environmental dynamism, typified by rapid change and a state of crisis, affects the relationship between innovation strategy and dynamic capabilities (Pawar & Eastman, 1997; Shamir & Howell, 1999). In differing degrees, the relationship between the innovation strategy and dynamic capabilities may vary.

Generally, environmental dynamism describes the rate and instability of changes in a firm's external environment (Dess and Beard, 1984). Across industries there are significant differences in terms of the impacts of environmental characteristics on firms. Therefore, as environmental dynamism increases, it will be difficult for all involved parties, such as the top management team, stakeholders, and others, to accurately assess both the present and future state of the environment.

In firms within industries exhibiting greater environmental dynamism, such as rapid changes in technologies, markets, and competition, the top managers must make quick strategic decisions and develop creative and innovative strategies to build a rapid

response capability to cope with the changing external conditions and thereby to survive and/or prosper in the new environment (D'Aveni, 1994; Hitt et al., 1998). An innovation strategy will increase the effectiveness of communication and planning, and will dynamically enhance the ability to respond. As the environment changes more rapidly, a higher level of dynamic capabilities is required to meet customers' needs (Covin & Slevin, 1989). However, when the external environment is stable, customer preferences are relatively fixed and the increased costs of innovation will not be necessary (Moorman and Miner, 1998).

Petrus (2019) describes environmental factors as environmental dynamism and refers to them as the rate of change, unpredictability, volatility, and instability in an environment. The measurement scale for environmental dynamism, comprising four items, was partly adapted from Dess and Beard (1984), and Garg et al. (2003), originally developed by Miller and Dröge (1986) and Miller and Friesen (1982), and partly from Jaworski and Kohli (1993). For each item, the respondents were asked to indicate the frequency of changes in particular areas, such as (1) the product/service features desired by customers; (2) the product/service features supplied by competitors; (3) product technologies in the industry; (4) government policy in the industry on a five-point Likert scale, with anchors ranging from "Very Frequent Change" (= 5) to "No Change" (= 1). Factor analysis of these four items revealed a single factor with loadings exceeding 0.70. This factor had an eigenvalue of 2.657 and explained 66.424 percent of the variance, confirming the unidimensionality of the scale. The reliability of the scale was satisfactory (Cronbach alpha = 0.831). Loadings on this factor ranged from 0.771 to 0.853.

Environmental dynamism is an important moderator in recent studies, e.g. environment dynamism moderated the relationship between emotional capability and firm performance (Akgün et al., 2008), between entrepreneurial orientation and firm

performance (Kreiser and Davis, 2010), between innovation strategy and firm performance (Ting et al., 2012), between product and process innovation and new product success (García-Zamora et al., 2013), between entrepreneurial orientation and resource acquisition (Huang and Wang, 2013), between innovativeness strategy and business performance (Vij & Bedi, 2016), and between green product innovation strategy and firm profitability (Chan et al., 2016). Environmental dynamism influences the effectiveness of CEO transformational and transactional leadership behaviors on organizational innovation (Prasad & Junni, 2016).

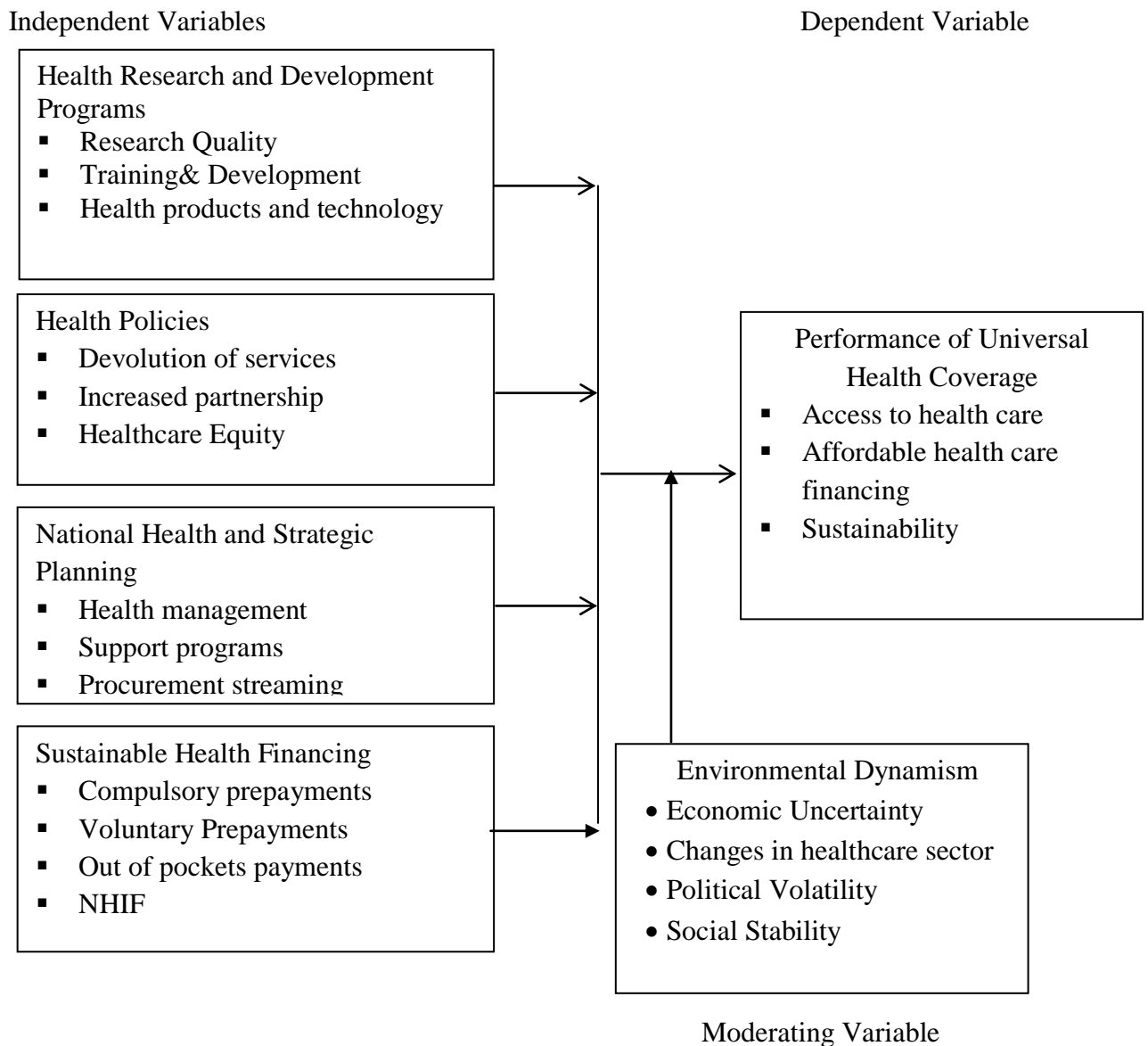
Environmental dynamism in the context of UHC is evident in the implementation of UHC policies. According to a study by Oraro-Lawrence and Wyss (2020), it emerged that while most stakeholders agree on the basic definition of UHC, a diversity of practical interpretation has emerged reflecting the differing perspectives of each country's unique social, political, economic and epidemiological realities (O'Connell, Rasanathan & Chopra, 2014). This plurality of interpretation makes it necessary for governments to steward a participative decision-making process through which a defined approach towards UHC may be developed (Baltussen et al., 2016; Terwindt et al., 2016). In spite of this, many governments have maintained a haphazard approach towards health systems priority-setting, resulting in arbitrary and inconsistent planning decisions (Hauck & Smith, 2015; WHO, 2016). In Kenya, where UHC is mentioned conceptually in the national government's health policy documents and medium-term development agenda, there remains limited articulation of the explicit choices and trade-offs to be considered in steering the country's UHC policy direction (Ministry of Health, Kenya, 2014; Kenya National Treasury, 2018; Ministry of Medical Services, Ministry of Public Health & Sanitation, 2015).

2.4 Conceptual Framework

A conceptual framework is a concise description of the phenomena under study accompanied by a visual depiction of the major variables of the study (Mugenda, 2008). It is a basic structure that consists of certain abstract blocks, which represent the observational, the experimental and the analytical/ synthetically aspects of a process or systems being conceived (Bogdan & Biklen, 2007).

Figure 2

Conceptual Framework



Source: Author (2024)

The conceptual framework in Figure 2 show the expected relationship between the independent variables and the dependent variable. In this study, the independent variables presented in the conceptual framework are related to strategic initiatives and include: Health Research and Development programs, Health policies, National Health and Strategic Plan and Sustainable Health Financing. The dependent variable is Universal Health Coverage (UHC). Each of these independent variables is expected to significantly influence the dependent variable, the Performance of Universal Health Coverage Program. The variable environmental dynamism is also expected to moderate the relationships between the independent variables and the dependent variables individually and jointly.

2.5 Summary of Knowledge and Gaps

Table 1

Knowledge Gaps

Author, year, context	Methodology	Findings	Gaps
Omachonu and Einspruch (2010)	Systematic review of literature	Changes have transformed R&D in the health care sector through enhancement and modification of the systems and processes that are in place	The study, however, did not explicitly link R&D to the development of UHC through empirical findings thus presenting an empirical gap
Akhnif, Macq and Meessen (2019)	Retrospective analysis of the RAMED policy along with a case study design	Study showed some major shortcomings, especially the lack of structure of the learning, and insufficient effort to systemize and sustain a transformation of practices within the health administration	Did not show any strategic R&D initiative by the Moroccan government towards achieving UHC in the country, hence, presenting an action-knowledge conflict gap
Gitobu, Gichangi and Mwanda (2018)	A time series analysis was conducted on health facility delivery services utilization	Cost is a deterrent to health facility delivery service utilization in Kenya and thus free delivery services are an important strategy to promote utilization of health facility delivery services	The study was, however, limited to only free maternal healthcare and not to the entire UHC, thus presenting a knowledge gap
Behera and Dash (2018)	Logitudinal panel data analysis	Policies like increased base of tax would increase the collected revenue which can be used to fund health care services	The study considered increased tax base rather than risk pooling in funding UHC which is trend in the UHC model hence presenting an evidence gap and also a methodological gap owing to panel data analysis

Koduah et al., (2021)	Systematic review of literature and document analysis	Financial sustainability of the National Health Insurance Scheme and delays in reimbursement of claims to facilities that affect the health system's ability to provide timely management of UHC	The study used a document review of health systems, population, and patient barriers to delivery UHC, however, due to the lack of a national database the search may not be exhaustive, therefore, providing empirical gaps. The study was also done in a different country, Ghana, thus presenting contextual gaps
Uguru, Onwujekwe, Uguru, & Ogu, (2021).	A descriptive cross-sectional using mixed methods	Increased awareness and inclusion of oral healthcare in all health insurance schemes with expansion of current oral healthcare benefit package will improve access to care and further improve chances of attaining universal health coverage.	The study was carried out in a different context, Nigeria, hence presenting a contextual gap
Adebola, O. G. (2020).	Cross-sectional design analysed using logistic regression model	Many Nigerians pay Out-of-Pockets (OOP) for healthcare service. Therefore, until due attention is given to these identified micro-level factors as determinants of health insurance, achieving Sustainable Development Goals (SDGs) on UHC by year 2030 becomes a mirage despite huge spending on NHIS by the government.	The study did not consider the effects of risk pooling in UHC financing, thus presenting both empirical and knowledge gap
Derakhshani et al., (2021)	A multi-method study was conducted involving systematic literature review and qualitative design (FGDs and Interviews)	The majority of the identified factors were related to the "regulation and supervision" dimension, whilst the "payment system" entailed the fewest. The political commitment during political turmoil, excessive attention to the treatment, referral system, paying out of pocket(OOP) and protection against high costs, economic growth, sanctions, conflict of interests,	The study did not examine the strategic initiatives used by the Iranian government to support the implementation of UHC thus presenting both an empirical gap and contextual gap

Dzapasi, B. M. (2019).	Qualitative Comparative Analysis (QCA) - more specifically the crisp-set QCA variant (csQCA), a mixed-method approach	<p>weakness of the information system, prioritization of services, health system fragmented, lack of managerial support and lack of standard benefits packages were identified as the leading factors on the way to UHC.</p> <p>Relationships between health financing arrangements and contextual factors that guarantee sources of revenue are key to achieving UHC goals. The results suggest that it is not sufficient for countries to only focus on policies that view the health system in isolation of the broader context of the country. Rather, countries should address the politics that arise due to the complex nature of the health system and its dependence on the context of the country. Fiscal space and a lack of inequality along with the health financing arrangements are integral to achieving health service coverage.</p>	The study used a different methodology from the current study and also did not link strategic initiatives to achievement of UHC ,hence, presenting both methodological, knowledge and contextual gaps
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CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the research method that was used in order to achieve the objectives outlined. Specifically, it describes the research design, population of the study, sampling design, data collection, data analysis techniques that were adopted.

3.2 Research Philosophy

Research philosophy encompasses the foundational principles upon which a researcher builds their study. It serves to enhance the understanding of the research and mitigate potential biases (Sekaran & Bougie, 2019; Saunders, Lewis & Thornhill, 2012). For this study, the positivism research philosophy was chosen because it primarily relied on empirical knowledge derived from objective observation. Positivism emphasizes the use of data collected and interpreted in an unbiased and objective manner. This approach requires the researcher to maintain objectivity throughout the analysis and refrain from letting personal values influence their research findings. The outcomes of positivist research are expected to be quantifiable and observable (Saunders, Lewis & Thornhill, 2012). On the basis of this, the study adopted a positivism philosophy characterized by strict adherence to logical procedures in order to examine opinions and perceptions and come up with proper positions on speculations and also to allow for quantitative analysis for testing of hypothesis. This choice is consistent with previous research conducted by scholars such as Odhiambo (2020), Ochenge (2018), and Njue (2021).

3.3 Research Design

The study adopted the explanatory research design. Explanatory research is a method developed to investigate a phenomenon that has not been studied or explained properly.

Its main intention is to provide details about where to find a small amount of information. Explanatory research generally focuses on the “why” questions. Explanatory research is responsible for finding the *why* of the events by establishing cause-effect relationships. Its results and conclusions constitute the deepest level of knowledge (Arias, 2012). In this sense, explanatory studies can deal with the determination of causes (post-facto research) and effects (experimental research) through hypothesis testing. For instance, in the current study, the Explanatory research was used to find out why the performance of the pilot UHC was very low despite the presence of strategic initiatives and also what impact would highlighting these strategic initiatives have on the scaled performance of UHC at the national level. This research design was appropriate to this study since it enabled the using both qualitative and quantitative techniques to provide an in-depth understanding of the study problem.

3.4 Target Population

The target population in this study comprised the Ministry of Health (MoH), Kenya Medical Supplies Authority (KEMSA), County Health Management Teams (CHMTs), Civil Society Organizations (CSOs), Public Hospitals (County level 2,3,4 & 5), and International Donor Funds (IDFs) in the four counties where the UHC was piloted in Kenya, that is; Kisumu, Isiolo, Nyeri and Machakos counties. The accessible population from these organizations in the four counties comprised of 744 managers drawn from NHIF, MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs who were the key persons who participated in the pilot study. The population was obtained from a sampling frame with the Director of Medical Services office. The study also included a sample of beneficiary residents from the pilot counties. The target population is as shown in Table 2.

Table 2*Population of Key UHC Policy Stakeholders in Kenya*

Organization					Total
	Machakos	Kisumu	Isiolo	Nyeri	Accessible Population
NHIF (the national headquarters)	3	3	3	3	12
Ministry of Health (National)	5	5	5	5	20
Kenya Medical Supplies Authority (KEMSA)	1	1	1	1	4
County Health Management Teams (CHMTs)	29	29	29	29	116
Civil Society Organizations	25	25	25	25	100
Public Hospitals (County level 2,3,4 & 5)	150	170	56	104	480
International Donor Funds	2	5	3	2	12
Total	215	238	122	169	744

Source: Director of Medical Services office (2022)

The unit of observation consisted of the management in the organizations as they are the key decision makers entrusted with the policy interpretation and implementation function. On behalf of the organizations data was collected from the senior managers in the organizations.

3.4.1 Inclusion and Exclusion Criteria for the Study

Inclusion Criteria

- i. Managers or key personnel from the Ministry of Health (MoH), Kenya Medical Supplies Authority (KEMSA), County Health Management Teams (CHMTs), Civil Society Organizations (CSOs), Public Hospitals (County levels 2, 3, 4, and 5), and International Donor Funds (IDFs) involved in the UHC pilot program.

- ii. Individuals listed in the sampling frame provided by the Director of Medical Services office.
- iii. Personnel who were actively involved in implementing, managing, or monitoring the UHC pilot in Kisumu, Isiolo, Nyeri, and Machakos counties.

Exclusion Criteria

- i. Personnel who were not part of the UHC pilot program implementation or decision-making processes.
- ii. Managers or staff from organizations not directly involved in the UHC pilot (e.g., private hospitals, unrelated NGOs).
- iii. Participants who could not provide complete data due to lack of availability or insufficient information.
- iv. Participants who engaged with healthcare services or the pilot program outside the defined study period.

This set of criteria ensured a focused and representative sample of stakeholders and beneficiaries directly involved in or impacted by the UHC pilot program in Kenya.

3.5 Sampling Procedure and Sample Size

Rubin (2006) define sampling as a procedure of selecting members of a research sample from the accessible population, which ensures that conclusions from the study can be generalized to the study population.

3.5.1 Sampling Procedure

Respondents were selected using stratified random sampling. Stratified random sampling is a type of probability sampling using which researchers can divide the entire population into numerous strata. Stratified sampling is a method of sampling from a population which can be partitioned into subpopulations (Shahrokh Esfahani & Dougherty, 2014).

In statistical surveys, when subpopulations within an overall population vary, it could be advantageous to sample each subpopulation independently. This ensured that each organization was represented in the study.

3.5.2 Sample Size

Sample size is a small part of the population to be studied and sampling procedure is the process by which samples are selected in a study (Kothari, 2004). Therefore, since, the total accessible population under consideration in this study is 744 persons, the sample size was computed using the formula proposed by Israel (2009) as follows;

$$n = \frac{N}{1 + N(e^2)}$$

Where:

n = required sample size

N = the given population size

e^2 = the degree of accuracy whose value is 0.05

Substituting these values in the equation gives a sample size (n) of:

$$n = \frac{744}{1 + 744(0.05^2)} = 260.14$$

Therefore, the sample size to be used in the study was 260 respondents. This is a figure greater than 30 and, hence, amenable to most statistical methods of analysis. The sample size was then proportionally allocated across the implementing organizations size using the Neyman allocation formula:

$$n_h = \left(\frac{N_h}{N} \right) n$$

Where, n_h is the sample size for stratum h , n is total sample size, N_h is the population size for stratum h , N is the total population as shown in Table 3.

Table 3*Sampling Distribution of Key UHC Policy Stakeholders in Kenya*

Organization					Sample Size
	Machakos	Kisumu	Isiolo	Nyeri	$n_h = \left(\frac{N_h}{N}\right)n$
NHIF	1	1	1	1	4
Ministry of Health	2	2	2	2	8
Kenya Medical Supplies Authority (KEMSA)	1	1	1	1	4
County Health Management Teams (CHMTs)	10	10	10	11	41
Civil Society Organizations	8	9	9	8	34
Public Hospitals (County level 2,3,4 & 5)	41	42	41	41	165
International Donor Funds	1	1	1	1	4
Total	64	66	65	65	260

3.6 Instrumentation

The study used both primary and secondary data. The instrument for primary data collection was a semi-structured questionnaire which was self-administered to the sampled respondents. The structure of the instrument includes both closed-ended and open-ended questions. The questions revolved around the independent and dependent variables and were administered to relevant respondents in respect to their responsibilities in the health sector. The scope of the questions was ascertaining the respondents' perceived views on the strategic initiatives towards the achievement of universal health coverage, respondents' knowledge on health research and development programs, Health Policies and Plans, National Health and Strategic Plans Monitoring; and Sustainable health financing. Secondary data on the program performance was collected in form of official records on UHC and recorded on a data collection form. The study also used the data collection form for collecting secondary data.

3.6.1 Pilot Study

The questionnaire was pilot tested in two of the counties (Makueni & Nakuru) with 26 selected respondents; 13 in Nakuru and 13 in Makueni respectively and involved the NHIF, Public Hospitals, CSOs and CHMTs. The selected organizations in those counties were not selected for the final data collection and analysis. According to Mugenda and Mugenda (2003) and Nardi (2018), pilot testing may be done on the basis of 10% of the actual sample size for survey studies. Upon the pilot study, analysis was done to ascertain the acceptability of the tool. The results of the pilot study report were useful in detecting weaknesses of the data collection items and doing modification to the tool for the final data collection procedure. The results of the pilot study were not included in the final analysis but were reported on to ascertain the viability of the instruments used for data collection in the study. Further tests on reliability and validity of the instruments were then carried out using the results of the pilot test.

3.6.2 Validity of the Study Instruments

Validity is the accuracy and meaningfulness of inferences which are based on the results (Oso & Onen, 2009). It is a measure of how well a test measures what it is supposed to measure. It is concerned with the accurate representation of the variables under study (Singh & Masuku, 2012). Validity test is important indicator to ascertain consistence of data obtained from the instruments and whether we may rely on such data for this particular study. Validity of the instruments was done along the closed ended and open-ended parts of the questionnaire. The study used face validity, content validity and construct validity to ascertain the validity of the instruments. To confirm face validity, the instruments were evaluated with the researcher's academic supervisors at the university who gave suggestions for modification.

The validity of the instruments was done with the help of one healthcare finance professionals and also fellow PhD students who volunteered during the pilot testing of the instruments. This was done so as to ensure that the constructs and the contents of questionnaires were relevant to the respondents. After explaining to them the constructs used and asking for their rating and inputs, they rated the instrument and also gave suggestions for improvement of the questionnaires. The formula used to determine the validity of the questionnaire based on the assessors' ratings as provided by Lawshe was;

$$CVR = (ne - \frac{N}{2}) / (\frac{N}{2})$$

Where, CVR = content validity ratio

ne = number of SME panelists indicating "essential"

N = total number of SME panelists

This formula yielded values ranging from +1 to -1; positive values mean that at least half of the SMEs viewed the item as important. The mean CVR across products can be used as a measure of the overall material validity test. If more than 50% of panelists rate an item as "important," the greater the degree of its validity. When all panelists accept that the item is "important," the CVR is 1.00 (adjusted to 0.99 for ease of handling under Lawshe [1975]). If none of the raters were to mark the item as "necessary," the CVR would be 0 and the item would have to be deleted.

Table 4*Validity of the Questionnaires (Closed –Ended parts)*

Items	Ne	CVR	Interpretation
Health Research and Development Programs	7	0.75	Retained
Health Policies	7	0.75	Retained
National Health and Strategic Plans	8	0.99	Retained
Sustainable Health Financing Strategy	6	0.5	Retained
Healthcare Service Delivery	8	0.99	Retained
Universal Health Coverage in Kenya	7	0.75	Retained

Ne= Number of experts that evaluated the item essential

N= Number of experts (8 in this case), the items with the CVR bigger than 0.49 remained at the instrument and the rest eliminated

From the results in Table 4, it is evident that no construct fell below the communality value of 0.49 which is the accepted threshold value recommended by Lawshe (1975). This showed that there was good under-stability of the questionnaire constructs and items. Therefore, all the constructs and their items were retained as they were.

The independent assessors were able to identify the size of the segments, density of codes, interpretation of a segment and codes independently. Coding was done to reduce the themes into short summary forms depicting the meaning of the data for ease of analysis (Auriacombe, 2016). Syntactical coding proposed by Sreejesh et al., (2014) was used as it enabled the development of coding units containing words, phrases, sentences or paragraphs which conveyed the meanings being sought in the study. Essentially, the basic categories of responses which were of interest to the study was whether the respondents agreed with a position or disagreed with it and also the intermediate forms of these dispositions. The researcher ensured that the coding was done in categorical way that ensured that there was mutual exclusivity in the categories of responses to avoid

ambiguity in the interpretation of the results. The coding scheme used after being validated by independent raters is given in Table 5.

Table 5
Coding for Content Analysis

Standard	Coder 1	Coder 2	Verdict	Final code
Agreement	Yes all	Agreed	Consistent	Yes
	Yes – but, Yes-	Not always,		Moderate
Intermediate	but moderate	Sometimes	Consistent	
Disagreement	No, We do not	No, We don't	Consistent	No
Uncertainty	Not sure	I'm not sure	Consistent	Not Sure

The results in Table 5 indicates that there was close agreement and consistency within and between the coders and the standard on the emerging responses. The study, therefore, adopted the results of the validity of the content analysis on the basis of these results.

3.6.2 Reliability of the Study Instruments

The researcher used feedback from the pilot study to improve the design of the questionnaire. Reliability is the measure of the consistency of the results from the tests of the instruments. It is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The internal consistency approach was used to determine the reliability of the instruments. The Cronbach's coefficient alpha was applied on the results obtained from the pilot test for the current study done in Makueni and Nakuru Counties to determine how items correlate among them in the same instrument. After the collection of the pilot testing data, both questionnaires were subjected to reliability and validity tests. The reliability tests were done in two phases;

for the structured part of the questionnaires and the open-ended parts of the questionnaires.

The reliability of the questionnaires was measured using the internal consistency method where the Cronbach alpha was calculated while the validity of the questionnaire was tested for the communality value using the Lawshe formula. According to Wallen and Fraenkel (2013), as a rule of thumb, the proposed instrument can only be used if the Cronbach alpha coefficient of 0.70 or higher is obtained on a significant sample, and this rule has been followed for the study instruments. Therefore, the decision rule was to scale and rephrase where Cronbach alpha coefficient was less than 0.70 and accept otherwise. The internal consistency for the structured parts of the questionnaires involved the scaling method using the SPSS and the results are presented as follows. Results of the evaluation of reliability for piloted questionnaires (Closed –Ended parts) are shown in Table 6.

Table 6

Reliability Test Results for Questionnaires (Closed –Ended parts)

Variable	Cronbach's Alpha	No.of Items
Health Research and Development Programs	0.749	9
Health Policies	0.747	9
National Health and Strategic Plans	0.854	9
Sustainable Health Financing Strategy	0.825	9
Healthcare Service Delivery	0.832	13
Universal Health Coverage in Kenya	0.919	13
Overall Coefficient	0.876	62

The results of the test of reliability of the 62 item piloted questionnaires (only the closed ended Likert scale parts) shown in Table 3.6 indicate that the coefficient of Cronbach was higher than 0.7 for the individual constructs and that the overall coefficient of

Cronbach alpha of 0.876 was also than the threshold value of 0.7. An analysis of the scaling effect also showed that the overall change in reliability of the structured parts of the instrument would change over a range of 0.022 points, that is, from 0.863 to 0.885 when any item was removed which represented a less than 5% change in overall reliability and was, therefore, negligible. Therefore, all the items were retained in the instrument as they were. This indicates that the structured part of the questionnaire was reliable for the analysis and, as such, was retained and administered without any further changes.

In this study, the accuracy reliability method was used as it closely corresponded to the standard for assumed truth and was the strongest of all the three forms (Krippendorff, 2004). It was also used as it addresses all possible variations occurring due to inconsistencies within observers and between observers and also deviation from the standard.

3.7 Data Collection Procedures

Prior to embarking on the data collection exercise, proper authorizations and permits to conduct research from relevant bodies including the University, the National Commission for Science and Technology Innovation (NACOSTI) as well as the county governments were sought and obtained. Permission was also requested from the management of the target institutions to allow administration of the questionnaires to the relevant respondents. In order to conveniently access the relatively large sample distributed across the country, three research assistants were recruited to assist in data collection and in other logistical assignments. The research assistants were trained to enhance their competence and minimize as much as possible data collection and data entry errors.

3.8 Data Analysis and Presentation

Data processing and analysis was done based on qualitative and quantitative methods as discussed below;

The qualitative data was analyzed using descriptive methods involving content analysis and coding with the aid of the Nvivo software. According to Wamukuru et al., (2019), content analysis is ideal for the analysis of textual information. This method is preferred for the analysis of text-based information as it enables the systematic and objective identification of special characteristics encoded in messages and decoding the information contained therein (Berg, 2001). This makes it possible to analyze the latent and manifest textual material through classification, tabulation, and evaluation of its key symbols and themes in order to derive their meanings and probable effect on the subject under investigation (Krippendorff, 2004).

NVivo is a qualitative data analysis computer software package produced by QSR International. NVivo helps qualitative researchers to organize, analyze and find insights in unstructured or qualitative data like interviews, open-ended survey responses, journal articles, social media and web content, where deep levels of analysis on small or large volumes of data are required (McNiff, 2016). NVivo helps organize, analyze and visualize mixed media and unstructured information by providing tools for classifying, sorting and arranging data in ways that enable the identification of themes and patterns. Nvivo codes utilize the language and terminology used by the participants rather than alternative methods where codes are researcher-derived (Hilal&Alabri, 2013).

As coding was involved in the analysis of the content, it was also possible to use quantitative techniques to observe the general trends and criticality of the themes. A coding scheme was devised to capture and tabulate these dispositions which were then

subjected to computation to obtain the relevance score. In order to generate conclusions from the coded data it is helpful to compare the identified codes regarding their importance (Vogelsang, Steinhüser & Hoppe, 2013). Therefore, a value is necessary to rank each code in respect to its relevance. To calculate this index a standardized procedure is needed that identifies the importance based on the given coding of raw data. As a measure of relevance, the two components term frequency and inverse document frequency are used (Robertson, 2004; Wu et al., 2008). The first measure covers the frequency of a term by counting its occurrence within the information source. The second measure extends the term frequency by considering not a single information source but all existing sources. Therefore, the inverse document frequency counts the existence of the term in question over all considered information sources (Keller, 2017).

Regarding the code-frequency (f_{ci}) each information source should have the same weighting (relative code-frequency). Therefore, the number of coded text segments for a particular code c in an information source i has to be standardized by the total number of codes mentioned in the information source i . With regard to Namey et al. (2008) the source-frequency is taken into account as a second measure. It represents the number of information sources which mention the particular code c and is calculated with the binary

$$a_{ci} = \begin{cases} 1, & \text{if code } c \text{ is mentioned in source } i \\ 0, & \text{otherwise} \end{cases} \quad \text{variable } a_{ci}$$

The following formula represents the relevance of a code c containing the two factors relative code-frequency and source-frequency, where c' represents the total number of codes mentioned in information source i :

$$CARFI_c = \sum_{i=1}^n \frac{f_{ci}}{\sum_{c'=1}^m f_{c'i}} \sum_{i=1}^n a_{ci}$$

Regarding $CARFI_c$ it is assumed that codes with a high relative code-frequency combined with a high source-frequency matter more and hence have a higher relevance (Namey et al., 2008; Keller, 2017). Therefore, this pre-coded formula in NVivo enabled the calculation of the relevance index in response to the coding in the qualitative data.

Quantitative data was analyzed by use of the Statistical Package for Social Scientists (SPSS). Since the study involves known variables, both independent and dependent, descriptive statistics as well as inferential statistical methods was used to analyze them. Descriptive statistics involved frequencies as percentages as well as the chi square to provide the general trends of the data. Inferential statistical analysis, on the other hand, involved bivariate correlations and multiple regression analysis. Pearson’s Correlation analysis was used to determine the nature of the relationship between variables at a generally accepted conventional significant level of $P \leq 0.05$ (Vaux, 2012). In addition Multiple regression analysis was employed to test the hypotheses. Multiple regression analysis was applied to analyze the relationship between a single dependent variable and several independent variables The beta (β) coefficients for each independent variable were generated from the model in order to test each of the hypotheses under study. A multivariate regression model was used to link both the independent and dependent variables as outlined below.

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots(i)$$

Where:

Y = Universal Health Coverage

α = Constant

X_1 = Health Research and Development Programs

X_2 = Health Policies

X_3 = National Health and Strategic Plan Monitoring

X₄=Sustainable Health Financing

ε = the error term

After the introduction of the moderating variable, equation (i) becomes;

$$Y = \alpha + \beta_1 X_1 M + \beta_2 X_2 M + \beta_3 X_3 M + \beta_4 X_4 M + M + \varepsilon \dots\dots\dots(ii)$$

Where; M = the moderating variable, Environmental Dynamism

β₁, β₂, β₃ and β₄ = Regression coefficients of the independent variables (i.e. for strong health systems, government health policy, NHIF's strategic plan and sustainable health financing respectively).

3.8.1 Assumptions of Regression Model

There are four principal assumptions which justify the use of linear regression models for purposes of inference or prediction this include; Linearity and additivity of the relationship between dependent and independent variables. This is where by the expected value of dependent variable is a straight-line function of each independent variable, holding the others fixed, the slope of that line does not depend on the values of the other variables and the effects of different independent variables on the expected value of the dependent variable are additive (Hughes, 2016). Linearity was tested by means of a P-P plot whereby the plotted points should match the diagonal line and also by means of a Scatter plot whereby the amounts of points scattered above and below the 0-horizontal line should be equal.

The other assumption is the statistical independence of the errors - in particular, no correlation between consecutive errors in the case of time series data (Mugenda & Mugenda, 2013). This was tested using Tolerance statistics and Variable Inflation Factor (VIF). The VIF values for all the predictors should be below 5. According to Rogerson

(2001), VIF values of below 5 indicate no evidence of Multicollinearity. Violation of this assumption could mean that the variables are simply expressions of each other, that is, are not independent and this may distort the findings.

Homoscedasticity assumption or constant variance of the errors versus time (in the case of time series data), versus the predictions and versus any independent variable was the other assumption of the study. The decision rule was to reject the null hypothesis when calculated p-value is greater than α value of 0.05 and fail to reject the null hypothesis if the calculated p-value is less than α value of 0.05. According to Kothari et al., (2011), existence of heteroscedasticity can invalidate statistical tests of significance that assume that the modeling errors are uncorrelated and uniform.

Lastly, normality of the error distribution (Garson, 2012) meant that the residuals in the model should be normally distributed. The decision rule was to reject the null hypothesis if p-value is greater than 0.05 and fail to reject the null hypothesis if the p-value is less than 0.05. Violation of the normality assumption can also affect the statistical integrity of the findings by introducing distortions and bias in the results.

3.9 Ethical Considerations

Ethical issues were strictly observed in during the research period. The main ethical issues that were considered while carrying out the study were confidentiality, privacy, and respondent anonymity (Sieber, 2012). Ethical research respects the rights of the respondents to participate in a study with informed consent. In this study, the researcher first sought all relevant permissions from the concerned authorities before carrying out the study (Oso & Onen, 2009). The researcher also declared any conflict of interests beforehand where applicable to increase the respondents' level of acceptance to participate in the study. An ethical clearance letter was first procured from the

University's ethical clearance committee after which the researcher proceeded to obtain a research permit from the National Commission for Science Technology and Innovation (NACOSTI). The researcher then sought appointment with the respective organization heads where the study was carried out.

The respondents were required to sign a consent letter indicating their voluntary participation in the study. Clear and adequate explanations showing the purpose and the intention of the study were given to the prospective respondents after which they are expected to make their informed decision on whether or not they are interested in participating in the study. The participants in the study were assured of anonymity and confidentiality throughout the research process. Data was handled with utmost care and shall not be inflated or otherwise mishandled to give a true reflection of the subject being investigated in the study. All material derived from various used and to be included later in the study was duly acknowledged cited and referenced using the APA format.

I commit to ethically disposing of the research data after fulfilling its purpose. I will retain the data only as long as necessary, typically 3–5 years, to meet research objectives or comply with legal requirements. Annually, I will review stored data and promptly dispose of those past their retention period. Digital data will be permanently erased using secure deletion software, while physical records will be shredded or professionally destroyed. I will ensure all data is anonymized during retention to protect participants' identities. Throughout the process, I will adhere to institutional guidelines, relevant laws, and ethical board requirements, documenting the disposal methods and maintaining transparency. Disposal plans are shared with participants in the consent process, so they understand our commitment to their privacy. I will oversee the entire process to ensure compliance and accountability. By following this structured approach, I will respect participant confidentiality while meeting both ethical and legal standards.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSIONS

4.1 Introduction

This chapter presents results arising from the analysis of data collected using questionnaires. The data collected was analysed using descriptive and inferential statistical methods where the findings are presented in tables and figures, and their implications discussed.

4.2 Response Rate

The researcher administered 260 questionnaires to all the sampled respondents for this study. Out of these, a total of 187 questionnaires were returned correctly filled and usable for the study. A summary of the instrument response is given in Table 7.

Table 7

Instrument Response Rate

Instruments Issued	Instruments Retrieved	
	Completed	Response Rate (%)
260	187	72%

The overall response rate to the questionnaires was 72%. The response rate was high and was, therefore, acceptable for the study. According to Maxfield and Babbie (2014), a response rate of 50% is acceptable for studies of this kind while instrument response rates of 80% and above are considered as very good.

4.3 Demographic Characteristics

This section presents the descriptive statistics that were used to establish the fundamental features of the data upon which quantitative analysis was iterated. There was a need to first establish the demographic characteristics of the respondents considered as categorical variables which gave some basic insight about the respondents.

Table 8*Demographic Characteristics of the Respondents*

Variable	Category	Frequency	Percentage(%)
Gender	Male	116	62
	Female	71	38
Age in Years	19 – 28	19	10
	29 – 38	43	23
	39 - 48	69	37
	Above 48	56	30
Level of Education	College Diploma	21	11
	Bachelors Degree	77	41
	Masters Degree	67	36
	Doctorate	22	12
Years worked in current position	Less than 1 yr	17	9
	1 - 5 yrs	47	25
	5 - 10 yrs	60	32
	10 - 15 yrs	37	20
	Above 15 yrs	26	14

The findings in Table 8 indicate that the majority (62%) of the respondents were male although the high proportion of females (38%) in the health sector management indicated that the sector had achieved the constitutional requirement of at least 30% of its leadership should be from either gender. The results further indicate that the majority (37%) of the respondents were aged between 39 and 48 years, age particularly above 45years has been found to be an important top management team characteristic that has an impact on strategy implementation (Okungu, 2017). Concerning the level of education, the results indicate that most (41%) of the respondents had bachelor's degrees as their highest academic qualifications although almost half (48%) had postgraduate qualifications cumulatively. Most (32%) of the respondents had also worked in the organizations in their current (managerial) positions for between 5 and 10 years.

These findings imply that the majority of the respondents had a reasonable level of education and relevant work experience and could, therefore, be relied upon to give dependable information for the study. This vital information enhanced the validity of the current study. Rogelberg and Stanton (2007) explained that work experience plays a significant role in how organizations head and managers make decisions. Further, Abere and Muturi (2015) explained that for a reliable study to be conducted, the respondents' background characteristics, such as age, gender, educational qualifications, and work experience needed to be established to ascertain that one sampled from a reliable population that is likely to give valid answers for the study. The finding on the gender distribution indicates that a third of the respondents were female while the rest were male indicating the likelihood of obtaining balanced findings. The findings on age response imply that most managers were above 39 years of age and hence had experienced different healthcare regimes in the country. This research benefited greatly because all the organizations that were visited had reasonable numbers of well-experienced managers who had considerable knowledge of health systems and service delivery in the country.

4.4 Descriptive Statistics

This section provides the results of the descriptive statistical analysis which was used to provide the general trend of the responses from the respondents and provide a basis for inferential statistics.

4.4.1 Descriptive Statistics for Research and Development

This objective was measured based on; research quality, training and development, and health products & technology. The responses were assessed through a 5-point Likert

scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A =Agree, SA =Strongly Agree. The results are summarized in Table 9.

Table 9

Research & Development Programs

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
There is strengthened public support for and trust in health and medical research	21 (11)	32 (17)	74 (40)	48 (26)	12 (6)	2.99	0.624
There is improved quality in the health research process	15 (8)	27 (14)	27 (14)	79 (42)	39 (21)	3.53	0.661
We facilitate technical assistance to support the strengthening of national systems for health research	12(6)	41(22)	24(13)	88(47)	22(12)	3.36	0.618
There is high compliance with the research recommendations	22(12)	12(6)	22(12)	85(46)	46(25)	3.65	1.25
We endeavor to undertake training and development with the technological changes	14(7)	35(19)	45(24)	61(33)	32(17)	3.33	1.049
Periodic and continual refresher training for UHC has been adopted	23(12)	27(14)	37(20)	72(39)	28(15)	3.29	0.797
We apply greater technological Integration of Medical Systems	12(6)	55(29)	25(13)	60(32)	35(19)	3.27	0.886
We have the potential for medical Work-Flow Process Reengineering	3(2)	19(10)	87(47)	75(41)	3(2)	3.3	2.31
We have computerized healthcare information technology	14(8)	14(8)	23(12)	84(45)	52(28)	3.78	0.768
Aggregate						3.389	0.996

The findings in Table 9 indicates that most of the respondents (40%) were uncertain about whether there was strengthened public support for and trust in health and medical

research. However, 42% agreed while 21% strongly agreed that there is improved quality in the health research process. Majority of the respondents 47% who agreed and 12% who strongly agreed indicated that their organizations facilitate technical assistance to support the strengthening of national systems for health research. There is an indication that there is high compliance with the research recommendations in the organizations as indicated by 46% who agreed and 25% who strongly agreed. Most healthcare organizations endeavor to undertake training and development with the technological changes as indicated by most respondents of who 33% agreed and 17% strongly agreed. Most of the healthcare organizations have adopted periodic and continual refresher training for UHC in their systems as indicated by 39% who agreed and 15% who strongly agreed. Hence, it is evident that the organizations were keen on developing their local capacity to carry out R&D on health systems probably as a way of sustaining continuity of research in their operations and increasing their adaptability to the changes in the operating environment.

The findings also show that most respondents agreed (33%) while 19% strongly agreed that greater technological Integration of Medical Systems was also being applied by the organizations. However, there was uncertainty by most respondents (47%) on whether their organizations had the potential for medical workflow process reengineering. However, the majority of the organizations had computerized healthcare information technology as indicated by most of the respondents who agreed (45%) and those who strongly agreed (41%). Increasing technology dependence on healthcare management systems for R&D and operations management is evident from the findings. The results indicating that there is improved quality in the health research process and also there is high compliance with the research recommendations in the organizations imply that the

healthcare organizations supporting UHC were increasingly depending on research to improve their operations.

The Aggregate Mean value of 3.39 indicates a moderate to positive response to the various statements related to health and medical research, technology integration, and support for UHC. The mean values range from 2.99 to 3.78, showing varying levels of agreement with the specific aspects of health research and development initiatives. The overall standard deviation is 0.996, which suggests moderate variation in the responses. The standard deviations for individual statements range from 0.618 to 2.31, indicating varying levels of consensus or disagreement across different areas. Some statements, like "There is high compliance with the research recommendations" (SD = 1.25) and "We have the potential for medical work-flow process reengineering" (SD = 2.31), show higher variation, meaning there's less agreement among respondents on these topics.

In general; Strengthened public support and trust in health research shows a more moderate agreement (mean of 2.99) with a relatively low standard deviation (0.624), indicating a balanced perception; Improved quality of health research received a higher mean (3.53) and lower deviation (0.661), suggesting greater consensus that the quality of research has improved; Statements relating to technical assistance, training and development, and integration of technology show varied responses but generally positive, with means above 3 (ranging from 3.27 to 3.78). The potential for medical work-flow process reengineering shows the highest variation (SD = 2.31), implying a wider difference in opinions. Overall, while the data indicates general support for initiatives related to research, technology, and UHC, there is significant variation on specific topics, particularly in the areas of compliance with recommendations and process reengineering, which may require further exploration to understand the causes of differing views.

The findings are, therefore, consistent with Baral and Dieleman (2015) who observed that research and development has become a crucial tool for change in organizations today driven largely by the need for innovation. The findings also concur with Kuruvilla et al., (2006) who found that research and development help in shaping and changing the values and beliefs of people hence the success of the attainment of universal health care. The findings further corroborate those of Mickan and Wenke (2016) who established that R&D plays an important role in an organization by sharpening the research skills of healthcare professionals. Different communities have different values and beliefs that would act as a barrier to attainment of UHC. Research and development help in reconciling these values, beliefs, and practices held by community members.

The findings showing most healthcare organizations endeavor to undertake training and development with the technological changes agree with a GoK (2012) report which found that continued training of competent health workforce and improved delivery of primary healthcare services consistent with the policies resulted in the improvement of health indicators such as life expectancy and infant mortality. The findings are also in agreement with Štaras et al., (2013) who found that technology helps in reducing paperwork, and facilitates the storage of huge volumes of information of patients while at the same time reducing the time taken to retrieve the information of the patients from the database. Technology is applied in almost all aspects of operations in an organization. The rapid change and advancement in technology has changed the way healthcare operations are conducted (Beresniak et al., 2015).

The findings that show that greater technological integration of medical systems was also being applied by the organizations is consistent with the view that it is increasingly being recognized that R&D is strongly supported by technological capabilities. Technology also acts as a catalyst of R&D in the health care sector which helps in the performance of

UHC. Gupta (2008) in a similar study linking technology as a driver of R&D strategy for attainment of UHC also identified key areas that ICT would likely on the health care sector noting that technology is a key driver of offshore healthcare services through outsourcing.

4.4.2 Descriptive Statistics for Health Policies

This objective was measured based on; Devolution of services, Increased partnerships, and Strategic initiatives. The responses were assessed through a 5-point Likert scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree. The results are summarized in Table 10.

Table 10*Health Policies*

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
The policies aimed at the regulation of the health sector to achieve Universal Health Coverage are adequate	15(8)	51(27)	66(35)	29(16)	26(14)	3	0.676
Devolution of health services has increased the number of actors in UHC	17(9)	41(22)	15(8)	83(44)	31(17)	3.37	0.683
Devolution of health services will improve the implementation of UHC policies	20(11)	33(18)	50(27)	64(34)	20(11)	3.17	0.704
We have enhanced ability to collaborate with other healthcare organizations as a result of the policies	18(10)	86(46)	30(16)	35(19)	18(10)	2.73	0.955
Policies on UHC have enabled us to strengthen partnerships with other financing organizations	6(3)	45(24)	43(23)	78(42)	15(8)	3.27	0.774
There are transparent and inclusive processes in the national health policies, strategy, and plan that set a clear direction for the health sector	31(17)	44(23)	14(7)	65(35)	33(18)	3.13	0.737
Strategic initiatives are in place to ensure that health authorities take responsibility for steering the entire health sector towards the performance of UHC	26(14)	48(26)	31(17)	50(27)	32(17)	3.07	0.781
There is deployment of support systems enabling work environments for health workers in order to achieve UHC	4(2)	68(36)	25(13)	76(41)	14(8)	3.15	0.997
There is a strategic framework to enhance multi-sectoral involvement in UHC	14(7)	20(11)	18(10)	92(49)	43(23)	3.7	0.756
Aggregate						3.177	0.785

Table 10 shows that there was uncertainty on whether the policies aimed at the regulation of the health sector to achieve Universal Health Coverage are adequate as

indicated by most respondents (35%) who were neutral regarding the statement and 37% who disagreed or strongly disagreed (8%). However, with 44% of the respondents agreeing and 17% strongly agreeing, it was evident that the majority of the respondents thought that the devolution of health services has increased the number of actors in UHC. Most (43%) agreed while 11% strongly agreed that devolution of health services will improve the implementation of UHC policies. However, most respondents disagreed (46%) while 10% strongly disagreed that their organizations have enhanced ability to collaborate with other healthcare organizations as a result of the policies. The respondents were evenly split on whether policies on UHC have enabled them to strengthen partnerships with other financing organizations as indicated by 50% who either agreed or strongly agreed on one hand and 50% who were either neutral or disagreed with the statement.

Most of the respondents, however agreed (35%) while 18% strongly agreed that there were transparent and inclusive processes in the national health policies, strategy, and plan that set a clear direction for the health sector. There are indications that strategic initiatives had been put in place to ensure that health authorities take responsibility for steering the entire health sector towards the performance of UHC as indicated by most of the respondents who agreed (27%) and strongly agreed (17%). Further, with 41% agreeing and 8% strongly agreeing, it was evident that most of the respondents indicated that their organizations had deployed support systems for enabling work environments for health workers to achieve UHC. In addition, the findings show that there existed a strategic framework to enhance multi-sectorial involvement in UHC as indicated by the majority of the respondents 49% of who agreed and 23% strongly agreeing with the statement.

The aggregate scores (mean = 3.177; SD = 0.785) suggest that while Kenya's UHC policies have established a foundational framework, challenges persist in implementation, stakeholder engagement, and policy adequacy. This suggests that, on average, there is cautious optimism about the adequacy and implementation of these policies, but with room for improvement. The standard deviation of 0.785 indicates moderate variability in responses. This suggests that opinions among respondents are not entirely uniform but are not highly dispersed either. Different stakeholders likely perceive the policies based on their specific experiences and contexts, such as resource availability or administrative efficacy.

The results imply that there was still uncertainty on the policies meant to regulate UHC disagreeing with Sow et al., (2018) whose study on how income support policies influence inequalities in healthcare revealed that having in place sound policies especially those aimed at improving maternal health at birth as early as possible significantly influences UHC. The finding on the uncertainty on policies on collaborations could traced to policy documents like the National Health Strategic Plans which have emphasized the need for collaboration. However, the collaboration called for is mostly vertical between the National Government and County governments, inter-county, intersectoral, multidisciplinary, and cross-functional. Horizontal collaboration and partnerships have not been clearly outlined in the policy documents (Masaba et al., 2020). Thomson et al., (2017) revealed that socioeconomic inequalities in health could be significantly reduced when adequate regulations and interventions are in place. Overall, the findings imply that there was uncertainty on whether health policy strategy had a considerable effect on the performance of Universal Health Coverage in Kenya. Therefore, policymakers should focus on: Enhancing the clarity, inclusivity, and transparency of health policies; Addressing variability in perceptions by ensuring

equitable resource distribution and tailored support, and; Strengthening collaboration among devolved governments, healthcare organizations, and financiers to solidify partnerships and trust.

4.4.3 Descriptive Statistics for National Health and Strategic Plans

This objective was measured through; Health management, Support programs, and Procurement streaming. The responses were assessed through a 5-point Likert scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A =Agree, SA =Strongly Agree. The results are summarized in Table 11.

Table 11*National Health and Strategic Plans*

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
We are working with the national health strategic plan to ensure the improved health status of individuals, families, and communities	7(4)	18(10)	30(16)	101(54)	31(17)	3.7	0.982
Through the national health strategic plan, the government is committed to defending its citizens against what threatens their health	29(15)	36(19)	45(24)	45(24)	32(17)	3.99	0.668
Through the UHC, the government is effectively protecting its citizens against the financial consequences of ill-health	0	7(4)	58(31)	87(46)	35(19)	3.8	0.782
The government is committed to providing equitable access to people-centered care	12(6)	42(22)	35(19)	75(40)	23(12)	3.89	0.706
The government is committed to ensuring good governance and leadership in the country's healthcare sector	33(18)	40(21)	60(32)	41(22)	13(7)	3.82	0.8
We have set priorities for determining an appropriate framework to implement the initiative programs	9(5)	14(7)	44(23)	100(53)	20(11)	3.78	0.698
We are establishing sustainable processes for implementing the initiative programs	20(11)	30(16)	32(17)	80(43)	25(13)	4.06	0.951
We are establishing an appropriate framework to implement the initiative programs	18(10)	62(33)	22(12)	71(38)	14(8)	4.18	0.803
We do regular evaluations of strategic plans because of the alignment of systematic processes and activities as well as the observance of documentation principles.	3(2)	67(36)	26(14)	80(43)	11(6)	4.05	0.937
Aggregate						3.919	0.814

Table 11 shows that 54% of the respondents agreed while 17% strongly agreed with the statement that their organizations were working with the national health strategic plan to ensure improved health status of individuals, families, and communities. The implication is that the majority of the organizations were conversant with the national health strategic plan and were working alongside it for the benefit of the community. Most respondents felt that through the national health strategic plan, the government was committed to defending its citizens against what threatens their health as indicated by 24% who agreed and 17% who strongly agreed. The majority of the respondents, however, thought that through the UHC, the government was effectively protecting its citizens against the financial consequences of ill-health as indicated by 46% of the respondents who agreed and 19% who strongly agreed.

The findings also imply that the government was committed to providing equitable access to people-centered care as indicated by most of the respondents, 40% who agreed and 12% who strongly agreed. However, 32% of the respondents were neutral while cumulatively 36% either disagreed or strongly disagreed that the government was committed to ensuring good governance and leadership in the country's healthcare sector. This implies that there was uncertainty about the commitment of the government to ensure improved governance in the health sector.

Further, 53% agreed while 11% strongly agreed implying that the majority of the organizations have set priorities for determining an appropriate framework to implement the initiative programs. In addition, most of the organizations were establishing sustainable processes for implementing the initiative programs as indicated by 43% of the respondents who agreed and 13% who strongly agreed. Among these processes was establishing appropriate frameworks to implement the initiative programs as indicated by most of the respondents, 38% who agreed and 8% strongly agreed. The findings also

show that the organizations carried out regular evaluations of their strategic plans because of the alignment of systematic processes and activities as well as observance of documentation principles as indicated by 43% of the respondents who agreed and 6% who strongly agreed.

The overall average score across all statements is 3.919, suggesting general agreement. The aggregate standard deviation is 0.814, showing moderate variability in responses across all statements. Overall, the data suggests a positive perception of the health initiatives, with the highest levels of agreement related to establishing sustainable processes and frameworks. The variability in responses is moderate, indicating some differences in opinion, particularly regarding specific commitments and governance aspects. The findings imply that majority of the organizations were conversant with the national health strategic plans and were working alongside it for the benefit of the community. Therefore, national health and strategic plans were seen as effective in the performance of Universal Health Coverage in Kenya.

According to Akande et al., (2014), there are several reasons which can help strategic plans to positively influence the realization of UHC. Among these is that all stakeholders should be consulted in the formulation of health care plans from the initial stage all through to the final step. The formulated plans should be attainable within the stated timeframe. Further, the finding indicating most agreed that the government was committed to providing equitable access to people-centered care shows it is on track with its commitment to healthcare equitability consistent with the SDGs. In June 2012, the UN Conference on Sustainable Development emphasized UHC's role in enhancing not just health but also social cohesion, economic growth, and development. It called for action on the social and environmental determinants of health and pledged to strengthen health systems towards the provision of equitable universal coverage (Fried *et al.*, 2013).

4.4.4 Descriptive Statistics for Sustainable Health Financing

This objective was measured based on; Compulsory prepayments, Voluntary Prepayments, Out-of-pocket payments and NHIF. The responses were assessed through a 5-point Likert scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA =Strongly Agree. The results are summarized in Table 12.

Table 12

Sustainable Health Financing

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
The government is efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all.	28(15)	74(40)	12(6)	51(27)	22(12)	3.7	0.982
The government is strengthening and aligning PFM systems that determine how budgets are formulated, allocated, and executed with health financing functions and health system objectives	0	46(25)	41(22)	79(42)	21(11)	3.99	0.668
Efficient and sustainable financial policies have been put in place by the government to enhance universal health coverage	14(7)	76(41)	33(18)	50(27)	14(7)	3.8	0.782
Strategies have been put in place to raise revenues that can sustainably finance universal health coverage in Kenya	44(23)	50(27)	18(10)	40(21)	35(19)	3.89	0.706
Spending targets have been put in place for the health sector to ensure sustainable financing	0	6(3)	43(23)	93(50)	45(24)	3.82	0.8
Health coverage schemes have increased access to health services for all citizens	32(17)	77(41)	11(6)	56(30)	12(6)	3.78	0.698
Health coverage schemes assure availability of quality health services among insured individuals in the country	4(2)	25(13)	68(36)	73(39)	17(9)	4.06	0.951
Monthly premium improves personal health-seeking behavior	9(5)	48(26)	44(23)	67(36)	19(10)	4.05	0.937
Aggregate						3.886	0.816

Table 12 shows that 40% of the respondents disagreed while 15% strongly disagreed implying that the government was not efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all. However, there were indications that the government is strengthening and aligning PFM systems that determine how budgets are formulated, allocated, and executed with health financing functions and health system objectives as indicated by most of the respondents, 42% of who agreed and 11% who strongly agreed. Further, most respondents 47% disagreed while 7% strongly disagreed that efficient and sustainable financial policies have been put in place by the government to enhance universal health coverage.

There are also indications that not enough strategies have been put in place to raise revenues that can sustainably finance universal health coverage in Kenya as indicated by most of the respondents, 27% of who disagreed with the statement and 23% strongly agreed. However, spending targets have been put in place for the health sector to ensure sustainable financing as implied by most respondents, 50% of who agreed and 24% who strongly agreed. Further, 41% of the respondents disagreed while 17% strongly disagreed with the view that health coverage schemes have increased access to health services for all citizens. The respondents, however, indicated that for the insured individuals in the country, health coverage schemes assure the availability of quality health services as indicated by 39% who agreed and 9% who strongly agreed. The findings also show that monthly premium improves personal health-seeking behavior among the citizens as indicated by most respondents, 36% who agreed and 10% who strongly agreed. The findings showed that the government was not efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all.

The results show a predominantly positive outlook on government policies related to health financing, with the "health coverage schemes" statements receiving the most

favorable responses. While there is strong agreement on most policies, the responses show moderate variability, reflecting mixed opinions on the efficiency and sustainability of certain initiatives (e.g., financial policies and revenue strategies). The aggregate mean (3.886) suggests that while respondents lean positively toward these policies, there remains some division on the effectiveness and implementation of specific aspects. The relatively moderate standard deviation of 0.816 suggests that while the overall response is positive, there is noticeable variability in opinions. They suggest that while respondents lean positively toward these policies, there remains some division on the effectiveness and implementation of specific aspects. This variation could indicate that while some policy areas are widely accepted, others might still be controversial or unclear to certain groups.

The findings, therefore, agreed with Oketch and Lelegwe (2016) whose analysis of UHC and equity and how they influence accessibility to health care in the Kenyan context pointed out issues concerning governance at NHIF that include corruption and collusion at NHIF and facility levels have adversely realization of sustainable health care financing and thus negatively impacting on attainment of UHC. Despite NHIF being the largest risk pooling system in the country, only 18% of the total population is covered under the insurance scheme (Wamai, 2009). The insurance covers the urban population, while the poor and disadvantaged comprising around 46.6% of the population are not covered, resulting in appalling health expenses posing an enormous threat to their financial security. However, due to several corruption allegations, mismanagement, poor capacity, inefficiency, and weak governance and accountability mechanisms; stakeholders doubted the NHIF's capacity to deliver UHC in Kenya (GOK, 2016). From the findings, it is evident that there was a need for sustainable financing mechanisms to achieve universal health coverage in the country.

The findings also imply that not enough strategies have been put in place to raise revenues that can sustainably finance universal health coverage in Kenya. The issue of having the right funding mix has been a challenge even to health systems rated as the most efficient. For instance, Lim's (2017) study in Singapore revealed that despite the expansion of funding and services, the government remains committed to the longstanding principles of fiscal prudence and not drawing from past reserves. Drawing down of national reserves can only be done during exceptional circumstances and requires specific approval from the president. However, the sustainability of Singapore's health system is under pressure from changing demographics, disease trends, and growing demands from citizens for greater equity and expanded healthcare services. In the face of these challenges, the Singaporean government has responded by introducing three major costly policy reforms stratified across three segments of its population.

This has, however, not been the case in Ghana where a study by Owusu-Sekyere and Bagah (2014) first observed that Ghana has adopted a National Health Insurance Scheme (NHIS) to provide financial access and universal coverage for health care, which is key in promoting, preventive, curative and rehabilitative health interventions for all at an affordable cost. The study, however, revealed that the sustainability of the scheme is threatened by lack of funds which has resulted in indebtedness to service providers. Out-of-pocket payment has been re-introduced by service providers and in some cases, NHIS card holders who are unable to make upfront payments are rejected at health facilities.

It was also evident that while health coverage schemes have not necessarily increased access to health services for all citizens. For the insured individuals in the country, health coverage schemes assure the availability of quality health services. According to Barasa et al, (2018) whose study on NHIF reforms and its implications and Lessons for Universal Health Coverage, Health Systems & Reform, showed that since 2010, there

has been an expansion of the coverage to include various segments of the society. However, though NHIF reforms in Kenya are well-intentioned and there has been improvement in several areas, design attributes could compromise the extent to which they achieve their intended goal of providing universal financing risk protection to the Kenyan population. Kyomugisha et al., (2009) in Uganda, however, found that there were challenges with equity in the provision of healthcare. Citizens without cover were treated better in hospital than members; some members pay premiums continuously without falling sick and schemes refused to cover illnesses like diabetes and hypertension. Fairness was related to the very little payment for the services received, members paying less than non-members but both getting the same treatment, and no patient discrimination based on gender, age, or social status.

4.4.5 Descriptive Statistics for Environmental Dynamism

This objective was measured on the basis of; Uncertainties, Rate of Change, Volatility and Instability in the implementation environment. The responses were assessed through a 5-point Likert scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree. The results are summarized in Table 13.

Table 13*Environmental Dynamism*

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
A number of changing healthcare market dynamics made the delivery of UHC uncertain for us	16(9)	15 (8)	39(21)	76(41)	41(22)	3.59	0.707
A lot of unforeseen changes were being witnessed in the healthcare sector that affected the UHC's performance.	15(8)	13(7)	29(15)	79(42)	51(27)	3.74	0.678
We had some issues of volatility of the political climate that affected the delivery of UHC.	21(11)	31(17)	37(20)	55(29)	43(23)	3.36	0.718
We have had a stable health policy environment for our organization to support the delivery of UHC.	42(23)	74(40)	33(18)	24(13)	14(8)	2.43	0.784
We encountered financial challenges that affected the performance of UHC	15(8)	25(13)	31(17)	47(25)	69(37)	3.7	0.91
We encountered social challenges that affected the performance the performance of UHC	19(10)	20(11)	22(12)	71(38)	55(29)	3.66	0.824
Aggregate						3.413	0.770

There are strong indications that the changing healthcare market dynamics had made delivery of UHC uncertain by most of the respondents in Table 14 who agreed (41%) and 22% who strongly agreed. There were also strong indications that a lot of unforeseen changes were being witnessed in the healthcare sector that affected the UHC's performance as indicated by most respondents who agreed (42%) and those who strongly agreed (15%). Respondents indicated that their organization had experienced some issues of volatility of the political climate that affected the delivery of UHC as shown by most respondents who agreed (29%) and those who strongly agreed (23%). Most respondents disagreed (40%) while strongly disagreed 23% that their organization had experienced a

stable health policy environment for supporting the delivery of UHC. Further, respondents strongly agreed (37%) while others agreed (25%) that their organization had encountered financial challenges that affected the performance of UHC. Respondents also strongly agreed (29%) while others agreed (38%) that encountered social challenges that affected the performance the performance of UHC.

The aggregate mean of 3.41 and standard deviation of 0.770 reflect that the implementation of UHC in Kenya is influenced by environmental dynamism, but the extent and nature of this impact vary across different sectors and levels of stakeholders. These findings highlight that while there is general recognition of external challenges, the degree of agreement on their severity is not uniform, pointing to differing experiences and perceptions based on local contexts (political, economic, social) and institutional roles. Further, the aggregate mean of 3.41 suggests that the implementation of UHC in Kenya is moderately impacted by external environmental changes.

This includes factors such as: Healthcare market shifts (e.g., changes in demand, technology, or private sector involvement); Political instability (e.g., fluctuations in government priorities or political unrest); Economic and financial challenges (e.g., funding gaps or resource shortages); Social challenges (e.g., public health crises, population health disparities). In the context of Kenya, these factors are highly relevant, as the country is undergoing significant reforms in the healthcare sector while also dealing with various social, political, and economic challenges. The data suggests that the dynamic nature of the environment creates uncertainty and makes it difficult to implement and sustain UHC policies effectively. In practice, policymakers and healthcare providers must consider these environmental dynamics carefully and develop adaptive strategies to navigate uncertainties, stabilize funding sources, and ensure that healthcare delivery remains resilient in the face of change.

There were strong indications that the volatility of the political climate affects the delivery of UHC. This agrees with Amos et al., (2021) who found that while solutions to Africa's political and macroeconomic instability are important, they lie beyond the scope of this commentary. According to Ara, Zehravi, Maqbool and Gani (2022), UHC reforms are an inherently political process, and public health advocates will need to do more to promote not only the health benefits of public health interventions but also the economic and political benefits too. It was also evident that at a stable Policy environment is important for the delivery of UHC. This finding supports those of Shiferaw and Zolfo (2012) that an enabling policy environment, multi sectorial involvement of stakeholders and effective human resource management and capacity building are essential requirements for the success of UHC.

The findings that showed that there were strong indications that economic instability negatively affects the performance of UHC. This corroborates the findings of Ranabhat et al., (2019) which showed that the economy would be sustainable after the guarantee of health service to all people. Poor enrollment and drop out in health insurance would significantly affect universal health coverage (Nsiah-Boateng et al., 2019). Likewise, increasing government health expenditures would contribute to quality health service and also coverage (Jakovljevic & Getzen, 2016; Dieleman et al., 2018). Out-of-pocket expenditure increase catastrophic health expenditure and directly push into poverty (Aregbeshola & Khan, 2018). Poor people need more health service, but they are not able to pay. On the other hand, there is wide variation in the cost of health care by different health care facilities and people cannot decide receive health care where health care facilities are affordable, accessible, and provide quality health service (Arora, Moriates & Shah, 2015).

The findings also showed that social stability is important for the performance of UHC as indicated by most respondents. This concurs with Baum, Bégin, Houweling and Taylor (2009) who found that entrenched poor health and health inequity are important public health problems. Solutions to such problems conventionally originate from the health care sector, a conception reinforced by the dominant biomedical imagination of health. By contrast, attention to the social determinants of health has recently been given new force in the fight against health inequity. The health care sector is a vital determinant of health in itself and a key resource in improving health in an equitable manner. Actors in the health care sector must recognize and reverse the sector's propensity to generate health inequity. The sector must also strengthen its role in working with other sectors of government to act collectively on the deep-rooted causes of poor and inequitable health.

4.4.6 Adoption of Universal Health Coverage in Kenya

This was the dependent variable and was measured on the basis of; access to healthcare, affordable health care financing and sufficient health staff capacity. The responses were assessed through a 5-point Likert scale ranging from SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree. The results are summarized in Table 14.

Table 14*Adoption of Universal Health Coverage in Kenya*

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	S.Dev
There is an availability of essential medicines and technologies to diagnose and treat medical problems.	61(33)	42(22)	30(16)	20(11)	34(18)	2.59	0.963
There is access to quality health services.	31(17)	50(27)	64(34)	23(12)	19(10)	2.73	0.901
We strive to offer affordable quality health services.	35(19)	36(19)	16(9)	77(41)	23(12)	3.09	0.877
We have being striving to offer quality health services that are accessible to all patients for all levels of income.	17(9)	48(26)	11(6)	79(42)	32(17)	3.33	1.123
We have been effective in our endeavor to provide every beneficiary with public health services	31(17)	62(33)	48(26)	30(16)	16(9)	2.67	0.839
We have achieved great success in protecting all people from impoverishment due to illness.	20(11)	67(36)	35(19)	43(23)	22(12)	2.89	0.914
We have being operating on the principles of equity and sustainability.	5(3)	56(30)	9(5)	84(45)	33(18)	3.45	0.868
We have achieved a people-centered health system that meets priority health needs for all at affordable rates.	8(4)	58(31)	27(14)	81(43)	13(7)	3.18	1.081
We have being able to raise revenues to expand and sustain the health coverage.	22(12)	85(46)	22(12)	46(25)	12(6)	2.68	0.851
We have maintained well-trained, motivated health workers to meet patients' needs.	26(14)	43(23)	18(10)	82(44)	18(10)	3.12	0.678
We have been able to maintain better quality equipment and health facilities.	21(11)	31(17)	37(20)	55(29)	43(23)	3.36	0.951
There is better facility infrastructure as compared to be before the UHC.	18(10)	35(19)	30(16)	86(46)	18(10)	3.27	0.803
We are managing an effective pooling and redistribution of resources to ensure sustainable equity and financial protection.	33(18)	40(21)	13(7)	41(22)	60(32)	3.29	0.937
Aggregate						3.05	0.902

From the results in Table 14, there are strong indications that essential medicines and technologies to diagnose and treat medical problems were largely unavailable as shown by most respondents who strongly disagreed (33) and those who disagreed (22%). Respondents were also uncertain on whether there was access to quality health services (34%). However, most organizations indicated that they were striving to provide affordable quality health services as indicated by 41% of respondents who agreed and 12% who strongly agreed. Further, most respondents indicated that their organizations have been striving to offer quality health services that are accessible to all patients for all levels of income as indicated by 42% of respondents who agreed and 17% who strongly agreed.

Most respondents disagreed (33%) while 17% strongly disagreed that they have been effective in our endeavor to provide every beneficiary with public health services. Further, the respondents disagreed (36%) and also strongly disagreed (11%) that they have achieved great success in protecting all people from impoverishment due to illness. These were indications that that the current capitations were not adequate to support the wide coverage of UHC and also provide quality healthcare services at the same time. However, the respondents agreed (45%) that their organizations have been operating on the principles of equity and sustainability. Half of the organizations had also achieved a people-centered health system that meets priority health needs for all at affordable rates as indicated by 43% respondents who agreed and 7% who strongly agreed. However, most organizations had not been able to raise revenues to expand and sustain the health coverage as indicated by 45% of the respondents who disagreed and 12% who strongly disagreed.

There were indications that most healthcare facilities had maintained well-trained, motivated health workers to meet patients' needs as indicated by 44% of the respondents who agreed and 10% who strongly agreed. Most healthcare facilities had also been able to maintain better quality equipment and health facilities as indicated by 29% of respondents who agreed and 23% who strongly agreed. However, there were indications that the healthcare facilities infrastructure had improved as compared to be before the UHC as shown by 46% of the respondents who agreed and 10% who strongly agreed. Other findings indicate that the healthcare organizations were trying to manage effective pooling and redistribution of resources to ensure sustainable equity and financial protection as indicated by 33% of respondents who strongly agreed and 22% who agreed. Overall, the findings indicate that Universal Health Coverage had only been achieved in the country. This means that there was need for more strategic inputs to help realize the performance of the UHC agenda.

The relatively low aggregate mean (3.05) and the moderate standard deviation (0.902) suggest that Kenya's adoption of UHC has had mixed success. While the mean is positive, it is not closer to the higher end of the scale (4 or 5), suggesting that while the objectives of UHC are somewhat recognized, the outcomes are inconsistent. The system might be functioning in some areas (e.g., equity and sustainability) but still struggles in others (e.g., availability of essential medicines and access to quality services). The system is perceived as making progress but faces significant hurdles. Public perception varies, reflecting both areas of success and ongoing challenges. While the overall sentiment is positive, the variability indicates that certain populations or regions may not be experiencing the same level of improvement. Further, the variation might reflect disparities in healthcare access between different regions or income groups in Kenya. For example, rural areas might experience different outcomes than urban centers, or low-

income individuals may face more barriers to accessing health services, which could contribute to this variation in responses. The findings suggest that the government and policymakers should focus on addressing the areas with greater disparities, particularly in ensuring consistent access to quality healthcare, reducing gaps in availability of essential medicines, and improving affordability across all income levels.

The results implied that health financing as a key policy instrument for the government of Kenya was still inadequate, however, it has helped to reduce health inequalities. The finding agrees with Barasa, Nguhi and Di McIntyre (2019) who revealed that the Universal Health Coverage index for Kenya was 52% in 2014. In the same context, Barasa et al., (2019) noted that even though there was improvement in coverage between 2003 and 2014, inequalities in both service coverage and financial risk protection persisted with 6 out of 10 Kenyans not having access to essential healthcare services in 2014. However, the incidence of catastrophic health spending had declined from about 13 percent in 2013 to 8 percent in 2018 only to be exacerbated by the emergence of the Covid-19 pandemic. In 2020, the pandemic alone pushed an additional 2 million people into poverty (World Bank, 2021). Unexpected health expenditures through OOP payments are expected to cause additional suffering among the new poor and the near poor.

Inequities in service delivery have also been reported in other studies. For example, Barasa et al., (2018) observed that whereas the NHIF pays an annual capitation rate of 2,850 KES for members of its CSS, it pays the same facility an annual capitation rate of 1,200 KES for outpatient care for the general population. Similarly, whereas the NHIF reimburses the full cost of delivery for the civil servants based on a fee-for-service payment mechanism, it pays the same facility 10,000 KES per delivery for members in the national scheme using a case-based payment system. Mbau et al., (2018a) also noted

that these multiple provider payment mechanisms and payment rates may generate conflicting and unwanted incentives for providers.²⁰ there is evidence that these incoherent provider payment mechanisms have resulted in preferential treatment of civil servants at the expense of non-civil servants. This includes practices like sending non-civil servant NHIF members to purchase medicines from private pharmacies outside the hospital using out-of-pocket payments, while providing medicines to civil servants within the hospital because of the perception that the capitation rate for non-civil servants was inadequate (Mbau et al., 2018b).

It was also notable that most respondents agreed that there was improved equity in access to healthcare services for chronic conditions. However, coverage of diagnostic services was not adequate as indicated by most of the respondents. According to the NHIF website (www.nhif.or.ke), however, benefits include a range of both inpatient and outpatient services, such as general consultations, diagnostics, and medications. NHIF also covers some specialty services for chronic conditions, such as renal dialysis. The findings that most healthcare service providers do not get adequate allocation per patient per day to cover for the management of most conditions agrees with Obadha et al., (2018) who found that capitation and fee for service payments from NHIF and private insurers were disbursed late and the capitation payment rates were perceived as inadequate. The expected fees for service payment amounts from NHIF and private insurers were predictable while capitation funds from NHIF were not because providers did not have information on the number of enrollees in their capitation pool. Capitation and fee for service payments from the NHIF and private insurers were reported as good revenue sources as they contributed to providers' overall income. Moreover, public providers had lost their autonomy to access and utilize capitation and fee for service payments from the NHIF.

4.5 Correlation Analysis

In this subsection, a summary of Pearson's product moment correlation analyses is presented. It seeks to first determine the degree of interdependence of the independent variables and also show the degree and strength of their association with the dependent variable separately. These results are summarized in Table 15.

Table 15

Correlation of Strategic Initiatives on Universal Health Care in Kenya

		Research & Development	Health Policies	Health Strategic Plan	Health Financing	Environmental Dynamism	Universal Health Cover
Research & Development	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	187					
Health Policies	Pearson Correlation	.495**	1				
	Sig. (2-tailed)	0.000					
	N	187	187				
Health Strategic Plan	Pearson Correlation	.445**	.428*	1			
	Sig. (2-tailed)	0.000	0.000				
	N	187	187	187			
Health Financing	Pearson Correlation	.298**	.464*	.420**	1		
	Sig. (2-tailed)	0.000	0.000	0.000			
	N	187	187	187	187		
Environmental Dynamism	Pearson Correlation	-0.028	-	-0.093	0.069	1	
	Sig. (2-tailed)	0.703	0.468	0.208	0.351		
	N	187	187	187	187	187	
Universal Health Cover	Pearson Correlation	.374**	.480*	.358**	.280**	-0.145	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.048	
	N	187	187	187	187	187	187

** Correlation is significant at the 0.01 level (2-tailed).

The first correlation was carried out to establish the relationship between research and development programs strategy and Universal Health Coverage in Kenya. The correlation analysis in Table 16 shows that the relationship is significant ($r = 0.374$; $p = 0.000 \leq 0.05$). This implies that as things were currently, the research and development component was instrumental on the performance of universal health coverage in Kenya. This finding supports those of Mickan and Wenke (2016) who established that R&D plays an important role in an organization by sharpening the research skills of health care professionals.

A correlation was also carried out to determine the relationship of health policies strategy with Universal Health Coverage in Kenya. Table 16 indicates that the correlation was significant and positive ($r = 0.480$; $p = 0.000 \leq 0.05$). This indicates that the health policies were enabling the strategies in the implementation of UHC. This meant that strengthening health policies will lead to better performance of UHC. The strong policy showing evident in the correlations is indicative of the current efforts by low- and middle-income countries (LMICs) of which Kenya is part to increasingly adopt universal health coverage (UHC) as their health policy priority (Sachs, 2012).

The study also sought to establish whether the National Health and Strategic Plan Monitoring had a significant relationship with Universal Health Coverage in Kenya. Table 16 shows that the relationship was not significant ($r = 0.358$; $p = 0.000 \leq 0.05$). This implies that the National Health and Strategic Plan Monitoring had a moderate but significant impact on the performance of Universal Health Coverage probably owing to the status of implementation. This finding agrees with Esfahani, Mosadeghrad and Akbarisari (2018) whose study on the success of strategic planning in health care organizations of Iran found that strategic planning was positively related to organizational performance including employees' and patients' satisfaction and

organizational productivity. However, strategic planning was moderately successful in enhancing organizational performance of Iranian health care organizations. Strategic planning has been shown to have significant effect in the implementation of health programs (Thomas, 2021).

The relationship between sustainable health financing strategy and Universal Health Coverage in Kenya was also examined. The results in Table 16 indicate that the relationship was significant and moderate ($r = 0.280$; $p = 0.000 \leq 0.05$). This implies that creating sustainable financial mechanisms of healthcare were instrumental to the performance of UHC. This finding agrees with Kutzin, (2013) that a sustainable health financing system is fundamental to establish UHC in the developing countries. The establishment of a good health system is fundamental to ensure a sustainable UHC. The investment on health to ensure the sustainability, particularly health voucher programs to increase the demand for maternal and neonatal health services has reduced mortality in the developing countries (Chowdhury et al., 2011; Zaman et al., 2017).

Finally, a correlation was carried out to determine whether environmental dynamism had a significant relationship with universal health coverage in Kenya. Table 16 indicates that the relationship between the two variables is significant ($r = -0.145$; $p = 0.048 \leq 0.05$). This shows that the current state of environmental dynamism was adversely affecting the performance of UHC probably owing to the fragmented policy approaches. This agrees with Oraro-Lawrence and Wyss (2020) who observed discordance between policy networks on the range of healthcare services to be provided to the Kenyan population as part of the country's UHC efforts. There was lack of clarity on the role of different players in providing access to the Kenyan essential benefit package.

4.6 Diagnostic Tests

Greene (2012) explains that regression can only be accurately estimated if the basic assumptions of multiple linear regressions are observed. In this regard testing of linearity, multicollinearity, homogeneity of variance, and normality assumption tests were important. The results of these tests are discussed as follows.

4.6.1 Linearity Tests

Linearity was tested by means of a P-P plot whereby the plotted points should match the diagonal line and also by means of a Scatter plot whereby the amounts of points scattered above and below the 0-horizontal line should be equal (Montgomery, Peck & Vining, 2012). The closeness of fit of the plotted points with the diagonal line in Figure 1 (Appendix VI) and also the amounts of points scattered above and below the 0-horizontal line of the Scatter plot being equal indicates that the linearity assumption in the measurement of healthcare research & development variable in the regression model is valid. The closeness of fit of the plotted points with the diagonal line in Figure 2 (Appendix VI) and also the amounts of points scattered above and below the 0-horizontal line of the Scatter plot being equal shows that the linearity assumption in the measurement of health policies variable in the regression model is valid.

The closeness of fit of the plotted points with the diagonal line in Figure 3 (Appendix VI) and also the amounts of points scattered above and below the 0-horizontal line of the Scatter plot being equal shows that the linearity assumption in the measurement of National Health Strategic Plan variable in the regression model is valid. The closeness of fit of the plotted points with the diagonal line in Figure 4 (Appendix VI) and also the amounts of points scattered above and below the 0-horizontal line of the Scatter plot being equal indicates that the linearity assumption in the measurement of sustainable

health financing variable in the regression model is valid. The closeness of fit of the plotted points with the diagonal line in Figure 5 (Appendix VI) and also the amounts of points scattered above and below the 0-horizontal line of the Scatter plot being equal shows that the linearity assumption in the measurement of Health Service Delivery variable in the regression model is valid. These results are an indication of a linear relationship between each individual independent variable and the dependent variable as recommended by Field (2009). Therefore, the linear regression is suitable and can be estimated in this study hence the proposed model can accurately be estimated.

4.6.2 Multicollinearity Tests

Multicollinearity assumption test is instrumental in determining whether multicollinearity would affect the results in a regression analysis involving all the variables (Field, 2009). In this study the tolerance and variance inflation factors (VIF) determined were used to test for multicollinearity as shown in Table 16.

Table 16

Results for the Multicollinearity Assumption Tests

Variable	Sig.	Collinearity Statistics	
		Tolerance	VIF
Research & Development	0.318	0.749	1.335
Health Policies	0.712	0.695	1.439
National Health Strategic Plan	0.579	0.587	1.704
Sustainable Health Financing	0.163	0.685	1.460
Environmental Dynamism	0.067	0.721	1.388

The results in Table 18 show that the VIF for Research & Development = 0.749, Health Policies = 0.695, National Health Strategic Plan = 0.587, Sustainable Health Financing = 0.685 and Environmental Dynamism = 0.721 are all respectively less than 10 and with tolerance values greater than 0.1. This effectively rules out the possibility of

multicollinearity affecting the entire regression model (Field, 2009). Therefore, the results imply that there was the occurrence of multicollinearity which was effectively controlled among the variables and, hence, could have negligible or virtually no effect on the performance of the variables in the model.

4.6.3 Homoscedasticity Tests

The homoscedasticity assumption means that the variance around the regression line is the same for all values of the predictor variable (Jupiter, 2017). The Levene's test was used to test this assumption. It uses an *F*-test to test the null hypothesis that the variance is equal across groups. A *p* value less than .05 indicates a violation of the assumption (Modugno & Giannerini, 2015). The results are presented in Table 17.

Table 17

Test for the Homoscedasticity Assumption

Variable	Levene			Sig.	t	Conclusion
	Statistic	df1	df2			
Research & Development	2.421	2	9	0.125	-3.332	P > 0.05, equal variance
Health Policies	0.118	2	9	0.732	-3.174	P > 0.05, equal variance
National Health Strategic Plan	1.52	2	9	0.222	-2.86	P > 0.05, equal variance
Sustainable Health Financing	3.581	2	9	0.063	-0.321	P > 0.05, equal variance
Environmental Dynamism	0.374	2	9	0.543	-0.993	P > 0.05, equal variance

Table 17 shows that the Levene statistic for Research & Development is 2.421, $p = 0.125 > 0.05$, for Health Policies is 0.118, $p = 0.732 > .05$, for National Health Strategic Plan is 1.52, $p = 0.222 > .05$, for Sustainable Health Financing 3.581, $p = 0.063 > .05$ and for

Environmental Dynamism is 0.374, $p = 0.543 > .05$. Given that the probability associated with the Levene statistics for all these variables are greater than the level of significance, $p > .05$. Warner (2008) indicates that the probability for these Levene statistics meets the threshold for the homogeneity assumption. Hence the homoscedasticity assumption was satisfied and the proposed regression models for this study were suitable for analysis.

4.6.4 Normality Tests

The study tested the normality of the variables using the P-P plots as shown in the following figures; Linearity/Normality Tests Plots

Figure 3

Normal PP plot of Research and Development Programs on UHC Performance

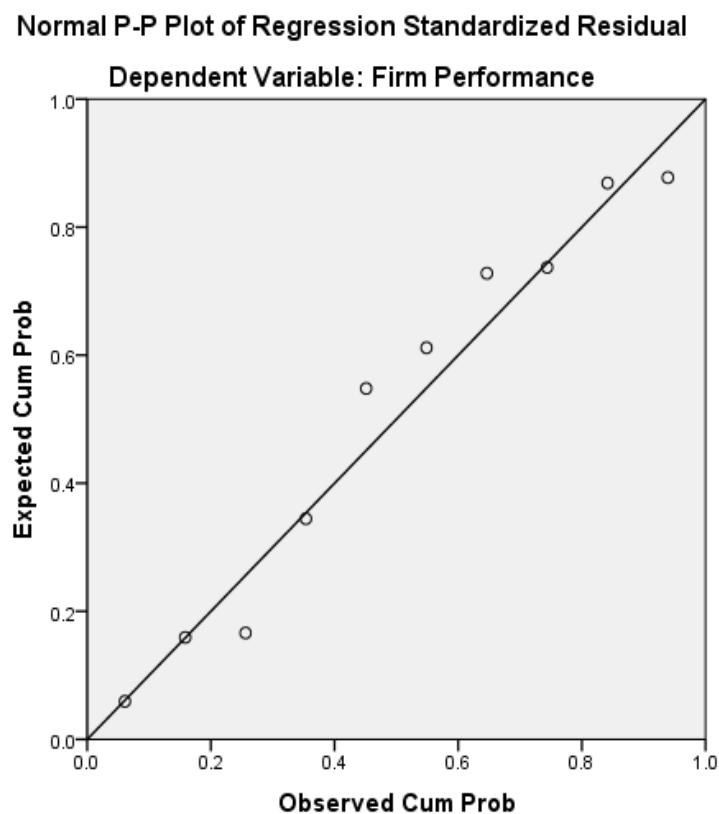


Figure 4

Normal PP plot of Health Policies Strategy on UHC Performance

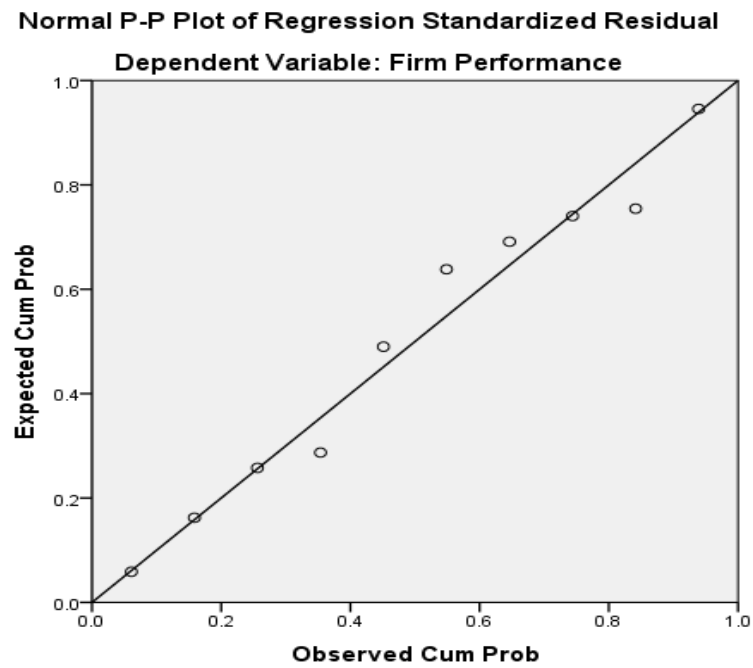


Figure 5

Normal PP plot of National Health and Strategic Plans on UHC Performance

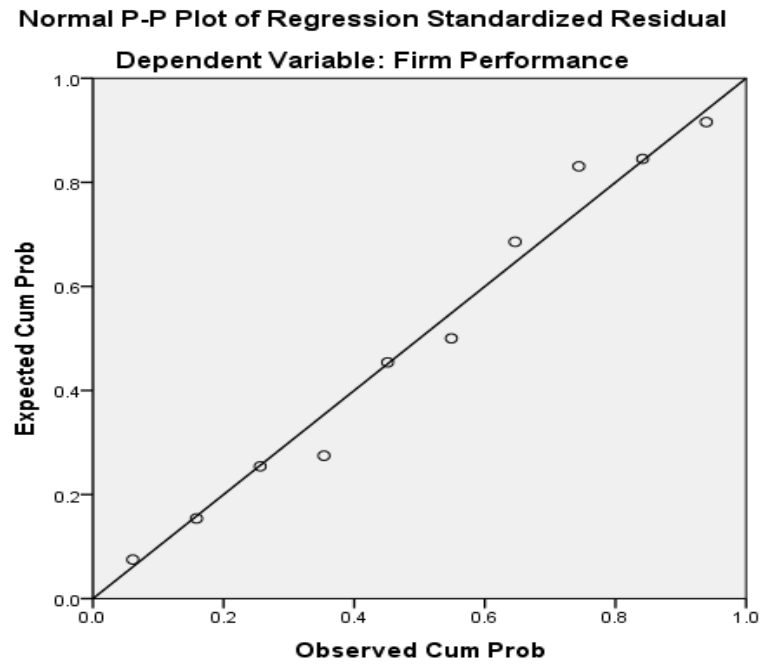
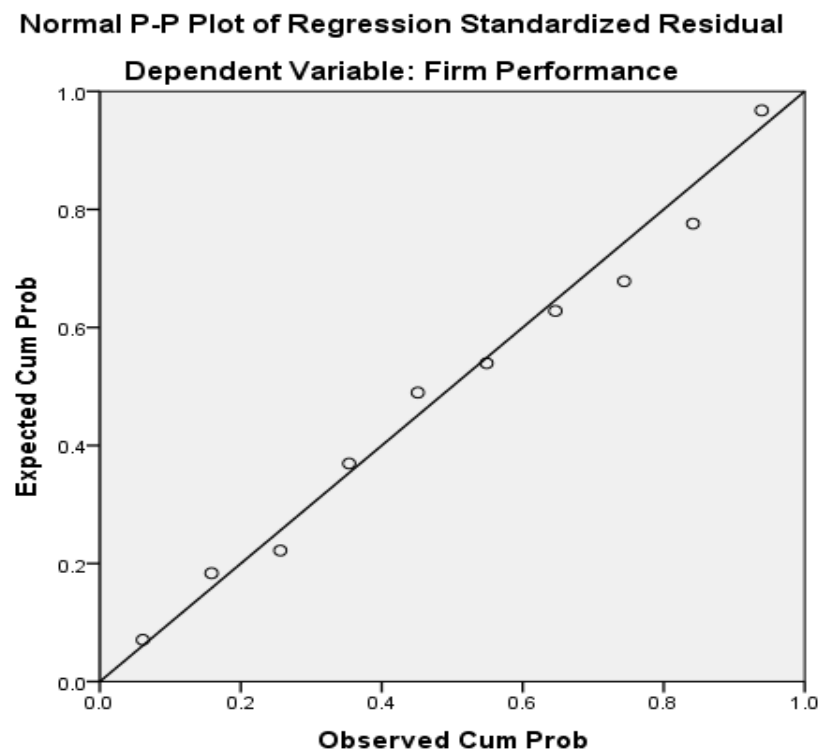


Figure 6

Normal PP plot of Sustainable Health Financing on UHC Performance



After omitting the outliers, 3 cases were omitted, for multiple regression the valid ratio of cases to independent variable is 6 to 1, therefore, the 184 valid cases, with 5 independent variables gives a ratio of 36.8 to 1 which satisfies the minimum requirement of the preferred ratio of 15 to 1 (Field, 2009). The test results of normality test are presented as shown in Table 20.

Table 18*Test for the Normality Assumption*

Variable	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Distribution
Research & Development	-0.358	0.181	-0.297	0.322	Normal
Health Policies	-0.566	0.178	0.933	0.354	Normal
Health Strategic Plan	-0.798	0.172	0.939	0.331	Normal
Health Financing	-0.509	0.168	0.673	0.345	Normal
Environmental Dynamism	-0.494	0.175	-0.155	0.355	Normal
Universal Health Cover	-0.715	0.179	0.148	0.366	Normal

Table 20 shows that the variables were normally distributed with skewness and kurtosis values ranging between -1.0 and +1.0 and their parameters within the limits ± 1.96 indicating that the departure from normality was not too extreme. This was acceptable according to Pallant (2013) and Field (2013) who explained that parametric values greater than ± 1.96 for small samples implies that the distribution of the data was not normal. Thus, on the basis of the respective skewness and kurtosis values in Table 19, it can be deduced that all the variables of interest to the study were normally distributed and, therefore, we could proceed to further analyse the regression model. Further, to establish the effect of strategic initiatives towards the performance of universal health coverage in Kenya, the independent variables; research and development programs strategy, health policies strategy, National Health and Strategic Plans, sustainable health financing strategy and Environmental Dynamism were fitted in the multiple regression equation 3.1.

4.7 Regression Analysis

Multivariate regression analysis was used to determine the multiple regression model hypothesized in chapter three. It was also used to determine how the independent

variables influenced the dependent variable collectively. The analysis was also meant to establish the extent to which each independent variable affected the dependent variable in such a collective set up and which were the more significant factors. However, first, it was important to establish the validity of the regression model through carrying out model assumption tests. The results are presented in section 4.3.2.1 to 4.3.2.4.

4.7.1 Regression Analysis without the Moderator

The results of the multivariate regression analysis before moderation are given in the model summary in Table 20.

Table 20

Model Summary before Moderation

R	R Square	Adjusted R Square	Std. Error of the Estimate
.678a	0.460	0.433	3.67286

a Predictors: (Constant), Health Financing, Research & Development, Health Policies, Health Strategic Plan

The multivariate linear regression analysis in Table 21 shows that the relationship between the dependent variable and all the independent variables pooled together was significant with a value obtained for R, which was the model correlation coefficient = 0.678 being higher than any zero order value in the table. This indicated that the model could improve when more variables were incorporated when trying to examine the influence of strategic initiatives towards the performance of universal health coverage in Kenya. The results in Table 21 further shows that the model could explain up to 43.3% (Adjusted $R^2 = 0.433$) of the variations in the performance of Universal Health coverage in Kenya resulting from the strategic initiatives by the key stakeholders.

To find out whether the model without the moderating variable was fitting to explain the variations in the dependent variable, the F-Test was used. The F-test of overall

significance indicates whether linear regression model provides a better fit to the data than a model that contains no independent variables. Patterson (2000) states that the appropriateness of the multiple regression model as a whole can be tested using F test. The results of the ANOVA performed on the independent and dependent variables are summarized in Table 21.

Table 21

Model 1 ANOVA before Moderation

	Sum of		Mean		
	Squares	df	Square	F	Sig.
Regression	941.045	4	235.261	17.44	.000b
Residual	2428.177	180	13.49		
Total	3369.222	184			

a. Dependent Variable: UHC Performance

b. Predictors: (Constant), Health Financing, Research & Development, Health Policies, Health Strategic Plan

The results of Table 22 indicate that there was a significant difference between means of strategic initiatives towards and performance of universal health coverage in Kenya. ($F_o = 17.44 > F_c = 2.34$; $\alpha < 0.05$; $df = 4, 180$; $p \leq 0.05$). This finding confirms the finding indicated by Table 20 that indeed the model was significant and can be used to make further inferences. In order to determine which of the strategic initiatives towards was more important in the performance of universal health coverage in Kenya, the beta value was used. The results are given in Table 21 which also provides a summary of the multiple linear regression analysis coefficients.

Table 22*Model 1 Regression Coefficients before Moderation*

	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	6.985	2.729		2.560	0.003
Research & Development	0.037	0.086	0.031	0.430	0.669
Health Policies	0.125	0.060	0.122	2.076	0.038
Health Strategic Plan	0.380	0.090	0.334	4.232	0.000
Health Financing	0.323	0.089	0.267	3.651	0.000

a. Dependent Variable: UHC Performance

It can be deduced from the findings in Table 22 that the most influential the strategic initiatives when it came to the performance of universal health coverage in Kenya was National Health Strategic Plan ($r = 0.334$; $p = 0.000 \leq 0.05$) followed by Sustainable Health Financing ($r = 0.267$; $p = 0.031 \leq 0.05$) and Health Policies ($r = 0.122$; $p = 0.038 \leq 0.05$) respectively. Research & Development ($r = 0.043$; $p = 0.575 > 0.05$) was, however, not found to significantly influence the performance of universal health coverage in Kenya as per the joint model. The findings, therefore, indicates that the three independent variables, that is, National Health Strategic Plan, Health Policies and Sustainable Health Financing when combined had the most impact compared to Research & Development when assessing the performance of UHC.

Performance of UHC = 6.985 + 0.037Research & Development + 0.125 Health Policies
+0.380 Health Strategic Plan + 0.323Sustainable Health Financing

Or concisely;

$Y = 6.985 + 0.037 RD + 0.125 HP + 0.380 HSP + 0.323 SHF$

4.7.2 Moderating effect of Environmental Dynamism

In order to examine the moderating effect of Environmental Dynamism on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya, Environmental Dynamism was introduced as the moderator in the model. The hierarchical regression model was used where the variables were introduced into the model sequentially. The findings of the regression summary are presented in Table 23.

Table 23

Summary of Regression Results with Moderator Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Change	F Change	df1	df2	Sig. F Change
1	.280a	0.078	0.073	4.11963	0.078	15.524	1	183	0.000
2	.352b	0.124	0.114	4.02785	0.045	9.435	1	182	0.002
3	.475c	0.226	0.213	3.79589	0.102	23.923	1	181	0.000
4	.678d	0.460	0.433	3.67286	0.234	13.329	1	180	0.000
5	.796e	0.634	0.597	3.54469	0.174	17.454	3	177	0.000

- a. Predictors: (Constant), Research & Development
- b. Predictors: (Constant), Research & Development, Health Policies
- c. Predictors: (Constant), Research & Development, Health Policies, Health Strategic Plan
- d. Predictors: (Constant), Research & Development, Health Policies, Health Strategic Plan, Health Financing
- e. Predictors: (Constant), Research & Development, Health Policies, Health Strategic Plan, Health Financing, Dynamism_Policies, Dynamism_Strategic Plan, Dynamism_Financing
- f. Dependent Variable: UHC program Performance

The multivariate linear regression analysis in Table 23 shows that the relationship between the dependent variable and all the independent variables pooled together after moderation with environmental dynamism was significant, with the value obtained for R, which was the model correlation coefficient = 0.796 being higher than any zero order value in the table. This indicated that the model improved when more variables were incorporated when trying to examine the influence of strategic initiatives on performance of universal health coverage in Kenya after moderation with environmental dynamism. The results in Table 23 further shows that the model could explain up to 59.7% (Adjusted $R^2 = 0.597$) of the variations in the performance of universal health coverage in Kenya resulting from the moderation of the strategic initiatives with environmental dynamism.

There was also a significant R-Square difference between the unmoderated model and the moderated model in Table 23 was also significant, with the R-Square of the former being, $R = 0.460$ and that of the latter being $R = 0.634$ ($p = 0.000$). The appropriateness of the models in predicting the performance of UHC in Kenya was also tested using the F-Test. The results of the ANOVA performed on the independent and dependent variables on the moderated Model 2 are summarized in Table 24.

Table 24*Model ANOVA for Environmental Dynamism as Moderating Variable*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	263.467	1	263.467	15.524	.000b
	Residual	3105.754	183	16.971		
	Total	3369.222	184			
2	Regression	416.536	2	208.268	12.837	.000c
	Residual	2952.686	182	16.224		
	Total	3369.222	184			
3	Regression	761.237	3	253.746	17.611	.000d
	Residual	2607.985	181	14.409		
	Total	3369.222	184			
4	Regression	941.045	4	235.261	17.44	.000e
	Residual	2428.177	180	13.49		
	Total	3369.222	184			
5	Regression	1345.25	7	192.1786	15.295	.000f
	Residual	2223.971	177	12.56481		
	Total	3569.221	184			

The results of Table 24 indicate that there was a significant difference between means of variables measuring strategic initiatives and the dependent variable performance of universal health coverage in Kenya after moderation (Model 5) ($F_o = 15.295 > F_c = 2.07$; $\alpha < 0.05$; $df = 7, 177$; $p \leq 0.05$). This finding confirms the finding indicated by Table 23 that indeed the model was significant and can be used to make further inferences. The significant change in the R-square model indeed confirms that environmental dynamism was a significant moderator of the relationship between strategic initiatives and performance of UHC in Kenya. Environmental dynamism was further interacted with each of the independent variables as shown in Table 25 which also provides a summary of the multiple linear regression analysis coefficients.

Table 25*Multiple Linear Regression Results with Moderator Variable*

Model		Unstandardized		Standardized		95.0% Confidence		
		Coefficients		Coefficients		Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
5	(Constant)	3.126	2.861		1.092	0.276	-2.521	8.773
	Research & Development	-0.019	0.009	-0.016	-2.169	0.031	-0.036	-0.002
	Health Policies	0.5	0.083	0.386	6.02	0.000	0.336	0.664
	Health Strategic Plan	-0.063	0.084	-0.056	-0.755	0.451	-0.229	0.102
	Financing	0.346	0.084	0.286	4.112	0.000	0.180	0.511
	Dynamism_Policies	-0.022	0.006	-0.341	-3.667	0.000	-0.021	-0.013
	Dynamism_Strategic Plan	0.036	0.0019	1.057	18.94	0.000	0.045	0.049
	Dynamism_Financing	-0.016	0.0039	-0.422	-4.103	0.000	-0.024	-0.005

a. Dependent Variable: UHC Performance

Table 25 shows that the interaction of Environmental Dynamism with three of the four independent variables was significant in the model Dynamism_Policies ($\beta = -0.341$; $p = 0.000$), Dynamism_Strategic Plan ($\beta = 1.057$; $p = 0.000$) and Dynamism_Financing ($\beta = -0.422$; $p = 0.000$). This, therefore, satisfied the explanatory condition where the moderating variable should be significant as explained by Fritz and Arthur (2017). Hair *et al.*, (2006) observes that when the coefficients of the interacted terms in the model with the moderator variable as the interacting term is significant and the coefficient of the moderator variable in the model included without interaction is significant, then there

is a moderating effect. The results, therefore, implied that the Environmental Dynamism was significant and was a moderating variable variable is when introduced into the model in Table 25.

Environmental Dynamism, however, negatively interacted with two variables, policies and strategic plan when introduced in the model. This could be explained by the observation that there was uncertainty over UHC policy continuity after the end of the pilot program and this led to policy inaction. The changing market dynamics together with the political and economic uncertainty at the time of the program affected the health financing negatively and consequently, the UHC program could not guarantee sustainable healthcare financing. Previous studies suggest that policy change contributed significantly to the outcome of universal health coverage, for instance, Ho, Khalid, Skead, and Wong (2022) found that policy uncertainty contributed to 32% of the outcome of universal health coverage. Pisani, Olivier Kok, and Nugroho (2017) similarly found that policy change arising from political instability contributed to 26% of the outcome of UHC in Indonesia. Takura and Miura (2022) also found that political and economic uncertainty contributed significantly to UHC performance by upto 49% in some Asian contexts, while Darrudi, Khoonsari and Tajvar (2022) attributed upto 52% UHC policy change to policy and economic factors.

In Kenya, the volatility of the political climate at the time of carrying out the study characterized by the possible change in government and policy position strongly affected the status of the UHC program. The possible change of guard at the time signaled significant changes in the policy regime on healthcare (Yates, Witter, Chantzi & Hunsaker, 2024). This was indeed confirmed months after the elections and change in government when the public risk pooling health financing model sought to replace the NHIF with the Social Health Insurance (SHIA). This signaling of policy change

evidently brought uncertainty to the UHC program in the country (Nungo, Filippon & Russo, 2023). However, the program outcome demonstrated that a future UHC rollout with the right resourcing and coordination could lead to its implementation and performance country wide (Mwaniki & Ogoti, 2024), hence, the program outcome impacted the national health strategic plans positively. These findings imply that environmental dynamism was important in the performance of Universal Health Coverage in Kenya.

Further, extant literature reveals that the implementation environment of national scale projects constantly experience challenges of uncertainties and instabilities especially in political transition times where new priorities overshadow the continuity of old policy paths (Ansell & Trondal, 2018). However, environmental dynamism interacted positively with sustainable health financing a development which could be attributed to the emphasis on risk pooling as a means of financing as well as the then government's strategic financing efforts towards UHC (Ashoff & Klingebiel, 2014).

Further, in the case of UHC, Oraro-Lawrence and Wyss (2020) observed that while the robust dialogue within Kenya's health policy circles signals intentionality to create a path towards UHC, the country lacks a centralized, systematic and inclusive process through which this agenda can be driven. As a result, a highly dynamic policy environment has emerged where actors differ substantively in their interpretations of the country's UHC values and priorities. This reflects existing priority-setting studies in Kenya that have found variances in the way different stakeholders perceive health systems decisions in the country (McCollum et al., 2018; Barasa et al., 2016). Oraro-Lawrence and Wyss (2020) further noted that stakeholders' articulated values are aligned to their dogmatic principles and their depth of interaction with the country's health and political systems. For instance, national and sub-national government stakeholders

prioritized short-term health maximization as their main UHC policy goal in Kenya.

Table 26 presents the summary in the change of the coefficient significance when supply chain integration is introduced in the model as a product of optimization strategies.

Table 26

Summary of Regression Models after Moderation

		Research & Development	Health Policies	Health Strategic Plan	Sustainable Health Financing	Dynamism_x_Policies	Dynamism_x_Strategic Plan	Dynamism_x_Financing
Model 1	B	0.28						
	95.0% CI	(0.165, 0.495)						
Model 2	B	0.2	0.228					
	95.0% CI	(0.063, 0.408)		(0.105, 0.484)				
Model 3	B	0.068	0.087	0.39				
	95.0% CI	(-0.093, 0.255)	(-0.081, 0.305)		(0.265, 0.624)			
Model 4	B	0.031	0.122	0.334	0.267			
	95.0% CI	(-0.133, 0.207)	(0.178, 0.210)	(0.203, 0.557)	(0.149, 0.498)			
Model 5	B	-0.016	0.386	-0.056	0.286	-0.341	1.057	-0.422
	95.0% CI	(-0.036, -0.002)	(0.336, 0.664)	(-0.229, 0.102)	(.18, .511)	(-.021, 013)	(.045,.049)	(-.024, 0.005)

Table 26 shows that Research & Development coefficient was not significant before moderation with environmental dynamism ($r = 0.031$, $p = 0.669$) but was significant after moderation at ($r = 0.016$, $p = 0.031$). Health Policies coefficient was significant before moderation ($r = 0.122$, $p = 0.038$) and was also significant after moderation ($r = 0.386$, $p = 0.000$). Health Strategic Plan was significant before moderation with the coefficient being $r = 0.334$, $p = 0.000$, however, it was not significant in the moderated model ($r = -0.056$, $p = 0.451$). Sustainable Health Financing coefficient was significant before

moderation ($r = 0.267$, $p = 0.000$) and also significant after moderation ($\beta = 0.286$, $p = 0.000$). The R^2 change from $R = 0.460$ before moderation to $R = 0.634$ after moderation was also significant $p = 0.000$. Therefore, based on the moderation rule by Hair *et al.*, (2006), Environmental Dynamism is a moderating variable.

From the results, it is evident that Environmental Dynamism was important to the health policy and national health strategic plan implementation for UHC in the country. In particular, the current study had established in Table 26 that respondents were of the view that current changes in the healthcare sector, volatility of the political climate, stable policy environment, economic instability and social stability as environmental dynamism constructs considerably affected the implementation of UHC in Kenya. For instance, UHC is a highly political concept across the globe and a review of the broader international literature on the origins of universal coverage shows that it is intrinsically political and cannot be achieved without recognition of its dependence on, and consequences for, both governance and politics (Greer & Méndez, 2015).

Environmental dynamism was, nonetheless, found to interact negatively with sustainable health financing. This means that a positive economic trajectory coupled with a stable financing regime could improve the performance of the UHC. In the UHC pilot phase of Nyeri County, for example, it was evident that the financing approach played a very big role in the performance of UHC and led to a considerable health workload of NCDs. This was the same case for Machakos and Isiolo counties where a stable funding regime for UHC led to better performance outcomes in terms of maternal health and recovery from road traffic accidents. From a political economy perspective, Reich *et al.*, (2015) observed that UHC reforms intentionally redistribute resources in the health sector and across households, these policies inevitably involve political trade-offs, conflicts, and negotiations.

In terms of social stability, Borgonovi and Compagni (2013) argue that social and political sustainability are equally fundamental and desirable features of a health care system. Aso (2017) noted that Japan's performance of UHC for all people in 1961 contributed to social stability and to economic growth by helping to expand the middle class and realize a more equitable income distribution. In their study, Ranabhat et al., (2020) observed that individualism and polarization encourages privatization of health and it ultimately increases the out-of-pocket expenditure and promotes health care as a business. Consequently, society becomes polarized and ultimately long-term barriers to universal health coverage are created. On the other hand, an individual mind set feels insecure at any time and instability forms in every mind and ultimately this creates conflict in society and a culture of non-transparent corruption and consumption of public resources by the private sector results in poor health delivery. These consequences, particularly in low- and middle-income countries result in a state with poor economy and social capital and achieving UHC is very far from reality. In Kenya, Ondako (2015) established that social factors influencing were mainly the stakeholder consensus and representation of the grass roots in decisions on social insurance.

Regarding the need for a stable policy environment, Darrudi, Khoonsari and Tajvar (2022) observed that movement toward UHC is a long-term policy engagement that requires both political know-how and technical knowledge. Further, according to Darrudi et al., (2022), since most of the fundamental challenges related to UHC can be linked to a weak political commitment and a lack of policy advocacy, they concluded that major policy alterations must be made. In addition, badly designed policies should be revised to improve health coverage. Russo, Bloom and McCoy (2017), however, noted that policies must incorporate the realities of non-linear economic growth and potential economic contraction for stability. Therefore, a more stable implementation environment was

preferable for the performance of UHC while environmental instability would continue to negatively affect the performance of UHC in Kenya.

Economic instability was also cited by respondents as a cause of poor implementation of UHC. Borgonovi and Compagni (2013) observed that although health care has been portrayed as draining wealth, evidence has progressively accumulated to show that, on the contrary, investments in health (and health care) are effective strategies in both developing and developed countries not only to reduce poverty but also to pursue economic growth through increased productivity and higher household income. According to Russo et al., (2017), with the prospect of economic contraction and shrinking budgets, many African countries will face great challenges in reaching the ambitious goals of UHC. Ondako (2015) also observed that economic factors affecting the implementation of UHC included rates imposed and low disposable incomes whereas demographic factors were mainly high population growth, high number of the poor and many dependants. Takura and Miura (2022) similarly concluded that socioeconomic factors, such as GDP, health expenditure, unemployment, poverty, and population influence the progress of UHC, regardless of system maturity or geographic characteristics. However, according to Ghebreyesus (2017), many countries have achieved universal health coverage at different levels of economic development, so this is more a political than an economic challenge.

4.7.3 Hypothesis Testing

The study sought to test the hypothesis;

H₀₁: Research and development programs strategy has no statistically significant influence on the performance of Universal Health Coverage in Kenya.

The results in Table 21 indicate that the research and development strategy did not have a significant influence in the achievement of Universal Health Coverage in Kenya ($r =$

0.031; $p = 0.669 > 0.05$), therefore, the null hypothesis was accepted. The finding shows that research and development strategy was not a well-emphasized component of UHC. This finding, therefore, disagrees with Cochrane et al., (2017) who found that research and development strategy informs the established of progressive policies and guidelines on how best to achieve UHC. This is best achieved through partnership programs aimed at establishing policies, practices and health interventions that are less costly for patients. According to Kuruvilla et al., (2006), research and development helps in shaping and changing the values and beliefs of people hence success of the attainment of universal health care. Different communities have different values and beliefs that would act as a barrier in attainment of UHC. Research and development helps in reconciling these values, beliefs and practices held by community members.

The study also sought to test the hypothesis;

H₀₂: Health policies strategy has no statistically significant influence on Universal Health Coverage in Kenya.

According to the results in Table 21, Health policies strategy had a statistically significant influence on Universal Health Coverage in Kenya ($r = 0.122$; $p = 0.038 \leq 0.05$), therefore, we fail to accept the null hypothesis. Further, Health Policies emerged as the most influential strategy in the performance of UHC as per the joint model. This is consistent with the findings of Sachs (2012) who found that developing countries are currently prioritizing UHC in their health policies and as such strengthening policy actions towards its performance. However, there are concerns regarding the feasibility, equity, efficiency, and sustainability of the Kenyan government's policy decision to move toward NHIF using a voluntary contributory mechanism (Barasa et al., 2018). However, according to McIntyre et al., (2018), it is important that policy design and implementation are aligned with "best practice" and enhance the country's aspiration to

achieve UHC. Several policy actions are imperative. The implementation of a new health policy demands more than providing instructions around a policy document or designing a set of standard operating procedures (Allcock et al., 2015; Ansell, Sørensen & Torfing, 2017). Effective health policy implementation requires “the aggregation of the separate actions of many individuals, and [an understanding of] how and why the actions in questions are consistently reproduced by the behavior of individuals.” (Baron, 2018: 2).

Additionally, the study tested the hypothesis;

H₀₃: National Health Strategic Plans has no statistically significant influence on Universal Health Coverage in Kenya.

The anchoring of UHC under the National Health Strategic Plan also proved to be significant to the performance of UHC ($r = 0.334$; $p = 0.000 < 0.05$), hence, we fail to accept Null hypothesis. The importance of having health strategic plans in healthcare delivery was underscored in a study by Nkengasong et al., (2009) who argued that medical laboratory services are an essential, yet often neglected, component of health systems in developing countries. However, medical laboratory services in developing countries can be strengthened by leveraging funding from other sources of HIV/AIDS prevention, care, surveillance, and treatment programs. Strengthening these services will require coordinated efforts by national governments and partners and can be achieved by establishing and implementing national laboratory strategic plans and policies that integrate laboratory systems to combat major infectious diseases. These plans should take into account policy, legal, and regulatory frameworks; the administrative and technical management structure of the laboratories; human resources and retention strategies; laboratory quality management systems; monitoring and evaluation systems; procurement and maintenance of equipment; and laboratory infrastructure enhancement.

The study also tested the hypothesis;

H0₄: Sustainable health financing strategy has no statistically significant influence on Universal Health Coverage in Kenya.

Sustainable health financing was found to have significant influence in the joint model ($r = 0.267$; $p = 0.000 \leq 0.05$) and, subsequently, we fail to accept Null hypothesis. This finding could be explained by the fact that there was renewed focus on healthcare financing in the period leading to and during the pilot phase of the UHC. The financing focused on segments in the society especially the informal sector who were especially vulnerable owing to their financial capability and, hence, contribution to the scheme is still in question. Households who spend 10% or more of their income on health care are deemed to have incurred catastrophic expenditure. Globally, such households increased from 9.4% in 2000 to 13.2% in 2017. In Kenya, 5.1% of households spent 10% or more of their income on health care and another 1.3% spent more than 25% of their income on health care (World Health Organization and World Bank, 2022). This is partly due to low health insurance coverage in Kenya (Njuguna, 2023). However, during the pilot study of UHC, the residents of the government waived the healthcare fees in the four pilot counties and hence provided financial risk protection for the residents of those counties. This led to improved UHC performance especially along the key disease burden areas.

However, the early termination of the pilot in Kisumu and Nyeri due to lack of funds indicate that government financing alone was not sustainable and other forms of funding like risk pooling could be more sustainable especially when well subscribed to. Barasa et al., (2018) also pointed out in their study that the determination of provider payment rates should be informed by evidence generated from rigorous costing and actuarial analysis, rather than recommendations from health care providers. The NHIF should avoid what we call here purchaser capture, where health care providers exert a high

influence on provider payment rates, resulting in inflated costs of services, that benefit providers but compromise the sustainability of the NHIF. Appropriately costed provider payment rates will enhance the financial sustainability of the NHIF.

Finally, the study tested the hypothesis;

H0₅: Environmental Dynamism has no statistically significant moderating effect on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya.

The results in Table 26 indicate that Environmental Dynamism significantly influence on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya (change from $R^2 = 0.460$ to $R^2 = 0.634$; $p = 0.000 \leq 0.05$), therefore, we fail to accept the null hypothesis. The findings also showed that environmental dynamism had a negative effect on policies. This was due to the fact that the political and governance environment at the time of the study and currently did not give very clear directions on the future of UHC in the country. The findings, therefore, agree with the model presented by Kelsall et al., (2016), which showed that political stability creates healthy public policy, adequate funding and improve governance and the performance of the UHC in a faster way. A recent study by Mohamed et al., (2021) also demonstrated that political instability and lack of proper leadership from the Government undermines the establishment of health policies which contributed dramatically to the decline in health performance. Ho et al., (2022), however, pointed out that there is growing recognition that achieving universal health coverage is a political challenge. Ranabhat (2020) pointed out that political instability affected the performance of UHC.

The results further showed that environmental dynamism significantly but positively impacted health strategic planning in UHC. This could be attributed to the fact that the

pilot phase of the UHC provided important insights into what is achievable through UHC in the country and, thus, provided guidance on how to implement UHC nationally. This translated to the recalibration of the national health strategic plans to accommodate the UHC based on the pilot study considerations. These findings, therefore, agree with Yang (2019) who observed that environmental dynamism is positively related to strategic planning and strategic change—the more dynamic the environment is, the more the organizations are inclined to implement the strategic change. Hough and White (2004) also found that the level of environmental dynamism combined with the manager's functional position explains scanning behavior which is important in the development and implementation of the organization's strategic plans. Further, according to Hough and White (2003) environmental dynamism may moderate the relationship between rational-comprehensive decision making and decision quality.

The findings also indicated that environmental dynamism had a negative relationship with sustainable health financing for UHC. This suggests that following the UHC pilot studies, the financial implication of UHC was underscored. During the pilot studies, issues with capitation and disbursement of funds were highlighted as key to the delivery of UHC. The pilot studies were fully funded by the government through direct cash transfer. However, in the larger UHC program, this was not expected to be the case as a combination of financing models would be needed. Given the low government spending on health to GDP and the rather low subscription to NHIF and poor health insurance penetration, it was doubtful whether the eventual UHC rollout would be indeed financially sustainable.

The findings corroborated that of a study by Derakhshani et al., (2021) who found that paying out of pocket (OOP) and protection against high costs, economic growth, and lack of standard benefits packages affected the performance of UHC. Dzapasi (2019)

also pointed out that fiscal space and a lack of inequality along with the health financing arrangements are integral to achieving health service coverage. Overall, the model constant is significant ($p < 0.05$) which suggests that there were other factors not included in the model which affected the performance of Universal Health Coverage in Kenya. The study, therefore, establishes that in a combined set up, health policies was the most effective strategy when it came to the performance of UHC in the country. The findings also indicate that the dependent variable, that is, performance of UHC in Kenya, would change by a corresponding number of standard deviations when the respective independent variables change by one standard deviation.

Hence, the model before moderation was;

$$\text{Performance of UHC} = 6.985 + 0.037\text{Research \& Development} + 0.125 \text{ Health Policies} \\ + 0.380 \text{ Health Strategic Plan} + 0.323\text{Sustainable Health Financing}$$

Or concisely;

$$Y = 6.985 + 0.037 \text{ RD} + 0.125 \text{ HP} + 0.380 \text{ HSP} + 0.323 \text{ SHF}$$

The Implications are that emphasis on improving the Health Strategic Plan and Sustainable Health Financing would yield the highest gains in UHC performance. Also, Research & Development and Health Policies are less impactful but still contribute positively.

And after moderation, the emergent linear model becomes;

$$\text{Performance of UHC in Kenya} = 3.126 + 0.019 \text{ Dynamism_Research \& Development} - \\ 0.022\text{Dynamism_Policies} + 0.036 \text{ Dynamism_Strategic Plan} - 0.016 \\ \text{Dynamism_Financing} + 0.117\text{Environmental Dynamism}$$

$$\text{Simply put; } y_{ij} = 3.126 - 0.019 \text{ RD_D} - 0.022\text{HP_D} + 0.036\text{HSP_D} - 0.016\text{SHP_D} \\ + 0.117\text{ED}$$

Environmental Dynamism introduced as a significant positive factor, suggesting it plays a key role in driving UHC performance. The Implications are that Environmental Dynamism is a critical variable that offsets some of the original variables' effects, reflecting how external changes or uncertainties influence UHC performance. The negative coefficients of moderated factors suggest that in a dynamic environment, some strategies (e.g., financing and policies) may not adapt well and could hinder performance if not optimized for dynamism. The positive impact of Environmental Dynamism emphasizes the need to incorporate flexibility and adaptability into UHC strategies.

Therefore, before moderation, Health Strategic Plan and Sustainable Health Financing were the most critical drivers of UHC performance. The model reflects a relatively stable environment where these variables strongly influence outcomes. After Moderation, Environmental Dynamism becomes an influential variable, significantly altering the impact of other factors. Adaptability and responsiveness to dynamic conditions are crucial for improving UHC performance. Therefore, in terms of Strategic Focus, there is need to invest more in Health Strategic Plan and Sustainable Health Financing, but ensure they are adaptable to dynamic environments. It is also important to strengthen Research & Development to improve its robustness under environmental uncertainties. The Policy Implications of these findings are that there in need to enhance mechanisms for monitoring and responding to Environmental Dynamism. Further, it is important to integrate dynamic modeling approaches to improve policy and financing frameworks' adaptability.

These findings resonates with the observations by Hauck and Smith (2015) and WHO (2016) that many governments have maintained a haphazard approach towards health systems priority-setting, resulting in arbitrary and inconsistent planning decisions. According to a study by Oraro-Lawrence and Wyss (2020), it was observed that while

most stakeholders agree on the basic definition of UHC, a diversity of practical interpretation has emerged reflecting the differing perspectives of each country's unique social, political, economic and epidemiological realities (O'Connell, Rasanathan & Chopra, 2014).

This plurality of interpretation makes it necessary for governments to steward a participative decision-making process through which a defined approach towards UHC may be developed (Baltussen et al., 2016; Terwindt et al., 2016). In Kenya, where UHC is mentioned conceptually in the national government's health policy documents and medium-term development agenda, there remains limited articulation of the explicit choices and trade-offs to be considered in steering the country's UHC policy direction (MoH, 2014; Kenya National Treasury, 2018). Therefore, it is evident that the implementing environment and, particularly, the policy environment was not stable enough for the performance of UHC as per the government strategy. The partial stability made it challenging to optimize the implementation of UHC across the country as per the government's agenda and its strategic initiatives.

A summary of hypothesis testing results is given in Table 27 as shown below;

Table 27*Summary of Hypothesis Testing Results*

Hypothesis	Decision Rule	Test (P-Value)	Conclusions
H ₀₁ : Research and development programs strategy has no statistically significant influence on performance of Universal Health Coverage in Kenya	Reject H ₀₁ if p-value for Research and development programs < 0.05. Accept otherwise	p=0.669 < p = 0.05	Null hypothesis was accepted; alternative view adopted that Research and development programs strategy has no significant influence on performance of UHC in Kenya
H ₀₂ : Health policies strategy has no statistically significant influence on Universal Health Coverage in Kenya	Reject H ₀₂ if p-value for Health policies strategy < 0.05. Accept otherwise	p=0.038 < p = 0.05	We fail to accept Null hypothesis; Health policies strategy has significant influence on Universal Health Coverage in Kenya
H ₀₃ : National Health Strategic Plans has no statistically significant influence on Universal Health Coverage in Kenya	Reject H ₀₃ if p-value for Health Strategic Plans < 0.05. Accept otherwise	p=0.000 < p = 0.05	We fail to accept Null hypothesis; alternative view adopted that National Health Strategic Plans has significant influence on Universal Health Coverage in Kenya
H ₀₄ : Sustainable health financing strategy has no statistically significant influence on Universal Health Coverage in Kenya	Reject H ₀₁ if p-value for Sustainable health financing strategy < 0.05. Accept otherwise	p=0.000 < p = 0.05	We fail to accept Null hypothesis; Sustainable health financing strategy has significant influence on Universal Health Coverage in Kenya
H ₀₅ : Environmental Dynamism has no statistically significant moderating effect on the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya	Reject H ₀₁ if R ² change is not significant < 0.05. Accept otherwise	Adj R-Square change from 0.460 – 0.634	We fail to accept Null hypothesis; alternative view adopted that Environmental Dynamism significantly moderates the relationship between strategic initiatives and the performance of Universal Health Coverage in Kenya

4.8 Qualitative Data Analysis

4.8.1 Research and Development Programs on Performance of UHC in Kenya

The first objective of the study was to examine the effect of research and development programs strategy on the Universal Health Coverage in Kenya. Using data captured in both the open ended parts of the questionnaire, the study derived themes emerging from the responses concerning research and development programs in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on certain issues and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of R&D. The findings are presented and discussed as follows. Table 27 shows a tabulation of the respondents' verbatim reactions to the questions posed.

Table 28

Results on R & D Programs Strategy on the UHC in Kenya

2.1(a). Does your organization involve in any research activity meant to improve the universal healthcare program?

Not at the moment, but we do have plans to begin doing research in the future
We have a technical committee which is among other tasks charged with research and development, but I don't think we have embarked on research on universal healthcare yet
No we have yet to set up a research department
We are currently doing research on several developments in healthcare, universal healthcare is just one of them
Our organization carries out surveys but I don't think or rather I have not seen anything on universal healthcare program yet
Yes, as a private insurer it is absolutely important we carry out a study on universal healthcare
No, we do not have a research budget or personnel for carrying out research

2.2(a). Does your organization involve in any training activity towards the improvement of the universal healthcare program?

Yes, our management and staffs have been attending trainings to ready them for universal healthcare program
Our organization has been facilitating workshops on universal healthcare for the staff and management
There have been discussions in our organization on the need to train our staffs on universal healthcare
No, we do not have any trainings as yet on universal healthcare program
We are currently in the middle of the trainings on UHC
No, we are budget constrained at the moment, maybe with more funding we could do that

2.3(b). In your view, has research and training activity improved the universal healthcare program in your organization?

No, our organization has not carried out research on universal healthcare so we cannot exactly determine its impact
Yes, I think our staffs and management now have a better understanding of universal healthcare
For our firm, I definitely think research and training on universal healthcare has been quite impactful to us
Training on universal healthcare has enabled us to better appreciate the healthcare needs of this country and our position in it. I think we are now in a better position to play our role well
We have at least been able to dispel some of the misinformation associated with universal healthcare through the trainings

These reactions were then coded and analyzed to show the weighty issues regarding the

R&D strategy in UHC and tabulated in Table 29.

Table 29*Relevance Index of R&D Programs Constructs on the UHC in Kenya*

Word	Count	Relevance
better understanding	13	0.995
universal healthcare program	3	0.448
research	9	0.348
training	6	0.299
Staff	4	0.199
organization	4	0.199
management	3	0.149
better position	1	0.1
several development	1	0.1
seen anything	1	0.1
private insurer	1	0.1
research department	1	0.1
technical committee	1	0.1
research budget	1	0.1
healthcare need	1	0.1

Looking at Table 29, it is evident that most of the respondents stressed the need for better understanding (i= 0.995) of universal healthcare program (i = 0.448) as evidenced by their high relevance indexes compared to other constructs in the table. The high relevance scoring of research training, staff, organization and management also underscored the need for research and training on universal healthcare among the staff and management within the healthcare service provider organizations. Other important issues raised were the need for the creation of a research department as well as a research technical committee for universal healthcare and also the need to factor in research as a budget vote in their organizations.

4.8.2 Health Policies on Performance of UHC in Kenya

The study also sought to determine the effect of health policies strategy on Universal Health Coverage in Kenya. Using data captured in both the open ended parts of the questionnaire and the interview schedule, the study derived themes emerging from the responses concerning health policies strategy in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on the issues raised and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of health policies strategy. The findings are presented and discussed as follows. Table 30 shows a tabulation of the respondents' verbatim reactions to the questions posed.

Table 30

Results on Health Policies Strategy on Performance of UHC in Kenya

3.1(a). Does devolution of services affect the universal healthcare program in your organization?

Devolution of healthcare has enabled us to map out our healthcare needs in the country so that we are able to assess the practicality of providing universal healthcare

Yes, even as a national government agency, devolution of healthcare services has enabled us to quickly map and appraise the universal healthcare set up and capabilities across the counties

I think devolution while it has its own challenges in healthcare delivery is still an important framework through which we can appraise the universal healthcare programs

Yes, through the devolution context we are able to strategize for universal healthcare in our county

3.2(a). Does an increased partnership with your organization affect the delivery of the universal healthcare program?

Partnership with the government through NHIF has been instrumental in enabling us to provide universal healthcare

The partnerships enable us to increase our healthcare access to many people who were previously unable to even afford low cost primary healthcare. However, we still have issues with capitation and this needs to be resolved.

I think as the partnerships grow stronger and more mature, universal healthcare will soon become a reality of our times

The partnerships at the moment are still not strong enough and this exposes us to some challenges when dealing with our partners

We are currently working on our partnerships to improve the coordination and handling of issues, but yes, I can say the partnerships are leading towards the realization of universal healthcare program

3.3(a). In your view, have strategic initiatives improved the universal healthcare program in your organization?

Yes, the strategic initiatives are bearing fruits in terms of universal healthcare

Yes, but a lot more still needs to be done

We have come along with healthcare reforms in this country and the strategic initiatives currently being advanced by the government are turning out to be instrumental in the realization of universal healthcare

Everything revolves around strategy, however, I don't think the government is doing enough strategy wise to make universal healthcare a reality

I'm not so sure as I still feel we as stakeholders are not fully involved in the UHC program implementation strategies

The strategies are good, but they need to be backed up with adequate funding and coordination

These views were also coded and analyzed to show the issues regarding the Health Policies Strategy in UHC and tabulated in Table 31.

Table 31

Relevance Index of Health Policies Constructs on the UHC in Kenya

Word	Count	Relevance
capabilities	10	0.994
partnership	6	0.373
devolution of healthcare	2	0.373
universal healthcare program	2	0.373
strategic initiative	2	0.248
UHC program implementation	1	0.186
realization of universal healthcare	2	0.186
handling of issues	1	0.186
government	4	0.186
national government agency	1	0.186
program implementation strategy	1	0.186
devolution context	1	0.124
many people	1	0.124
county	2	0.124
reality	2	0.124
enough strategy	1	0.124
coordination	2	0.124
healthcare need	1	0.124
important framework	1	0.124
healthcare access	1	0.124
adequate funding	1	0.124
healthcare delivery	1	0.124
low cost	1	0.124
primary healthcare	1	0.124
healthcare reform	1	0.124

Table 31 shows that the capabilities of the devolved units to deliver on the UHC was the most relevant issue from the respondents' perspectives. The level of partnerships as well as the ability of the devolved units to implement the universal healthcare program were also main concerns for the respondents. The strategic initiatives as well as program implementation strategy also scored highly in relation to the realization of universal

healthcare in the devolution context. All these constructs had high scoring in terms of criticality of Health Policies Strategy in the performance of UHC in the country.

4.8.3 National Health and Strategic Plans on Performance of UHC in Kenya

The study further sought to establish the effect of National Health and Strategic Plans on Universal Health Coverage in Kenya. Using data captured in both the open ended parts of the questionnaire and the interview schedule, the study derived themes emerging from the responses concerning health policies strategy in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on the issues raised and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of the National Health and Strategic Plans. The findings are presented and discussed as follows. Table 32 shows a tabulation of the respondents' verbatim reactions to the questions posed.

Table 32

Results on National Health and Strategic Plans on Performance of UHC

4.1(a) Does the universal healthcare program affect health management in your organization substantially?

Yes, universal healthcare does affect our management substantially, we have had to do a lot of configurations to enable us to be ready for universal healthcare programs

In a way, yes, there is quite some changes being carried out with some additional provisions being made so as to accommodate the program.

Not really, the current management is just adequate, maybe we can talk about additional responsibilities

Yes, it has affected health information sharing to third parties (licensed parties, of course)

It has configured our financial operations as expected

4.2(a) Does your organization have any support programs towards the improvement of the universal healthcare program?

Yes, from the government

Sealing loopholes to make maximum use of finances

Yes, we are currently expanding our facilities so as to be able to provide improved services in the future as demand grows

We are trying to ensure there is high compliance with the program

We are encouraging our clients to register for affordable health insurance programs

Yes, we are on track to implement some of the provisions of universal healthcare program

4.3(a) In your view, has universal healthcare program substantially affected procurement streaming in your organization?

Yes, the organization has to have extra cost in purchasing of biometric kits, finger scanners and extra laptops

Yes, given the demands of UHC, there is need to choose service providers, giving consideration to service quality, efficiency and equity

Yes, our organization has had to identify private retail pharmacies, general practitioners (GPs), hospitals and specialists.

Not at the moment, but our organization will have to ramp up its procurement to match the expectations of the universal healthcare roll out

The respondents' views were also coded and analyzed to show the weighty issues regarding the National Health and Strategic Plans in UHC and tabulated in Table 33.

Table 33

Relevance Index of National Health and Strategic Plans on UHC in Kenya

Word	Count	Relevance
universal healthcare program	2	0.984
purchasing	4	0.656
affected health information	1	0.492
lot of configuration	1	0.492
use of finance	1	0.492
health insurance program	1	0.492
private retail pharmacy	1	0.492
demand of UHC	1	0.492
services quality	1	0.328
biometric kit	1	0.328
improved services	1	0.328
services provider	1	0.328
procurement	1	0.328
financial operations	1	0.328
third party	1	0.328

Table 33 shows that purchasing ($i = 0.656$) of universal healthcare was the most relevant issue as far as National Health and Strategic Plans was concerned in the performance of Universal Health Coverage in the country. The other concerns that were rated as highly relevant were the level of configuration ($i = 0.492$) of the country's healthcare system for the provision of UHC owing to the demand for UHC ($i = 0.492$) and also, for improved healthcare services ($i = 0.328$). Additionally, licensing of other parties like service providers ($i = 0.328$) and ensuring high compliance ($i = 0.328$) together with sealing loopholes ($i = 0.328$) were rated as important by the respondents. In addition, equity ($i =$

0.328) in the provision of universal healthcare was also rated as among the highly relevant issues that needed to be given more attention.

4.8.4 Sustainable Health Financing Strategy on Performance of UHC in Kenya

The fourth objective of the study sought to establish the effect of sustainable health financing strategy on Universal Health Coverage in Kenya. Using data captured in both the open ended parts of the questionnaire and the interview schedule, the study derived themes emerging from the responses concerning health policies strategy in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on the issues raised and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of sustainable health financing strategy. The findings are presented and discussed as follows.

Table 34

Results on Sustainable Health Financing on Performance of UHC in Kenya

5.1(a) Do compulsory prepayments affect the universal healthcare program delivery by your organization?

Yes, but that has been working only for those in formal employment. While the subscribers have been getting healthcare coverage, I don't think that has been happening for the uninsured group. Therefore, I can't fully say we have a universal healthcare program

No, I am not seeing any difference as yet. The compulsory deductions just work for those salaried workers and they do not constitute the majority of the population

No, there is no universality in the compulsory prepayments yet

Compulsory prepayments would be a good idea but only if it was possible to have everyone subscribe. But with the current situation, that's an impossibility

5.2(a) What about voluntary prepayments, do they affect the universal healthcare program delivery by your organization?

Yes, many customers/members are covered and able to access services

Yes, we are now seeing more people coming under the universal healthcare program based on their own subscription

Yes, especially for the elderly, their numbers have increased and I attribute that to their family members making the subscriptions for them

We are currently providing healthcare services to a growing segment of the population in our area that was previously unable to afford our services

No, the voluntary contributions still leave out the very poor who cannot afford the subscriptions

There is more that needs to be done to encourage voluntary prepayments by different insurers

No, I don't think subscriptions alone be it mandatory or voluntary will address the universal healthcare needs, I believe healthcare should be made more accessible and affordable in the long term so that even those in out-of-pocket modes can still enjoy quality and affordable healthcare services

5.3(a) What is your view of out-of-pocket payments, does it improved the universal healthcare program in your organization?

Out-of-pocket-payments are pretty much straight forward as no capitation is involved. However, it is so limited sometimes and patients seldom afford the full range of services available or prescribed

No, out-of-pocket-payments cannot really get us to universal healthcare. It has been the mode but with disastrous results.

No, we cannot have out-of-pocket-payments and universal healthcare at the same time

Yes, only is out-of-pocket-payments requirements in health services are very limited

Even in the highly subsidized public healthcare facilities, out-of-pocket-payments is still a problem

The respondents' reactions were further coded and analyzed to show the weighty issues regarding the Sustainable Health Financing Strategy in UHC and tabulated in Table 35.

Table 35

Relevance Index of Sustainable Health Financing Strategy on UHC in Kenya

Word	Count	Relevance
Capitation	5	0.984
universal healthcare program	2	0.984
out-of-pocket payment	6	0.820
compulsory prepayment	2	0.656
Subscription	4	0.656
affordable healthcare services	1	0.492
subsidized public healthcare	1	0.492
public healthcare facilities	1	0.492
range of services	1	0.492
Universality	1	0.328
long terms	1	0.328
healthcare coverage	1	0.328
everyone subscribe	1	0.328
Segment	6	0.328
full range	1	0.328
compulsory deduction	1	0.328
voluntary prepayment	1	0.328
disastrous results	1	0.328
uninsured group	1	0.328
different insurer	1	0.328
payment requirements	1	0.328
current situation	1	0.328
healthcare services	2	0.328

Table 35 shows that the performance of universal healthcare program was largely viewed in terms of capitation ($i = 0.656$). Out-of-pocket payment ($i = 0.820$) also scored as the second most relevant item while compulsory prepayment ($i = 0.656$) and subscription ($i = 0.656$) were also ranked as among the most relevant issues affecting the implementation of universal healthcare. The affordability of the healthcare services ($i = 0.492$) and subsidized public healthcare ($i = 0.492$) were also rated as among the most relevant issues. However, the state of the public healthcare facilities ($i = 0.492$) and their ability to provide a range of services ($i = 0.492$) in accordance to the UHC was also a cause for concern.

4.8.5 Environmental Dynamism, Strategic Initiatives and Performance of UHC in Kenya

The study also sought to establish the effect of environmental dynamism on Universal Health Coverage in Kenya. Using data captured in both the open ended parts of the questionnaire and, the study derived themes emerging from the responses concerning environmental dynamism in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on the issues raised and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of health policies strategy. The findings are presented and discussed as follows.

Table 36

Environmental Dynamism on Universal Health Coverage in Kenya

6.1(a) Does the universal healthcare program improve easy accessibility to healthcare services in your organization?

Yes, only if it is well-implemented

Yes, but that was only at the beginning of the program

Not sure because only a limited number of healthcare needs were covered

Yes, if the costing is done well

Yes, but for mostly primary and outpatient healthcare needs

Yes, but I think it works rather well for infectious diseases than for other types of medical conditions

6.2(a) Does the universal healthcare program lead to quality and timely provision in your organization?

Yes, only when it is being well-implemented as envisioned

Yes, but I think the readiness of our organization is still wanting

Yes, if we are assured of the sustainability of the program then we could make substantial investments to improve the quality and timely provision of healthcare

Not as it is currently constituted, though I still believe it could be instrumental when properly implemented

6.3 (a) In your view, does your organization have a Coordinated and Supportive culture toward a universal healthcare program?

No, we still don't have the capacity

No, but if the UHC program continuity was assured we could have better organization alignment

No, our current configuration does not support a coordinated and Supportive culture toward a universal healthcare program.

Yes, I think our organization is ready and it has a coordinated and supportive culture toward a universal healthcare program

Yes, though there is still need for some realignment.

From the findings, it was evident that environmental dynamism effects such as uncertainty in policy continuity, lack of sustainable financing for the program affected the easy accessibility of the program among the patients. It also affected the quality and timely provision of healthcare services in the program. Further, the uncertainty mean that the healthcare organizations were not yet ready to reconfigure and have a coordinated and supportive culture towards the implementation of the program.

4.8.6 Performance of Universal Health Coverage in Kenya

The study finally sought to determine the status of the performance of universal health coverage in Kenya. Using data captured in both the open ended parts of the questionnaire and the interview schedule, the study derived themes emerging from the responses concerning health policies strategy in different healthcare service provider organizations in particular whether they agreed or disagreed with the questions posed and their reasons for their positions on the issues raised. These were then tabulated and subjected to the coding analysis so as to generate the relevance index which helped evaluate how much the respondents were disposed on the issues raised and also show the criticality of the issues raised relative to other issues in the performance of UHC in their organization as a result of health policies strategy. The findings are presented and discussed as follows.

Table 37

Performance of UHC as a Result of Health Policies Strategy

7.1(a) State how long the UHC program was operational in your organization:

Our area faced challenges in operating the UHC program and it only ran for a few months after its launch

In our case, the UHC program was operational for a few months before it was terminated due to lack of financing

The UHC program in our County held on for quite a while, over four months before it came to an end

The UHC program was operational for several months in our County and I think that was largely due to the priority given by our County government and the collaboration with the national government

7.1(b) What are your comments on the implementation of the universal healthcare program about healthcare access in your organization?

I think for starters UHC is a good thing when fully implemented

Affordable health care financing

Sufficient health staff capacity

It is a very good strategy that will help a lot of Kenyans once put in place correctly

It can get better when all the stakeholders are on board, but for the moment, it is still a good start

Our organization is gearing up to be a competitive healthcare provider of UHC despite being a private hospital

Currently, our county government is very supportive to our public healthcare facility and this has enabled us to be ready to implement UHC

At the moment were still trying to ensure that we are in a good position to provide universal healthcare in the future, we are still in the works

7.2(a) What are the challenges you have experienced in the implementation of the universal healthcare program about healthcare access in your organization?

Unable to fully identify the indigents that need to benefit from UHC

Bureaucracy and bottlenecks

Resourcing, we need resources to realize this vision. But it is still achievable

Our organization still has significant resource constraints

Delayed subvention

Challenges in accessing and processing of funds

We need more trained medical personnel and equipment

We have challenges with capitation from the insurers and the government

Medical information sharing sometimes is challenging among healthcare service providers, I think that needs to be addressed

Our clients especially those in the informal sector do not understand the limits of their mostly NHIF subscription hence we often get into disagreements sicne they think that everything is catered for

7.2(b) How did the challenges you have experienced in the implementation of the universal healthcare program affect its

Accessibility:

In our case, patients were unable to access certain healthcare services since the funding was limited to the prevalence of unique health needs among our populations

Despite the launch and sensitization, most of the country residents were a bit skeptical of the program and did not want to participate in it

Some eligible households were reluctant to register in the program

Limited capitation affected the healthcare access during the program in our County

Inadequate medicines reduced the access to the UHC program

Affordability:

The programs only catered for certain unique health needs among our populations, hence, the patients could still not afford the other healthcare needs outside the program

Some of the medical procedures were not covered in the program and, hence, we could only make referrals where the patient was unable to meet the costs

I don't think all the costs were catered for, hence, patients in a way still had to meet some other costs related to their healthcare

Comorbidities were instrumental in limiting the affordability of the healthcare as they required extra attention not covered in the program

Sustainability:

The abolition of minimum user fees was not sustainable, especially in large healthcare facilities

Capitation was rather limited

Reimbursements were not being done in time hence making the program less sustainable

I don't think the costing was comprehensively done and this affected the capitation and long term sustainability of the program

I am a little bit concerned at the level of healthcare purchasing which in my view against the backdrop of the challenges was not adequately done

7.3(a) Are there critical success factors that are being overlooked in the implementation of the universal healthcare program?

Yes, Coverage of a bigger population that will be able to fully benefit from UHC

Yes, Planning and phasing

Yes, Political goodwill-if the leaders support implementation

Yes, Resourcing

Yes, Needs assessment

Yes, Level of out-of-pocket payments or rather insurance coverage to out-of-pocket payments ratio. Yes, Ideally the ratio should keep increasing until the out-of-pocket payments are totally phased out

Yes, Sensitization of the community particularly the informal sector workers and the indigent

The respondents' views were also coded and analyzed to show the weighty issues regarding the National Health and Strategic Plans Monitoring in UHC and tabulated in Table 38.

Table 38

Relevance Index of National Health and Strategic Plans on UHC in Kenya

Word	Frequency	Relevance
out-of-pocket payment ratio	3	0.976
competitive healthcare provider	1	0.732
lot of Kenyans are indigent	1	0.732
provider of UHC	1	0.732
medical information sharing	1	0.732
sufficient health staff	1	0.732
sensitization	4	0.732
public healthcare facilities	1	0.732
affordable health care	1	0.732
resourcing	1	0.732
trained medical personnel	1	0.732
significant resources constraints	1	0.732
healthcare services provider	1	0.732
health staff capacity	1	0.732
informal sector workers	1	0.732
good strategy	1	0.488
county government	1	0.488
good start	1	0.488
NHIF subscription	1	0.488
bigger population	1	0.488
good position	1	0.488
insurance coverage	1	0.488
private hospital	1	0.488
political goodwill	1	0.488
Moment	2	0.488
Organization	2	0.488
universal healthcare	1	0.488
informal sector	2	0.488
need assessment	1	0.488

It is evident from Table 38, that out-of-pocket payment ratio ($i = 0.976$) was the most relevant issue in the performance of UHC. This was because UHC is premised on eliminating out-of-pocket payments for healthcare. The findings also indicate that the other highly relevant competitive healthcare provider ($i = 0.732$), lot of Kenyans are indigent ($i = 0.732$), medical information sharing ($i = 0.732$) and sufficient health staff ($i = 0.732$). There were also concerns with sensitization of UHC program ($i = 0.732$) and affordable health care ($i = 0.732$). Resourcing especially in terms of significant resources constraints ($i = 0.732$) as evidenced by lack of trained medical personnel ($i = 0.732$), and level of health staff capacity ($i = 0.732$) were also viewed as among the most relevant issues.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings and the conclusions drawn from them, and makes recommendations for stakeholders that can be implemented to help address the problem identified in the study.

5.2 Summary of the Findings

The study sought to examine effects of selected strategic initiatives for Universal Health Coverage on the Program Performance in Kenya. A summary of the major findings arising from the analysis of these variables is presented in this section according to these objectives.

5.2.1 Research and Development Strategy on Performance of Universal Health Coverage in Kenya

The findings from the quantitative analysis of this objective revealed that the relationship between research and development programs strategy and performance of Universal Health Coverage in Kenya was significant only in the bivariate correlation ($r = 0.374$; $p = 0.000$) and moderated model but was not significant in the un-moderated joint regression model ($r = 0.031$, $p = 0.669$). This implied that as things were currently, the research and development component was instrumental on the performance of universal health coverage in Kenya. Descriptive results revealed that most of the respondents (40%) were uncertain about whether there was strengthened public support for and trust in health and medical research. However, most respondents (42%) agreed that there is improved quality in the health research process. Majority of the respondents (47%) agreed that MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs facilitate

technical assistance to support the strengthening of national systems for health research. There is an indication that there is high compliance with the research recommendations in the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs as indicated by 46% who agreed. Most healthcare MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs endeavor to undertake training and development with the technological changes as indicated by most respondents of who 33% agreed.

Further, most of the healthcare MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs have adopted periodic and continual refresher training for UHC in their systems as indicated by 39% who agreed. Hence, it is evident that the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were keen on developing their local capacity to carry out R&D on health systems probably as a way of sustaining continuity of research in their operations and increasing their adaptability to the changes in the operating environment. The findings also revealed that most respondents agreed (33%) that greater technological Integration of Medical Systems was also being applied by the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs. However, there was uncertainty by most respondents (47%) on whether their MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had the potential for medical workflow process reengineering. However, most of the respondents agreed (45%) that the majority of the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had computerized healthcare information technology. Hence, increasing technology dependence on healthcare management systems for R&D and operations management is evident from the findings.

Findings from the qualitative data revealed that most of the respondents stressed the need for better understanding ($i = 0.995$) of universal healthcare program ($i = 0.448$) as evidenced by their high relevance indexes compared to other constructs in the table. The high relevance scoring of research training, staff, MoH, KEMSA, CHMTs, CSOs, Public

Hospitals, and IDFs and management also underscored the need for research and training on universal healthcare among the staff and management within the healthcare service provider MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs. Other important issues raised were the need for the creation of a research department as well as a research technical committee for universal healthcare and also the need to factor in research as a budget vote in the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs. In summation, the study emphasizes the importance of enhancing understanding and research on universal healthcare. Respondents highlighted the need for research training across healthcare stakeholders, including MoH, KEMSA, CHMTs, CSOs, and public hospitals. Establishing a dedicated research department, technical committee, and budget allocation for research are critical steps toward effective implementation.

5.2.2 Health Policies on Performance of Universal Health Coverage in Kenya

The quantitative analysis results of this objective revealed that relationship between health policies with performance of Universal Health Coverage in Kenya was significant and positive both before moderation ($r = 0.122$, $p = 0.038$) and after moderation ($r = 0.386$, $p = 0.000$). Descriptive statistical results, however, revealed that there was uncertainty on whether the policies aimed at the regulation of the health sector to achieve Universal Health Coverage are adequate as indicated by most respondents (35%) who were neutral. However, most of the respondents (44%) agreed that the devolution of health services has increased the number of actors in UHC. Most of the respondents (43%) agreed that devolution of health services will improve the implementation of UHC policies. There was, nevertheless, indications that most of the healthcare MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs have not enhanced ability to collaborate with other healthcare MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs as a result of the policies as indicated by most of the respondents (46%) who disagreed. The

respondents were evenly split on whether policies on UHC have enabled them to strengthen partnerships with other financing MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs as indicated by 50% who either agreed or strongly agreed on one hand and 50% who were either neutral or disagreed.

Most of the respondents, however, agreed (35%) that there were transparent and inclusive processes in the national health policies, strategy, and plan that set a clear direction for the health sector. There are indications that strategic initiatives had been put in place to ensure that health authorities take responsibility for steering the entire health sector towards the performance of UHC as indicated by most of the respondents who agreed (27%). Further, it was evident that most of the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had deployed support systems for enabling work environments for health workers to achieve UHC as indicated by most of the respondents who agreed (41%). In addition, the findings show that there existed a strategic framework to enhance multi-sectorial involvement in UHC as indicated by the majority of the respondents (49%) who agreed. Overall, the findings from the quantitative analysis implied that there was uncertainty on whether health policy strategy had a considerable effect on the performance of Universal Health Coverage in Kenya.

Results from the qualitative data revealed that the capabilities ($i= 0.994$) of the devolved units to deliver on the UHC was the most relevant issue from the respondents' perspectives. The level of partnerships ($i= 0.373$) as well as the ability of the devolved units to implement the universal healthcare program ($i= 0.373$) were also main concerns for the respondents. The strategic initiatives as well as program implementation strategy also scored highly ($i = 0.248$) in relation to the realization of universal healthcare in the devolution context. All these constructs had high scoring in terms of criticality of Health Policies Strategy in the performance of UHC in Kenya. Hence, the qualitative data

highlights that the capabilities of devolved units to deliver Universal Health Coverage (UHC) are the most critical factor, followed by the level of partnerships and the implementation ability of these units. Strategic initiatives and program execution also play key roles in advancing UHC in Kenya.

5.2.3 National Health and Strategic Plans on Performance of Universal Health Coverage in Kenya

The quantitative analysis results of this objective revealed that there was a significant correlation between the National Health Strategic Plan and the performance of Universal Health Coverage in Kenya was significant before moderation with the coefficient ($r = 0.334$, $p = 0.000$), however, it was not significant in the moderated model ($r = -0.056$, $p = 0.451$). This implied that the National Health and Strategic Plan moderately influenced the performance of Universal Health Coverage probably owing to the implementation status. Results from the descriptive statistics revealed that most of the respondents (54%) agreed that their MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were working with the national health strategic plan to ensure improved health status of individuals, families, and communities.

The implication was that the majority of the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were conversant with the national health strategic plan and were working alongside it to benefit the community. Most respondents felt (41%) that through the national health strategic plan, the government was committed to defending its citizens against what threatens their health. The majority of the respondents (65%), however, thought that through the UHC, the government was effectively protecting its citizens against the financial consequences of ill-health. The findings also revealed that there was a view among most of the respondents (52%) that the government was committed to providing equitable access to people-centered care.

However, most of the respondents (68%) disagreed that the government was committed to ensuring good governance and leadership in the country's healthcare sector. This implied that there was uncertainty about the commitment of the government to ensure improved governance in the health sector. Further, most of the respondents (53%) agreed that the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs have set priorities for determining an appropriate framework to implement the initiative programs. In addition, the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were establishing sustainable processes for implementing the initiative programs as indicated by most (43%) of the respondents.

Among these processes was establishing appropriate frameworks to implement the initiative programs as indicated by most of the respondents, 38% who agreed and 8% strongly agreed. The findings also show that the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs carried out regular evaluations of their strategic plans because of the alignment of systematic processes and activities as well as observance of documentation principles as indicated by most of the respondents (43%) who agreed. The findings imply that the MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were conversant with the national health strategic plans and were working alongside it to benefit the community. Therefore, national health and strategic plans were seen as effective in the performance of Universal Health Coverage in Kenya.

Findings from the qualitative analysis revealed that purchasing ($i = 0.656$) of universal healthcare was the most relevant issue as far as National Health and Strategic Plans was concerned in the performance of UHC in the country. The other concerns that were rated as highly relevant were the level of configuration ($i = 0.492$) of the country's healthcare system for the provision of UHC owing to the demand for UHC ($i = 0.492$) and also, for improved healthcare services ($i = 0.328$). Additionally, licensing of other parties like

service providers ($i = 0.328$) and ensuring high compliance ($i = 0.328$) together with sealing loopholes ($i = 0.328$) were rated as important by the respondents. In addition, equity ($i = 0.328$) in the provision of universal healthcare was also rated as among the highly relevant issues that needed to be given more attention. The qualitative analysis highlights purchasing universal healthcare as the most critical factor for UHC performance, followed by system configuration, demand for UHC, and improved healthcare services. Licensing, compliance, sealing loopholes, and ensuring equity in healthcare provision were also identified as essential areas for attention and improvement.

5.2.4 Sustainable Health Financing Strategy on Performance of Universal Health Coverage in Kenya

Results from the quantitative analysis revealed that Sustainable Health Financing coefficient was significant before moderation ($r = 0.267$, $p = 0.000$) and also significant after moderation ($r = 0.286$, $p = 0.000$) which meant that the sustainable health financing strategy significantly influenced the performance of Universal Health Coverage in Kenya. Cumulatively, 55% of the respondents disagreed that the government was not efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all. However, there were indications that the government is strengthening and aligning PFM systems that determine how budgets are formulated, allocated, and executed with health financing functions and health system objectives as indicated by most of the respondents (42%) who agreed. Further, most respondents (47%) disagreed that efficient and sustainable financial policies have been put in place by the government to enhance universal health coverage.

There were also indications that not enough strategies have been put in place to raise revenues that can sustainably finance universal health coverage in Kenya as indicated by

most of the respondents (50%) of who disagreed. However, spending targets have been put in place for the health sector to ensure sustainable financing as implied by majority of the respondents (74%) who agreed. Further, 58% of the respondents disagreed with the view that health coverage schemes have increased access to health services for all citizens. The respondents, however, indicated that for the insured individuals in the country, health coverage schemes assure the availability of quality health services as indicated by 48% who agreed. The findings also show that monthly premium improves personal health-seeking behavior among the citizens as indicated by most respondents (46%) who agreed. The findings showed that the government was not efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all.

Results from the qualitative analysis revealed that the performance of universal healthcare program was largely viewed in terms of capitation ($i = 0.656$). Out-of-pocket payment ($i = 0.820$) also scored as the second most relevant item while compulsory prepayment ($i = 0.656$) and subscription ($i = 0.656$) were also ranked as among the most relevant issues affecting the implementation of universal healthcare. The affordability of the healthcare services ($i = 0.492$) and subsidized public healthcare ($i = 0.492$) were also rated as among the most relevant issues. However, the state of the public healthcare facilities ($i = 0.492$) and their ability to provide a range of services ($i = 0.492$) in accordance to the UHC was also a cause for concern. Thus, the qualitative analysis highlights key factors influencing the performance of universal healthcare, with capitation and out-of-pocket payments identified as central issues. Other significant concerns include compulsory prepayment, subscription, affordability, and subsidized healthcare. The condition of public facilities and their service capacity were also noted as critical challenges.

5.2.5 Environmental Dynamism on Performance of Universal Health Coverage in Kenya

Results from the quantitative analysis revealed that Environmental Dynamism significantly interacted with three of the four independent variables, that is; Health Policies ($r = -0.341$; $p = 0.000$), Health Strategic Plan ($r = 1.057$; $p = 0.000$), and Sustainable Financing ($r = -0.422$; $p = 0.000$), thus satisfying the explanatory condition for it being a moderating variable. The change in the Adjusted R-Square from 0.460 – 0.634 was also significant ($p = 0.000$). From the descriptive statistical analysis, there were strong indications that the changing healthcare market dynamics had made delivery of UHC uncertain by most of the respondents (63%) who agreed. There were also strong indications that a lot of unforeseen changes were being witnessed in the healthcare sector that affected the UHC's performance as indicated by most respondents who agreed (57%). Respondents indicated that their MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had experienced some issues of volatility of the political climate that affected the delivery of UHC as shown by most respondents (52%) who agreed. Most respondents disagreed (63%) that their MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had experienced a stable health policy environment for supporting the delivery of UHC. Further, respondents agreed (62%) that MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs had encountered financial challenges that affected the performance of UHC. Respondents also strongly agreed (38%) that encountered social challenges that affected the performance the performance of UHC. These findings imply that environmental dynamism was important in the performance of Universal Health Coverage in Kenya.

From the qualitative analysis findings, it was evident that environmental dynamism effects such as uncertainty in policy continuity ($i = 524$), lack of sustainable financing for

the program ($i = 449$) affected the easy accessibility of the program ($i = 449$) among the patients. It also affected the quality and timely provision of healthcare services in the program. Further, the uncertainty mean that the healthcare MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs were not yet ready to reconfigure and have a coordinated and supportive culture towards the implementation of the program meant. In summation, the qualitative analysis revealed that environmental dynamism, particularly policy uncertainty and lack of sustainable financing, hindered the accessibility, quality, and timeliness of healthcare services. Additionally, the healthcare stakeholders, including MoH, KEMSA, CHMTs, and others, were unprepared to adapt and coordinate effectively for the program's successful implementation. Therefore, before moderation, Health Strategic Plan and Sustainable Health Financing were the most critical drivers of UHC performance. The model reflects a relatively stable environment where these variables strongly influence outcomes. After Moderation, Environmental Dynamism becomes an influential variable, significantly altering the impact of other factors. Adaptability and responsiveness to dynamic conditions are crucial for improving UHC performance.

5.3 Conclusions

In conclusion, the study demonstrates that research and development (R&D) strategies have a significant, though context-dependent, impact on the performance of Universal Health Coverage (UHC) in Kenya, as shown by their relevance in bivariate correlation and moderated models ($r = 0.374$; $p = 0.000$). The findings align with the Theory of Reasoned Action (TRA), which emphasizes that attitudes and perceived norms guide behavior; here, the uncertainty (40%) about public support for health research suggests a need for enhanced trust to influence positive actions. Despite this, improved research quality (42%) and strong compliance with research recommendations (46%) were

observed, indicating progress. The Ministry of Health (MoH) and associated bodies are actively developing local capacities for research, adapting to technological changes, and facilitating training. Qualitative results underscored the importance of integrating technology in health management, with many respondents recognizing the need for better training and MoH, KEMSA, CHMTs, CSOs, Public Hospitals, and IDFs support. This highlights the crucial role of R&D in healthcare management. This research generates new knowledge by identifying gaps in medical workflow reengineering and the necessity for institutionalized research departments and dedicated budgets in healthcare to sustain progress and adaptability in UHC initiatives.

The study also concludes that health policies have a significant positive relationship with UHC performance in Kenya, with stronger correlations observed after moderation ($r = 0.386$, $p = 0.000$). Despite this, there is uncertainty about the adequacy of existing policies, as 35% of respondents remained neutral on their effectiveness. Theoretical links to Institutional Theory suggest that regulatory frameworks and institutional environments shape UHC outcomes, influencing policy development and actor behavior. New knowledge generated includes insights into the complexities of policy impacts: devolution has increased stakeholder involvement, yet collaboration among key institutions remains limited, with 46% of respondents expressing doubts about partnership enhancements. Strategic frameworks for multi-sectorial participation and support systems for health workers are evident, indicating institutional alignment efforts. However, qualitative data highlights that devolved units' capabilities and partnerships are crucial for successful UHC, underlining the importance of effective local governance and institutional capacity in achieving health policy goals.

Further, the study's quantitative analysis highlights a significant positive correlation between Kenya's National Health Strategic Plan and Universal Health Coverage (UHC) performance before moderation ($r = 0.334$, $p = 0.000$), but not in the moderated model ($r = -0.056$, $p = 0.451$), suggesting a moderate influence likely tied to implementation status. Respondents largely agreed that key health agencies were aligned with the strategic plan, improving community health outcomes. While there was recognition of the government's efforts in financial protection (65%) and equitable care (52%), governance commitment remained uncertain (68%). This aligns with the Strategic Balancing Theory, as stakeholders balance competing demands—access, quality, and governance—within the healthcare sector. New knowledge generated includes insights on purchasing, healthcare system configuration, and equitable care as pivotal to UHC's success, emphasizing the need for clear frameworks and compliance. The research underscores the importance of systematic processes and regular evaluations by health institutions for strategic plan alignment, critical for achieving effective UHC.

The study's quantitative analysis highlighted the positive impact of Sustainable Health Financing (SHF) on Universal Health Coverage (UHC) in Kenya, showing a significant relationship both before ($r = 0.267$, $p = 0.000$) and after moderation ($r = 0.286$, $p = 0.000$). This aligns with the Social Health Insurance (SHI) model's focus on sustainable funding to ensure equitable access and financial protection. Yet, 55% of respondents felt the government inefficiently used funds to guarantee equitable, quality care, and 50% saw inadequate strategies for sustainable revenue generation. Despite this, spending targets are in place, with 74% acknowledging efforts toward sustainable health financing. Qualitative findings indicated concerns around funding mechanisms like out-of-pocket payments and capitation, as well as healthcare affordability and facility quality. New knowledge emphasizes the challenges in Kenya's healthcare system—particularly the

alignment of Public Financial Management (PFM) with health objectives—and underscores the role of insurance schemes in improving healthcare access and personal health behaviors. In conclusion, the qualitative analysis highlights key factors influencing the performance of universal healthcare, with capitation and out-of-pocket payments identified as central issues. Other significant concerns include compulsory prepayment, subscription, affordability, and subsidized healthcare. The condition of public facilities and their service capacity were also noted as critical challenges.

The study finally reveals that Environmental Dynamism significantly impacts Universal Health Coverage (UHC) in Kenya, serving as a moderating variable for factors like Health Policies, Strategic Plans, and Sustainable Financing, with statistical significance ($p = 0.000$). A notable change in the Adjusted R-Square from 0.460 to 0.634 suggests a considerable moderating influence. The findings align with conflict theory, highlighting power struggles and resource competition as key drivers of healthcare inequities. Respondents reported market volatility, political instability, and inadequate policy continuity, resulting in UHC uncertainties. Most respondents (63%) cited an unstable policy environment, and 62% noted financial challenges impacting UHC performance. Qualitative insights confirmed that factors like unpredictable policy changes and insufficient funding reduced healthcare access and quality. This study contributes to understanding how dynamic environments exacerbate conflicts in health service provision, revealing the need for coordinated efforts to stabilize healthcare systems, ensure policy continuity, and secure sustainable financing for effective UHC implementation.

The strategic implications for implementing the Social Health Authority (SHA) in Kenya hinge on addressing the systemic gaps highlighted in this study in relation to the UHC pilot program. Establishing SHA offers an opportunity to centralize oversight, harmonize

health financing, and align strategic initiatives, such as sustainable funding and policy coherence, with UHC goals. By incorporating research-backed strategies, SHA can mitigate challenges like resource inadequacies and unclear directives, ensuring equitable access to healthcare. Furthermore, its framework can adapt to environmental dynamism, enabling responsiveness to regional disparities. These findings will empower stakeholders—governments, financiers, and providers—to refine UHC strategies, bolster sustainability, and enhance healthcare delivery nationwide.

5.4 Recommendations

5.4.1 Recommendation for Policy

Following the findings and conclusions above, the study makes the recommendations;

The study underscores the importance of R&D in driving UHC progress in Kenya. To enhance the impact of research on healthcare performance, policies should focus on improving public trust in health research, expanding research capacities, integrating technology, ensuring compliance with research-based practices, fostering inter-institutional collaborations, and investing in workforce development. These actions will help Kenya build a robust and adaptable healthcare system capable of achieving sustainable UHC.

To improve UHC in Kenya, policy effectiveness must be enhanced through clearer frameworks and better communication. Strengthening local governance and devolved units is critical for tailored solutions. Promoting multi-sectorial collaboration and supporting health workers through training, resources, and incentives will bolster the workforce. Additionally, leveraging institutional frameworks and improving monitoring and evaluation systems will ensure that policies are responsive and lead to better health outcomes across the country.

To enhance UHC in Kenya, the government should focus on strengthening the implementation of the National Health Strategic Plan, improving governance structures, and ensuring financial protection and equity in healthcare. Regular evaluations and systematic processes are key to aligning health institutions with strategic goals. Additionally, optimizing healthcare system configuration and enforcing clear compliance frameworks will improve access, quality, and sustainability, ensuring UHC benefits all citizens.

Concerning sustainable health financing, the study recommends that to strengthen UHC in Kenya, the government should improve health financing efficiency, expand health insurance coverage, and reduce out-of-pocket payments. Strengthening Public Financial Management (PFM) and aligning it with health objectives is crucial. Investments in healthcare facilities, addressing inefficiencies in fund use, and ensuring affordable, accessible care, especially for low-income populations, are key. Expanding insurance models and ensuring quality care in public facilities will also enhance healthcare equity and access.

Finally, to address the complex challenges of environmental dynamism, financial constraints, and policy instability that hinder the successful implementation of UHC in Kenya, a multifaceted approach is needed. Policies should focus on ensuring stability, financial sustainability, and inclusivity while creating mechanisms for adaptation to change. By strengthening governance, promoting public engagement, and investing in resilience, Kenya can enhance its efforts to achieve effective and equitable UHC for all its citizens.

5.4.2 Recommendations for Future Studies

The study found that environmental dynamism significantly moderated the strategic initiatives and the performance of the UHC program in Kenya. However, an in depth analysis is still needed to establish further the links between policy dynamics and uncertainty on the performance of the UHC post pilot phase in Kenya. There is also need to establish how economic uncertainty affects the performance of the UHC post pilot phase in Kenya. Further, it is also important to explore the implications of sociopolitical dynamics on the the performance of the UHC post pilot phase in Kenya. In addition, there is need to further examine the strategies used in alignment of health service delivery and performance of Universal Health Coverage in other contexts through a cross country study. This is meant to enable the UHC implementers draw important lessons on the best practices and alignment strategies that can work in the Kenyan context in future. Finally, future studies in this area should also involve the beneficiaries especially in the informal sector so as to fully understand their perception on UHC and develop models around their capabilities for subscription.

REFERENCES

- Abeyasinghe, T., Himani, & Lim, J. (2011). Equity in Singapore's Healthcare Financing. In *Challenges for the Singapore Economy after the Global Financial Crisis* (pp. 119-138).
- Abihiro, G., & McIntyre, D. (2012). Achieving universal health care coverage: Current debates in Ghana on covering those outside the formal sector. *BMC International Health and Human Rights*, 12(1)43-52.
- Acharya, M. (2015). Universal Health Coverage as a Distinct Sustainable Development Goals Target: Dispelling Doubts and Underlining Implications. *Frontiers in Public Health*, 3.
- Adama, H. E., Popoola, O. A., Okeke, C. D., & Akinoso, A. E. (2024). Theoretical frameworks supporting IT and business strategy alignment for sustained competitive advantage. *International Journal of Management & Entrepreneurship Research*, 6(4), 1273-1287.
- Adebayo, E., Uthman, O., Wiysonge, C., Stern, E., Lamont, K., & Ataguba, J. (2015). A systematic review of factors that affect uptake of community-based health insurance in low-income and middle-income countries. *BMC Health Services Research*, 15(1), 67-79.
- Agustina, R., Dartanto, T., Sitompul, R., Susiloretni, K. A., Achadi, E. L., Taher, A., ... & Khusun, H. (2019). Universal health coverage in Indonesia: concept, progress, and challenges. *The Lancet*, 393(10166), 75-102.
- Ahmed, E. H. (2015). Significance Test in Meta-analysis Approach: A Theoretical Review. *American Journal of Theoretical and Applied Statistics*, 4(6), 630-655.
- Ahmed, S., Hasan, M. Z., MacLennan, M., Dorin, F., Ahmed, M. W., Hasan, M. M., ... & Khan, J. A. (2019). Measuring the efficiency of health systems in Asia: a data envelopment analysis. *BMJ open*, 9(3), e022155.
- Aikins, M., Tabong, P. T. N., Salari, P., Tediosi, F., Asenso-Boadi, F. M., & Akweongo, P. (2021). Positioning the National Health Insurance for financial sustainability and Universal Health Coverage in Ghana: A qualitative study among key stakeholders. *Plos one*, 16(6), e0253109.
- Akande, T. M., Salaudeen, A., & Babatunde, O. (2014). The effects of national health insurance scheme on utilization of health services at Unilorin Teaching Hospital staff clinic, Ilorin, Nigeria. *International Journal for Equity in Health*, 10(22), 33 – 46.
- Akgün, A. E., Keskin, H., & Byrne, J. (2008). The moderating role of environmental dynamism between firm emotional capability and performance. *Journal of Organizational Change Management*, 21(2), 230-252.
- Akhnif, E. H., Hachri, H., Belmadani, A., Mataria, A., & Bigdeli, M. (2020). Policy dialogue and participation: a new way of crafting a national health financing strategy in Morocco. *Health Research Policy and Systems*, 18, 1-12.
- Alawode, G. O., & Adewole, D. A. (2021). Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: a qualitative study among sub-national level actors, healthcare and insurance providers. *BMC Public Health*, 21, 1-12.

- Alemayehu, Y. K., Dessie, E., Medhin, G., Birhanu, N., Hotchkiss, D. R., Teklu, A. M., & Kiros, M. (2023). The impact of community-based health insurance on health service utilization and financial risk protection in Ethiopia. *BMC Health Services Research*, 23(1), 67.
- Amoah, P. A., & Phillips, D. R. (2018). Health literacy and health: rethinking the strategies for universal health coverage in Ghana. *Public health*, 159, 40-49.
- Amos, O. A., Adebisi, Y. A., Bamisaiye, A., Olayemi, A. H., Ilesanmi, E. B., Micheal, A. I., ... & Lucero Priso III, D. E. (2021). COVID- 19 and progress towards achieving universal health coverage in Africa: A case of Nigeria. *The International Journal of Health Planning and Management*, 36(5), 1417-1422.
- Anangwe, A. (2018). Health sector reforms in Kenya: User fees. *Governing Health Systems in Africa*, 12:29
- Andrews, K. R. (1971). *The Concept of Corporate Strategy*. Dow Jones-Irwin, Homewood, IL
- Angell, M., &Relman, A. S. (2002). Patents, profits & American medicine: conflicts of interest in the testing & marketing of new drugs. *Daedalus*, 131(2), 102-111.
- Anheier, H. K. (2014). *Nonprofit organizations: Theory, management, policy*. Routledge.
- Ansell, C., & Trondal, J. (2018). Governing turbulence: An organizational-institutional agenda. *Perspectives on public management and governance*, 1(1), 43-57.
- Anthonyraj, R. (2016). A health financing reform solution for Kenya: Expansion of National Hospital Insurance Fund (NHIF). *Global Journal of Medicine and Public Health*, 5(4), 1 – 4.
- Ara, I., Zehravi, M., Maqbool, M., & Gani, I. (2022). A review of recent developments and future challenges in the performance of Universal Health coverage policy framework in some countries. *Journal of Pharmaceutical Research & Reports*. SRC/JPRSR-131. DOI: doi. org/10.47363/JPRSR/2022 (3), 127.
- Aregbeshola, B. S., & Khan, S. M. (2018). Out-of-pocket payments, catastrophic health expenditure and poverty among households in Nigeria 2010. *International journal of health policy and management*, 7(9), 798.
- Arias, F. G. (2012). *The research project. Introduction to scientific methodology*. 6th. Fidiás G. Arias Odón.
- Arora, V., Moriates, C., & Shah, N. (2015). The challenge of understanding health care costs and charges. *AMA journal of ethics*, 17(11), 1046-1052.
- Ashoff, G., & Klingebiel, S. (2014). Transformation of a policy area: Development policy is in a systemic crisis and faces the challenge of a more complex system environment. *German Development Institute Discussion Paper*, (9).
- Aso, T. (2017). The crucial role of the finance ministry in achieving universal health coverage. *The Lancet*, 390(10111), 2415-2417.
- Atun, R., De Andrade, L. O. M., Almeida, G., Cotlear, D., Dmytraczenko, T., Frenz, P. & De Paula, J. B. (2015). Health-system reform and universal health coverage in Latin America. *The Lancet*, 5(4), 1230-1247.
- Avedoff, W. (2007). What Should a Country Spend on Health Care? *Health Affairs*, 26, (4), 962–70.

- Awoonor-Williams, J. K., Apanga, S., Bawah, A. A., Phillips, J. F., & Kachur, P. S. (2022). Using health systems and policy research to achieve universal health coverage in Ghana. *Global Health: Science and Practice, 10*(Supplement 1).
- Awoonor-Williams, J. K., Apanga, S., Bawah, A. A., Phillips, J. F., & Kachur, P. S. (2022). Using health systems and policy research to achieve universal health coverage in Ghana. *Global Health: Science and Practice, 10*(Supplement 1).
- Baltussen, R., Jansen, M. P., Mikkelsen, E., Tromp, N., Hontelez, J., Bijlmakers, L., & Van der Wilt, G. J. (2016). Priority setting for universal health coverage: we need evidence-informed deliberative processes, not just more evidence on cost-effectiveness. *International journal of health policy and management, 5*(11), 615.
- Baral, R., & Dieleman, J. (2015). Framework for measuring effective coverage to monitor progress towards universal health coverage. *Annals of Global Health, 81*(1), 64-77.
- Barasa, E. W., Cleary, S., English, M., & Molyneux, S. (2016). The influence of power and actor relations on priority setting and resource allocation practices at the hospital level in Kenya: a case study. *BMC Health Services Research, 16*(1), 1-13.
- Barasa, E., Rogo, K., Mwaura, N., & Chuma, J. (2018). Kenya National Hospital Insurance Fund Reforms: implications and lessons for universal health coverage. *Health Systems & Reform, 4*(4), 346-361.
- Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2011). The future of resource-based theory: revitalization or decline? *Journal of Management, 37*(5), 1299-1315.
- Baum, F. E., Bégin, M., Houweling, T. A., & Taylor, S. (2009). Changes not for the fainthearted: reorienting health care systems toward health equity through action on the social determinants of health. *American journal of public health, 99*(11), 1967-1974.
- Beck, T. L., Le, T. K., Henry-Okafor, Q., & Shah, M. K. (2017). Medical care for undocumented immigrants: national and international issues. *Primary care: Clinics in office practice, 44*(1), 1-13.
- Behera, D. K., & Dash, U. (2018). The impact of macroeconomic policies on the growth of public health expenditure: An empirical assessment from the Indian states. *Cogent Economics & Finance, 6*(1), 1435 - 1443.
- Beresniak, A., Schmidt, A., Dupont, D., Sundgren, M., Kalra, D., & De Moor, G. J. (2015). Improving the performance of clinical research: development and interest of electronic health records. *BioMed research international, 2015*.
- Bergen, N., Ruckert, A., & Labonté, R. (2019). Monitoring frameworks for universal health coverage: what about high-income countries? *International Journal of Health Policy and Management, 8*(7), 387.
- Blumenthal, D., & Hsiao, W. (2005). Privatization and its discontents – the evolving Chinese health care system. *N Engl J Med; 353*:1165–70.
- Bogdan, R., & Biklen, S. (2007). *Qualitative research for education* (5th ed.). New York, NY: Pearson International.

- Borgonovi, E., & Company, A. (2013). Sustaining universal health coverage: the interaction of social, political, and economic sustainability. *Value in health*, 16(1), S34-S38.
- Boyle S. (2011). United Kingdom (England). Health system review. *Health systems in transition*, 13(1):1-483.
- Brache, A. (2006). *Implementation*. New York: McGraw-Hill.
- Bresser, C., and Bishop G.(2003). Strategic responses to market changes. *International Journal of Medical Marketing*, 2 (1):81-85.
- Bristol, N. (2014). Global action toward universal health coverage. *Washington DC: Center for Strategic and International Studies*.
- Bryant-Lukosius D, Valaitis R, Martin-Misener R, Donald F, Morán Peña L, Brousseau L. (2017). Advanced Practice Nursing: A Strategy for Achieving Universal Health Coverage and Universal Access to Health. *Rev. Latino-Am. Enfermagem*.25:e2826. DOI: <http://dx.doi.org/10.1590/1518-8345.1677.2826>.
- Büchner, V., Hinz, V., & Schreyögg, J. (2014). Health systems: changes in hospital efficiency and profitability. *Health Care Management Science*, 19(2), 130-143.
- Buguzi, S. (2024). Financing Tanzania's universal health insurance. *The Lancet*, 403(10424), 340.
- Bultman, L., & Kingsley, K. (2014). *Medical Cannabis Primer for Healthcare Professionals*. Create Space Independent Publishing Platform.
- Bump, J. B. (2010). The Long Road to Universal Health Coverage: A Century of Lessons for Development Strategy. *The Lancet*.
- Buse, K., Mays, N., Colombini, M., Fraser, A., Khan, M., & Walls, H. (2023). *Making Health Policy*, 3e. McGraw Hill.
- Busse, R., Blümel, M., Knieps, F., & Bärnighausen, T. (2017). Statutory health insurance in Germany: a health system shaped by 135 years of solidarity, self-governance, and competition. *The Lancet*, 390(10097), 882-897.
- Carrin G.(2012). Health financing reform in Kenya—assessing the social health insurance proposal, *Kenya Medical Journal*.
- Carrin, G., Ron, A., & Hui, Y. (2009). The reform of the rural cooperative medical system in the People's Republic of China: interim experience in 14 pilot counties. *SocSci Med*. 48 (7), 961–72.
- Cashin, C., Bloom, D., Sparkes, S., Barry, H., Kutzin, J., O'Dougherty, S., & World Health Organization. (2017). *Aligning public financial management and health financing: sustaining progress toward universal health coverage* (No. WHO/HIS/HGF/ HFWorkingPaper/17.4). World Health Organization.
- Cassiani S. H. (2014). Strategy for universal access to health and universal health coverage and the contribution of the International Nursing Networks. *Revista latino-americana de enfermagem*, 22(6), 891–892. <https://doi.org/10.1590/0104-1169.0000.2502>
- Chan, H. K., Yee, R. W., Dai, J., & Lim, M. K. (2016). The moderating effect of environmental dynamism on green product innovation and performance. *International journal of production economics*, 181, 384-391.

- Chang, H. J. (2011). Institutions and economic development: theory, policy, and history. *Journal of institutional economics*, 7(4), 473-498.
- Chen, S., Cao, Z., Wang, Z., & Wang, C. (2023). The challenging road to universal health coverage. *The Lancet Global Health*, 11(10), e1490-e1491.
- Chernet, M. (2022). *Exploring The Facilitators of Community-Based Health Insurance Scheme Bankruptcy and its Magnitude in North Mecha District, West Gojjam Zone, Amhara, Ethiopia, 2021* (Doctoral dissertation).
- Chuma, J., & Okungu, V. (2011). Viewing the Kenyan health system through an equity lens: Implications for universal coverage. *International Journal for Equity in Health*, 10(22), 14 – 25
- Clark, J. (2014). Medicalization of global health 4: the universal health coverage campaign and the medicalization of global health. *Global Health Action*, 7(1), 240 - 254.
- Cochrane, G., Morgan Jones, M., Marjanovic, S., MacLure, C., Varnai, P., Jongh, T. D., & Nooijen, A. (2017). Evaluation of the Impact of the European Union's Research Funding for Poverty-Related and Neglected Diseases. *The Lancet*.
- Collins, R. (1990). Conflict theory and the advance of macro-historical sociology. *Frontiers of social theory: The new syntheses*, 68-87.
- Cooper, D. R., & Schindler, P. S. (2007). *Business Research Methods.*, New York: McGraw-Hill Education Inc.
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business research methods*. New York: McGraw-Hill Irwin.
- Covin, J. G., Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10 (1), 75-87.
- Cylus, J., & Papanicolas, I. (2015). An analysis of perceived access to health care in Europe: How universal is universal coverage? *Health policy*, 119(9), 1133-1144.
- D'Aveni, R. A. (1994). *Hypercompetition: Managing the Dynamics of Strategic Manoeuvring*. The Free Press, New York.
- Dahlgren G. (2011). Strategies for health financing in Kenya – the difficult birth of a new policy. *Scand J Soc Med*, 46(1), 67-81.
- Darrudi, A., Khoonsari, M. H. K., & Tajvar, M. (2022). Challenges to achieving universal health coverage throughout the world: a systematic review. *Journal of preventive medicine and public health*, 55(2), 125.
- Darrudi, A., Khoonsari, M. H. K., & Tajvar, M. (2022). Challenges to achieving universal health coverage throughout the world: a systematic review. *Journal of preventive medicine and public health*, 55(2), 125.
- Day, C., & Zondi, T. (2019). Measuring National Health Insurance: towards Universal Health Coverage in South Africa. *South African Health Review*, 2019(1), 55-68.
- Debroy, B., & Kumar, A. (2015). The road to universal health coverage in India. *The Lancet*, 386(10011), e56-e57.
- Deephouse, D. L. (1999). To be different, or to be the same? It questions (and theory) of strategic balance. *Strategic Management Journal*, 20(2), 147-166.

- Deephouse, D. L. (1999). To be different, or to be the same? It questions (and theory) of strategic balance. *Strategic Management Journal*, 20(2), 147-166.
- Deloitte, C. L. (2013). *A Strategic Review of NHIF and Market Assessment of Private Prepaid Health Schemes*. Nairobi: Ministry of Medical Services.
- Derakhshani, N., Doshmangir, L., Ahmadi, A., Fakhri, A., Sadeghi-Bazargani, H., & Gordeev, V. S. (2020). Monitoring process barriers and enablers towards universal health coverage within the sustainable development goals: a systematic review and content analysis. *ClinicoEconomics and Outcomes Research*, 459-472.
- Dess, G. G., Beard, D.W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29 (1), 52-73.
- Devi, S. (2018). Universal health coverage law approved in Egypt. *The Lancet*, 391(10117), 194.
- Dieleman, J. L., Sadat, N., Chang, A. Y., Fullman, N., Abbafati, C., Acharya, P., & Murray, C. J. (2018). Trends in future health financing and coverage: future health spending and universal health coverage in 188 countries, 2016–40. *The Lancet*, 391(10132), 1783-1798.
- Dietrich, C. F., & Riemer-Hommel, P. (2012). Challenges for the German health care system. *Zeitschrift für Gastroenterologie*, 50(06), 557-572.
- Elmer, D., Endrei, D., Németh, N., Horváth, L., Pónusz, R., Kívés, Z., ... & Boncz, I. (2022). Changes in the number of physicians and hospital bed capacity in Europe. *Value in Health Regional Issues*, 32, 102-108.
- Endalamaw, A., Gilks, C. F., Ambaw, F., & Assefa, Y. (2022). The universality of universal health coverage: a scoping review. *PloS one*, 17(8), e0269507.
- Endalamaw, A., Mengistu, T. S., Khatri, R. B., Wolka, E., Erku, D., Zewdie, A., & Assefa, Y. (2024). Universal Health Coverage—Exploring the What, How, and Why Using Realistic Review. *medRxiv*, 2024-05.
- Eze, P., Ilechukwu, S., & Lawani, L. O. (2023). Impact of community-based health insurance in low-and middle-income countries: A systematic review and meta-analysis. *PLoS One*, 18(6), e0287600.
- Ezeoke, O.P., Onwujekwe, O.E., & Uzochukwu, B.S. (2012). Towards universal coverage: Examining costs of illness, payment, and coping strategies to different population groups in Southeast Nigeria. *Am. JTrop Med Hyg*, 86 (1), 52–57.
- Fan, V., & Savedoff, W. (2014). The Health Financing Transition: A Conceptual Framework and Empirical Evidence. *SSRN Electronic Journal*.
- Flick, U. (2018). *An introduction to qualitative research*. Sage Publications Limited.
- Frederickson, H. G., Smith, K., Larimer, C., & Licari, M. (2016). Public institutional theory. *The Public Administration Theory Primer. Third edition*, 66-94.
- Fritz, M. S., & Arthur, A. M. (2017). Moderator variables. In *Oxford research encyclopedia of psychology*.

- Garcia-Zamora, E., Gonzalez-Benito, O., & Munoz-Gallego, P. A. (2013). Organizational and environmental factors as moderators of the relationship between multidimensional innovation and performance. *Innovation*, 15(2), 224-244.
- Garg, V. K., Walters, B. A., & Priem, R.L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*, 24(8), 725–744.
- Garson, G. D. (2012). Testing statistical assumptions. *Asheboro, NC: Statistical Associates Publishing*.
- Gaudette, É. (2014). Health care demand and impact of policies in a congested public system.
- GHANA: Supplementary Budget. (2011). *Africa Research Bulletin: Economic, Financial and Technical Series*, 48(7), 19190B-19191A.
- Ghebreyesus, T.A (2017). Together on the road to universal health coverage: a call to action. Geneva: World Health Organization; 2017 (WHO/HIS/HGF/17.1). License: CC BY-NC-SA 3.0 IGO.
- Ghebreyesus, T.A. (2017). All roads lead to universal health coverage. *The Lancet Global Health*, 5(9), e839-e840.
- Gida, T. N. (2022). Effectiveness of Community-Based Health Insurance in Ethiopia: Challenges and Prospects. *Harla Journal of Sustainable Development In Business and Economics*, 1(1), 63-80.
- Gilardino, R. E., Valanzasca, P., & Rifkin, S. B. (2022). Has Latin America achieved universal health coverage yet? Lessons from four countries. *Archives of Public Health*, 80(1), 1-11.
- Ginter, P. M., Duncan, W. J., & Swayne, L. E. (2018). *The strategic management of health care organizations*. John Wiley & Sons.
- Giovanella, L., Mendonça, M. H. M. D., Buss, P. M., Fleury, S., Gadelha, C. A. G., Galvão, L. A. C., & Santos, R. F. D. (2019). From Alma-Ata to Astana. Primary health care and universal health systems: an inseparable commitment and a fundamental human right. *Cadernos de Saúde Pública*, 35, e00012219.
- Gitahi, G.(2017). Africa in the era of sustainable development [https:// www.elsevier.com/connect/ africa-in-the-era-of-sustainable-development](https://www.elsevier.com/connect/africa-in-the-era-of-sustainable-development)
- Gitobu, C. M., Gichangi, P. B., & Mwanda, W. O. (2018). The effect of Kenya’s free maternal health care policy on the utilization of health facility delivery services and maternal and neonatal mortality in public health facilities. *BMC pregnancy and childbirth*, 18(1), 77.
- Glonti, K., Gordeev, V.S., & Goryakin, Y. (2015). A systematic review on health resilience to economic crises. *PLoS One* 2015;10:e0123117
- GoK (2012) Kenya National Health Sector Strategic Plan (KHSSP) III, Government Printers, Nairobi.
- GOK (2016). Assessment of Innovative Strategies on Service Delivery at the National Hospital Insurance Fund Nakuru, Kenya. *International Journal of Science And Research (IJSR)*, 5(4), 1354-1362.

- Gong, T.-J., Yu, C.-M. J., & Huang, K.-F. (2021). Strategic similarity and firm performance: Multiple replications of Deephouse (1999). *Strategic Organization*, 19(2), 207-236. <https://doi.org/10.1177/1476127019890342>
- Goudge, J., Harris, B., Nxumalo, N., Chersich, M., Alaba, O., Govender, V., & Chersich, M. (2017). Can social health insurance assist on the path towards universal coverage? Insights from a cross-sectional survey of members of the government employee insurance scheme in South Africa. *Health Systems And Policy Research*, 04(01).
- Govender, K., Girdwood, S., Letswalo, D., Long, L., Meyer-Rath, G., & Miot, J. (2021). Primary healthcare seeking behaviour of low-income patients across the public and private health sectors in South Africa. *BMC Public Health*, 21, 1-10.
- Graham, K. E., Chorzempa, H. L., Valentine, P. A., & Magnan, J. (2012). Evaluating health research impact: Development and implementation of the Alberta Innovates–Health Solutions impact framework. *Research Evaluation*, 21(5), 354-367.
- Greenwood, R., Hinings, C. R., & Whetten, D. (2014). Rethinking institutions and organizations. *Journal of Management Studies*, 51(7), 1206-1220.
- Greer, S. L., & Méndez, C. A. (2015). Universal health coverage: a political struggle and governance challenge. *American journal of public health*, 105(S5), S637-S639.
- Gupta, A. (2008). Prescription for change. *The Wall Street Journal*, 6.
- Habte, A., Tamene, A., Ejajo, T., Dessu, S., Endale, F., Gizachew, A., & Sulamo, D. (2022). Towards universal health coverage: The level and determinants of enrollment in the Community-Based Health Insurance (CBHI) scheme in Ethiopia: A systematic review and meta-analysis. *PloS one*, 17(8), e0272959.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*, 6th Edition. Prentice-Hall, Englewood Cliffs, NJ.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. *Education+ Training*.
- Handayani, W., & Pendrian, O. (2023). The Evaluation of the Impact of Implementing Organizational Culture on Employee Innovative Behavior. *International Journal of Law, Policy, and Governance*, 2(2), 49-64.
- Hauck, K., & Smith, P. C. (2015). The politics of priority setting in health: a political economy perspective. *Center for Global Development Working Paper*, (414).
- Hawkes, N. (2013). Research into universal health coverage rises despite economic downturn, report finds. *BMJ*, 347 (1) 144-144.
- Heller, P. S. (2006). The prospects of creating ‘fiscal space’ for the health sector. *Health Policy and Planning*, 21(2), 75-79.
- Hilal, A. H., & Alabri, S. S. (2013). Using NVivo for data analysis in qualitative research. *International interdisciplinary journal of education*, 2(2), 181-186.
- Hitt, M.A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Executive*, 12 (4), 22-42.

- Ho, C. J., Khalid, H., Skead, K., & Wong, J. (2022). The politics of universal health coverage. *The Lancet*, 399(10340), 2066-2074.
- Hong, Y., & Park, K. M. (2021). Striking a Balance During Economic Crisis: An Empirical Application of Strategic Balance Theory. In *Academy of Management Proceedings* (Vol. 2021, No. 1, p. 13193). Briarcliff Manor, NY 10510: Academy of Management.
- Huang, K. P., & Wang, K. Y. (2013). The moderating effect of social capital and environmental dynamism on the link between entrepreneurial orientation and resource acquisition. *Quality & Quantity*, 47, 1617-1628.
- Hughes, A. S. (2016). Mixed methods research. *APS Observer*, 29(5).
- Huzair, F., & Borda-Rodriguez, A. (2012). Challenges for the Application and Development of Omics Health Technologies in Developing Countries. *Drug Development Research*, 73(7), 447-451.
- Ifeagwu, S. C., Yang, J. C., Parkes-Ratanshi, R., & Brayne, C. (2021). Health financing for universal health coverage in Sub-Saharan Africa: a systematic review. *Global health research and policy*, 6(1), 1-9.
- Ilinca, S., Di Giorgio, L., Salari, P., & Chuma, J. (2019). Socio-economic inequality and inequity in use of health care services in Kenya: evidence from the fourth Kenya household health expenditure and utilization survey. *International Journal for Equity in Health*, 18(1), 196.
- Israel, G. D. (2009). *Determining Sample Size*. University of Florida IFAS extension.
- Jakovljevic, M., & Getzen, T. E. (2016). Growth of global health spending share in low and middle-income countries. *Frontiers in pharmacology*, 7, 21.
- Jamison, D. T., Alwan, A., Mock, C. N., Nugent, R., Watkins, D., Adeyi, O., ... & Binagwaho, A. (2017). Universal health coverage and intersectoral action for health: key messages from Disease Control Priorities. *The Lancet*.
- Jaramillo, F., & Chatterjee, S. (2019). NHIF Reform Critical to Affordable Health For All in Kenya. *Inter Press Service*
- Järvelin, J. (2012). Health Care Systems in Transition. The European Observatory on Health Care Systems. Retrieved February 25, 2019.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53-70.
- Jison, J. (2015). Your partner in health? Probing into the challenges faced by the Philippine national health insurance program. International Association for Political Science Students. Retrieved from IAPSS website August 11, 2019
- Kabia, E., Mbau, R., Oyando, R., Oduor, C., Bigogo, G., Khagayi, S., & Barasa, E. (2019). "We are called the et cetera": experiences of the poor with health financing reforms that target them in Kenya. *International journal for equity in health*, 18, 1-14.
- Kapologwe, N. A., Meara, J. G., Kengia, J. T., Sonda, Y., Gwajima, D., Alidina, S., & Kalolo, A. (2020). Development and upgrading of public primary healthcare facilities with essential surgical services infrastructure: a strategy towards achieving universal health coverage in Tanzania. *BMC Health Services Research*, 20(1), 1-14.

- Karanja J. (2014). Challenges in Provision of Universal Health Care by The National Hospital Insurance Fund, Kenya. *Value in Health*, 11(5), 38-47.
- Kaufman, B. E. (2011). Comparative employment relations: Institutional and neo-institutional theories. *Research Handbook of comparative employment relations*, 25-55.
- Keller, A. (2017). How to Gauge the Relevance of Codes in Qualitative Data Analysis? - A Technique Based on Information Retrieval, in Leimeister, J.M.; Brenner, W. (Hrsg.): Proceedings der 13. Internationalen Tagung Wirtschaftsinformatik (WI 2017), St. Gallen, S. 1096-1110.
- Kelsall, T., Hart, T., & Laws, E. (2016). Political settlements and pathways to universal health coverage. *London: Overseas Development Institute*, 1-32.
- Kenya National Treasury. (2018). Budget Statement for the Fiscal Year 2018/2019. Government of Kenya; 2018.
- Khan, S. N. (2014). Qualitative research method: Grounded theory. *International Journal of Business and Management*, 9(11), 224-233.
- Khan, Z. (2023). The emerging challenges and strengths of the National Health Services: a physician perspective. *Cureus*, 15(5).
- Kimani, D. & Maina, T. (2015). *Catastrophic Health Expenditures and Impoverishment in Kenya*. Washington, DC: Futures Group, Health Policy Project
- Kinney, E. D. (2011). Realizing the International Human Right to Health for Non-Citizens in the United States. *Notre Dame J. Int'l Comp. & Hum. Rts. L.*, 1, 94.
- Kiragu, Z. W., Rockers, P. C., Onyango, M. A., Mungai, J., Mboya, J., Laing, R., & Wirtz, V. J. (2022). Household access to non-communicable disease medicines during universal health care roll-out in Kenya: A time series analysis. *Plos one*, 17(4), e0266715.
- Kläy, A., Zimmermann, A. B., & Schneider, F. (2015). Rethinking science for sustainable development: Reflexive interaction for a paradigm transformation. *Futures*, 65, 72-85.
- Kodali, P. B. (2023). Achieving universal health coverage in low-and middle-income countries: challenges for policy post-pandemic and beyond. *Risk Management and Healthcare Policy*, 607-621.
- Koech, L. C. (2011). *Challenges of Strategy Implementation at the National Hospital Insurance Fund, Kenya* (Doctoral dissertation, University of Nairobi).
- Kothari, A., Hovanec, N., Hastie, R., & Sibbald, S. (2011). Lessons from the business sector for successful knowledge management in health care: a systematic review. *BMC health services research*, 11(1), 173.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Kreiser, P. M., & Davis, J. (2010). Entrepreneurial orientation and firm performance: The unique impact of innovativeness, proactiveness, and risk-taking. *Journal of small business & entrepreneurship*, 23(1), 39-51.
- Kruk, M.E., Myers, M., & Varpilah, S.T. (2015). What is a resilient health system? Lessons from Ebola. *The Lancet*, 385:1910–2.

- Krysanova, V., & Zhuravleva, M. (2015). Economic Burden In Direct Costs Of Obesity And Overweight In Russia. *Value in Health, 18*(7), A386-A387.
- Kukla, M., McKay, N., Rheingans, R., Harman, J., Schumacher, J., Kotloff, K. L., & Nasrin, D. (2017). The effect of costs on Kenyan households' demand for medical care: why time and distance matter. *Health policy and planning, 32*(10), 1397-1406.
- Kuruville, S., Mays, N., Pleasant, A., & Walt, G. (2006). Describing the impact of health research: a Research Impact Framework. *BMC health services research, 6*(1), 134.
- Kutzin, J. (2013). Health financing for universal coverage and health system performance: concepts and implications for policy. *Bulletin of The World Health Organization, 91*(8), 602-611.
- Lakin, J., & Magero, V. (2012). Healthy ambitions? Kenya's national hospital insurance fund (NHIF) must become more transparent if it is to anchor universal health coverage. *International Budget Partnership*
- Lamson, A. L., & Meadors, P. (2007). Building your home project. *The therapist's notebook for family health care: Homework, handouts, and activities for individuals, couples, and families coping with illness, loss, and disability, 225-232.*
- Lawal, A. F. (2020). *Between Policy And Reality: A Study Of A Community-Based Health Insurance Program In Kwara State Nigeria* (Doctoral dissertation).
- Lehmann, T., & Young, T. R. (1974). From conflict theory to conflict methodology: an emerging paradigm for sociology. *Sociological Inquiry, 44*(1), 15-28.
- Leitch, C. M., Hill, F. M., & Harrison, R. T. (2010). The philosophy and practice of interpretivist research in entrepreneurship: Quality, validation, and trust. *Organizational Research Methods, 13*(1), 67-84.
- Li, Y., Wu, Q., Xu, L., Legge, D., Hao, Y., Gao, L., & Wan, G. (2012). Factors affecting catastrophic health expenditure and impoverishment from medical expenses in China: policy implications of universal health insurance. *Bulletin of the World Health Organization, 90*, 664-671.
- Lloyd-Sherlock, P., Minicuci, N., Beard, J., & Chatterji, S. (2012). Social protection and preventing illness in developing countries: Establishing the health effects of pensions and health insurance. *International Social Security Review, 65*(4), 51-68.
- Lu, J. F. R., & Chiang, T. L. (2018). Developing an adequate supply of health services: Taiwan's path to Universal Health Coverage. *Social Science & Medicine, 198*, 7-13.
- Lu, J. F. R., & Hsiao, W. C. (2003). Does universal health insurance make health care unaffordable? Lessons from Taiwan. *Health affairs, 22*(3), 77-88.
- Malusha, J. M. (2022). The Experiences on Attempts and Challenges of Providing Free or Affordable Universal Health Care in Developing Countries: Review of Kenyan Situation. *European Journal of Development Studies, 2*(5), 32-37.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.

- Marten, R., McIntyre, D., Travassos, C., Shishkin, S., Longde, W., Reddy, S., & Vega, J. (2014). An assessment of progress towards universal health coverage in Brazil, Russia, India, China, and South Africa (BRICS). *The Lancet*, 384(9960), 2164-2171.
- Maruthappu, M., Ologunde, R., & Gunarajasingam, A. (2013). Is health care a right? Health reforms in the USA and their impact upon the concept of care. *Annals of Medicine and Surgery*, 2(1), 15-17.
- Matthews, T. D., & Kostelis, K. T. (2011). *Designing and conducting research in health and human performance*. San Francisco, CA: Jossey Bass.
- Mbogo, B. M., Odhiambo, C. O., Mokuu, B. F. K., Muendo, W. W., & Ng'ang'a, M. W. (2020). Health service provision and Universal Health Coverage program at the Outpatient Department of Karatina Hospital, Nyeri County, Kenya. *East African Medical Journal*, 97(12).
- McCollum, R., Theobald, S., Otiso, L., Martineau, T., Karuga, R., Barasa, E., ... & Taegtmeier, M. (2018). Priority setting for health in the context of devolution in Kenya: implications for health equity and community-based primary care. *Health policy and planning*, 33(6), 729-742.
- McIntyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, Ally M, Aikins, M, Mulligan JA, Goudge J. (2018). Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. *Bulletin of the World Health Organisation*, 86(2), 871–876.
- Mcintyre, D., Meheus, F., & Røttingen, J. A. (2017). What level of domestic government health expenditure should we aspire to for universal health coverage? *Health Economics, Policy and Law*, 12(2), 125-137.
- McIntyre, D., Meheus, F., & Røttingen, J. A. (2017). What level of domestic government health expenditure should we aspire to for universal health coverage?. *Health Economics, Policy and Law*, 12(2), 125-137.
- McIntyre, D., Obse, A. G., Barasa, E. W., & Ataguba, J. E. (2018). Challenges in financing universal health coverage in sub-Saharan Africa. In *Oxford research encyclopedia of economics and finance*.
- McKee, M., Balabanova, D., Basu, S., Ricciardi, W., & Stuckler, D. (2013). Universal health coverage: a quest for all countries but under threat in some. *Value in Health*, 16(1), S39-S45.
- McKee, M., Balabanova, D., Basu, S., Ricciardi, W., & Stuckler, D. (2013). Universal Health Coverage: A Quest for All Countries but under Threat in Some. *Value in Health*, 16(1), S39-S45.
- McNiff, K. (2016). What is qualitative research? *The Nvivo Blog: QSR International*, on November, 9.
- Meessen, B. (2018). The role of digital strategies in financing health care for universal health coverage in low-and middle-income countries. *Global Health: Science and Practice*, 6(Supplement 1), S29-S40.
- Meessen, B., & Malanda, B. (2014). No universal health coverage without strong local health systems. *Bulletin Of The World Health Organization*, 92(2), 78-78A.

- Meier, B. M., & Gable, L. (2013). US efforts to realize the right to health through the Patient Protection and Affordable Care Act. *Human Rights Law Review*, 13(1), 167-190.
- Melberg, A., Onarheim, K.H., & Spjeldnæs, A.O. (2018). Towards universal health coverage for undocumented migrants? *The Journal of the Norwegian Medical Association*, 1(2), 9 – 17.
- Melchert, F., Winter, R., & Klesse, M. (2004). Aligning process automation and business intelligence to support corporate performance management. *Association for Information Systems*.
- Meyer, R. E., & Höllerer, M. A. (2014). Does institutional theory need redirecting? *Journal of Management Studies*, 51(7), 1221-1233.
- Michael, R. (2014). Sexual capital: an extension of Grossman's concept of health capital. *Journal of Health Economics*, 23(4), 643-652.
- Michel, J., Tediosi, F., Egger, M., Barnighausen, T., McIntyre, D., Tanner, M., & Evans, D. (2020). Universal health coverage financing in South Africa: wishes vs reality. *Journal of Global Health Reports*, 4, e2020061.
- Mikhno, I., Koval, V., & Ternavskiy, A. (2020). Strategic management of healthcare institution development of the national medical services market. *Access: Access to Science, Business, Innovation in Digital Economy*, 1(2), 157-170.
- Miller, D., & Dröge, C., (1986). Psychological and traditional determinants of structure. *Administrative Science Quarterly*, 31(4), 539–560.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25.
- Mills, A. (2014). Health care systems in low-and middle-income countries. *New England Journal of Medicine*, 370(6), 552-557.
- Mills, A., Ally, M., Goudge, J., Gyapong, J., & Mtei, G. (2012). Progress towards universal coverage: the health systems of Ghana, South Africa and Tanzania. *Health Policy and Planning*, 27(suppl 1), i4-i12.
- Ministry of Health Republic of Kenya. Kenya Health Policy 2014-2030. 2014.
- Ministry of Health, Government of Kenya (2014). 2013 Kenya household health expenditure and utilization survey. Nairobi: Government of Kenya; 2014.
- Ministry of Medical Services, Ministry of Public Health & Sanitation. (2015). Accelerating Attainment of Health Goals: Kenya Health Sector Strategic and Investment Plan -KHSSP July 2013–June 2017 [Internet]. Government of Kenya; 2015. Available from: http://www.who.int/pmnch/media/events/2013/kenya_hssp.pdf [cited 17 2015 No
- Mishra, S., & Mohanty, S. K. (2019). Out-of-pocket expenditure and distress financing on institutional delivery in India. *International journal for equity in health*, 18, 1-15.
- Mizanbekova, S. K., Bogomolova, I. P., Vasilenko, I. N., & Bogomolov, A. V. (2019). Strategic planning of innovation development of industrial enterprises under growing competition and risks.

- Mizikar, A. (2012). Global Health Library2012127Global Health Library. Geneva: World Health Organization 2005. *Reference Reviews*, 26(3), 37-38.
- Mohamed, K. S., Abasse, K. S., Abbas, M., Sintali, D. N., Baig, M. M. F. A., & Cote, A. (2021). An overview of healthcare Systems in Comoros: the effects of two decades of political instability. *Annals of Global Health*, 87(1).
- Montgomery, C. A., & Collins, D. (2005). *Corporate strategy: a resource-based approach*. New York: McGraw-Hill.
- Moorman, C., & Miner, A. (1998). Organizational improvisation and organizational memory. *Academy of Management Review*, 23(4), 698-724.
- Mtei G, Makawia S, Ally M, Kuwawenaruwa A, Meheus F and Borghi J (2012). Who pays and who benefits from health care? An assessment of equity in health care financing and benefit distribution in Tanzania, *Health policy and planning*, 27(1),23-34.
- Mugenda, O., & Mugenda (2008). *Research Methods*: 1st edition, Published by ACTS, Nairobi, Kenya.
- Mukabana, B. (2016). *Effects of free maternity program on utilization of maternity services and challenges at Kakamega County Hospital, Kenya* (Doctoral dissertation, Moi University).
- Mukherjee, J., Satti, E., Mugunga, J., Almazor, C., & Jerome, G. (2016). Toward the performance of Universal Health coverage: Introducing the partners in health's-universal health coverage matrix. *Annals Of Global Health*, 82(3), 516.
- Munge, K., Mulupi, S., Barasa, E., & Chuma, J. (2017). A Critical Analysis of Purchasing Arrangements in Kenya: The Case of the National Hospital Insurance Fund. *International Journal of Health Policy And Management*, 7(3), 244-254.
- Muriithi, E.W. (2020). Investing in Primary Healthcare: Challenges in Achieving Universal Health Coverage in Kenya. (Doctoral Dissertation, United States International University – Africa). <https://erepo.usiu.ac.ke/handle/11732/7215;jsessionid=AD27BB8CD432D9B504D7F0D1FAE46D77>
- Musyoka, M. (2016). *Determinants of strategy implementation at National health insurance fund in Kenya* (Doctoral dissertation, United States International University-Africa).
- Mutai, R. K., Njoroge, K., & Mwangi, E. M. (2021). Influence of Awareness of Daily Payment on Uptake of Social Health Insurance among Bodaboda Operators in Eldoret Town, Kenya. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 10(4), 56-65
- Mwaniki, W., & Ogoti, L. (2024). Challenges facing the attainment of Universal Health Coverage in Kenya. Kenya Medical Association (KMA) Public Health Committee. <https://kma.co.ke/component/content/article/79-blog/125-challenges-facing-the-attainment-of-universal-health-coverage-in-kenya?Itemid=437>
- Mwaura, J. W., & Pongpanich, S. (2012). Access to health care: the role of community-based health insurance in Kenya. *The Pan African Medical Journal*, 12, 35.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data Reduction Techniques for Large Qualitative Data Sets. *Handb. Team-based Qual. Res.* 137–163

- Nannini, M., Biggeri, M., & Putoto, G. (2022). Health coverage and financial protection in Uganda: a political economy perspective. *International journal of health policy and management*, 11(9), 1894.
- National Council for Law Reporting. (2012). Laws of Kenya National Hospital Insurance Fund Act No. 9 of 1998 Revised Edition 2012 [1998] Published by the National Council for Law Reporting with the Authority of the Attorney-General. Retrieved at www.kenyalaw.org.
- Ngampravatdee, C., Gharehbaghi, K., Hosseinian-Far, A., Tee, K. F., & McManus, K. (2023). Strategic initiatives for large transport infrastructure planning: reinforcing sustainability in urban transportation through better stakeholder engagement. *Sustainability*, 15(18), 13912.
- Ngilu, C.K. (2004). *We Have to Make Health the Engine of Development. Social Health Insurance – Systems of Solidarity*. Eschborn, Germany: Deutsche Gesellschaft für Technische Zusammenarbeit, 17
- Nguhiu, P. K., Barasa, E. W., & Chuma, J. (2017). Determining the effective coverage of maternal and child health services in Kenya, using demographic and health survey data sets: tracking progress towards universal health coverage. *Tropical Medicine & International Health*, 22(4), 442-453.
- NHIF (2015), Contribution and deductions rates. [<http://www.nhif.or.ke/healthinsurance/rates>]
- NHS now has four different systems BBC January 2, 2008
- North, D. C. (2010). Economics and cognitive science. *Procedia-Social and Behavioral Sciences*, 2(5), 7371-7376.
- Nsiah-Boateng, E., Nonvignon, J., Aryeetey, G. C., Salari, P., Tediosi, F., Akweongo, P., & Aikins, M. (2019). Sociodemographic determinants of health insurance enrolment and dropout in urban district of Ghana: a cross-sectional study. *Health economics review*, 9, 1-9.
- Nungo, S. E., Filippin, J., & Russo, G. (2023). Social Health Insurance for Universal Health Coverage in LMICs: A Policy Analysis of the Attainments, Setbacks, and Equity Implications of Kenya's National Health Insurance Fund. Research Square; 2023. DOI: 10.21203/rs.3.rs-3123732/v1.
- Nyandekwe, M., Nzayirambaho, M., & Kakoma, J. B. (2014). Universal health coverage in Rwanda: dream or reality. *The Pan African Medical Journal*, 17.
- O'Connell, T., Ramanathan, K., & Chopra, M. (2014). What does universal health coverage mean? *The Lancet*, 383(9913), 277-279.
- OECD (2017). *Health spending*. Available from: <https://data.oecd.org/healthres/health-spending.htm> [Accessed 25 Feb 2019]
- Okech, T. C., & Lelegwe, S. L. (2016). Analysis of universal health coverage and equity in health care in Kenya. *Global journal of health science*, 8(7), 218.
- Okungbowa, O. G. (2023). Assessing Health Financing Progress Towards Universal Health Coverage in Nigeria (2015-2022). National Institute for Legislative and Democratic Studies National Assembly, Abuja. <http://localhost:8080/xmlui/handle/123456789/1540>

- Okungu, V., Chuma, J., & McIntyre, D. (2017). The cost of free health care for all Kenyans: assessing the financial sustainability of contributory and non-contributory financing mechanisms. *International journal for equity in health*, 16(1), 39.
- Okungu, V., Marshal, M. W. E. U., & Janine, M. A. N. S. (2019). Sustainability, equity, and effectiveness in public financing for health in Uganda: an assessment of maternal and child health services. *International Journal of Health Services Research and Policy*, 4(3), 233-246.
- Okungu, W. J. (2017). *Top management team characteristics and strategy implementation in Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).
- Olstad, D. L., Raine, K. D., & McCargar, L. J. (2012). Adopting and implementing nutrition guidelines in recreational facilities: public and private sector roles. A multiple case study. *BMC Public Health*, 12(1), 376.
- Omachonu, V. K., & Einspruch, N. G. (2010). Innovation in healthcare delivery systems: a conceptual framework. *The Innovation Journal: The Public Sector Innovation Journal*, 15(1), 1-20.
- Ondako, J.A. (2015). *An Investigation of Factors Affecting the performance of Universal Health Coverage through Social Health Insurance in Government Ministries in Kenya*. (Doctoral Dissertation, Kenyatta University)
- Ong, S. E., Tyagi, S., Lim, J. M., Chia, K. S., & Legido-Quigley, H. (2018). Health systems reforms in Singapore: A qualitative study of key stakeholders. *Health Policy*, 122(4), 431-443.
- Oraro-Lawrence, T., & Wyss, K. (2020). Policy levers and priority-setting in universal health coverage: a qualitative analysis of healthcare financing agenda setting in Kenya. *BMC health services research*, 20, 1-11
- Oso, W. Y., & Onen, D. (2009). *A general guide to writing research proposals and reports*. Jomo Kenyatta Foundation.
- Overbye, E. (2023). Capitalism with a human face” and European pension systems: Historical change, present reform directions, and possible relevance for the Republic of Korea. In *Background paper for an invited talk at pension conference April. Sejong, Republic of Korea* (pp. 1-28).
- Owoye, O., & Onafowora, O. A. (2023). Government Health Care Financing and Health Care Outcomes in Africa. *Journal of Management Policy & Practice*, 24(4).
- Paauwe, J., & Boselie, P. (2003). Challenging ‘strategic HRM ’ and the relevance of the institutional setting. *Human Resource Management Journal*, 13(3), 56-70.
- Panneerselvam, R. (2014). *Research methods*, second edition. Delhi: PHI Learning Private Limited.
- Pauw, T. L. (2022). Catching up with the constitution: An analysis of National Health Insurance in South Africa post-apartheid. *Development Southern Africa*, 39(6), 921-934.
- Pavignani, E., Michael, M., & Murru, M. (2013). Making sense of apparent chaos: health-care provision in six country case studies. *International Review of the Red Cross*, 95(1), 41-60.

- Pawar, B. S., & Eastman, K. K. (1997). The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Academy of Management Review*, 22(1), 80-109.
- Pearce, J.A., & Robinson, R. B. (2005). *Formulation, implementation, and control of competitive strategy*. McGraw-Hill.
- Peeters, J. (2012). Sustainable development: a mission for social work? A normative approach. *Journal Of Social Intervention: Theory And Practice*, 21(2), 5.
- Petrus, B. (2019). Environmental dynamism: The implications for operational and dynamic capabilities effects. *Nauki o Zarządzaniu*, 24(1), 28-36.
- Pisani, E., Olivier Kok, M., & Nugroho, K. (2017). Indonesia's road to universal health coverage: a political journey. *Health policy and planning*, 32(2), 267-276.
- Potcovaru, A. M. (2014). Challenges for the Romanian Health Sector in becoming a sustainable system. In *Proceedings of the 8th International Management Conference" Management Challenges for the Sustainable Development"*, November, Bucharest, Romania (pp. 451-457).
- Prasad, B., & Junni, P. (2016). CEO transformational and transactional leadership and organizational innovation: The moderating role of environmental dynamism. *Management Decision*, 54(7), 1542-1568.
- Prescott, J. E. (2001). Competitive intelligence: lessons from the trenches. *Competitive Intelligence Review: Published in Cooperation with the Society of Competitive Intelligence Professionals*, 12(2), 5-19.
- Qoronfleh, M. W. (2020). Health is a political choice: why conduct healthcare research? Value, importance, and outcomes to policymakers. *Life Sciences, Society and Policy*, 16(1), 5.
- Ranabhat, C. L., Atkinson, J., Park, M. B., Kim, C. B., & Jakovljevic, M. (2018). The influence of universal health coverage on life expectancy at birth (LEAB) and healthy life expectancy (HALE): a multi-country cross-sectional study. *Frontiers in pharmacology*, 9, 960.
- Ranabhat, C. L., Jakovljevic, M., Dhimal, M., & Kim, C. B. (2020). Structural factors responsible for universal health coverage in low-and middle-income countries: results from 118 countries. *Frontiers in public health*, 7, 414.
- Reich, M. R., Harris, J., Ikegami, N., Maeda, A., Cashin, C., Araujo, E. C., ... & Evans, T. G. (2016). Moving towards universal health coverage: lessons from 11 country studies. *The Lancet*, 387(10020), 811-816.
- Republic of Kenya (2010). Analysis of Performance, Analytical Review of Health Progress, and Systems Performance. Kenya Health Policy Framework 1994 to 2010: Ministries of Health.
- Republic of Kenya (2022). Economic survey 2022. Nairobi: Kenya National Bureau of Statistics; 2022. Accessed 28/10/2022. <https://www.knbs.or.ke/wp-content/uploads/2022/05/2022-Economic-Survey1.pdf>.
- Riley, A. (2022). The Possibility of Universal Health Coverage in the United States. *UC Merced Undergraduate Research Journal*, 14(1)
- Robertson, S. (2004). Understanding inverse document frequency: on theoretical arguments for IDF. *J. Doc.* 60, 503–520.

- Rosenbaum, S. (2011). Realigning the Social Order: The Patient Protection and Affordable Care Act and the US Health Insurance System. *Journal of Health & Biomedical Law*, 7.
- Rubin, D. B. (2006). *Matched sampling for causal effects*. Cambridge University Press.
- Russia – Unified Social Tax replaced by insurance contributions. Archived from the original on June 28, 2010.
- Russo, G., Bloom, G., & McCoy, D. (2017). Universal health coverage, economic slowdown, and system resilience: Africa's policy dilemma. *BMJ Global Health*, 2(3), e000400.
- Salari, P., Di Giorgio, L., Ilinca, S., & Chuma, J. (2019). The catastrophic and impoverishing effects of out-of-pocket healthcare payments in Kenya, 2018. *BMJ Global Health*, 4(6), e001809.
- Sanger-Katz, M. (2019). What's the Difference Between a 'Public Option' and 'Medicare for All'? *The New York Times*.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. Harlow: Pearson Education Ltd.
- Savedoff, W. (2012). What Should a Country Spend on Health Care? *Health Affairs*, 26(4), 962–70.
- Schaefer, R. T., & Grekul, J. M. (2008). *Sociology matters*. Boston: McGraw-Hill.
- Sciedu, L., Hamoud, M. W., Tarhini, A., Akour, M. A., & Al-Salti, Z. (2016). Developing the main knowledge management process via social media in the IT organizations: A conceptual perspective. *International Journal of Business Administration*, 7(5), p49.
- Sekaran, U., & Bougie, R. (2010). Theoretical framework in theoretical framework and hypothesis development. *Research methods for business: A skill building approach*, 80.
- Seo, E. H., Kim, C. Y., & Kim, K. (2020). A study on the mechanisms linking environmental dynamism to innovation performance. *Sustainability*, 12(23), 9999.
- Sesiano, K. L., & Gitari, J. (2022). Strategic Resource Allocation and Implementation of Universal Health Coverage Policy in NHIF Northern Kenya Region. *The International Journal of Business & Management*, 10(5).
- Shahrokh Esfahani, M., & Dougherty, E. R. (2014). Effect of separate sampling on classification accuracy. *Bioinformatics*, 30(2), 242-250.
- Shamir, B., & Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *Leadership Quarterly*, 10(2), 257-283.
- Shano, G., & Vilcu I. (2020). A review of Afya care – The universal health coverage pilot program – in Isiolo County. Kenya brief 5. Washington, DC: Think Well; 2020.
- Shiferaw, F., & Zolfo, M. (2012). The role of information communication technology (ICT) towards universal health coverage: the first steps of a telemedicine project in Ethiopia. *Global health action*, 5(1), 15638.

- Sieber, J. E. (2012). *The ethics of social research: Surveys and experiments*. Springer Science & Business Media.
- Silva, L. C., Macedo, I. M., & Thompson, M. (2024). Revisiting the debate on institutions, the state and institutional change: The relevance of institutional theory to public administration teaching. *Teaching Public Administration*, 42(1), 73-94.
- Singh, A., & Masuku, M. (2012). Understanding and applications of test characteristics and basics inferential statistics in hypothesis testing. *European Journal of Applied Sciences*, 4(2), 90-97.
- Singh, Z. (2013). Universal health coverage for India by 2022: a utopia or reality? *Indian journal of community medicine*, 38(2), 70-73.
- Sofrankova, B., Kiselakova, D., Cabinova, V., & Onuferova, E. (2018). The Importance of Research and Development Spending In the Context of Global Competitiveness and the Innovation Potential of the V4 Countries. *Journal of Eastern Europe Research in Business & Economics*, 5, 1-13.
- South-Winter, C., Dai, W., & Porter, J. (2015). Health Care in Ghana: A Study of Health Care Opinion Leadership. *GSTF Journal Of Nursing And Health Care*, 3(1).
- Sow, M., De Spiegelaere, M., & Raynault, M. F. (2018). Evaluating the effect of income support policies on social health inequalities (SHIs) at birth in Montreal and Brussels using a contextualized comparative approach and model family method: a study protocol. *BMJ open*, 8(9), e024015.
- Štaras, K., Mačiulienė, M., & Stokaitė, V. (2013). Impact of Information and Communication Technologies on Delivery of Health Care Services. *Health Policy and Management*, 1(5), 148-166.
- Suphanchaimat, R., Putthasri, W., Prakongsai, P., & Tangcharoensathien, V. (2017). Evolution and complexity of government policies to protect the health of undocumented/illegal migrants in Thailand—The unsolved challenges. *Risk management and healthcare policy*, 10(3), 49 - 61.
- Takura, T., & Miura, H. (2022). Socioeconomic determinants of universal health coverage in the Asian region. *International journal of environmental research and public health*, 19(4), 2376.
- Tan, C. C., Lam, C. S., Matchar, D. B., Zee, Y. K., & Wong, J. E. (2021). Singapore's health-care system: key features, challenges, and shifts. *The Lancet*, 398(10305), 1091-1104.
- Tan, K. B., & Earn-Lee, C. (2019). Integration of primary care with hospital services for sustainable universal health coverage in Singapore. *Health Systems & Reform*, 5(1), 18-23.
- Tan, K. B., Tan, W. S., Bilger, M., & Ho, C. W. (2014). Monitoring and evaluating progress towards Universal Health Coverage in Singapore. *PLoS medicine*, 11(9), e1001695. <https://doi.org/10.1371/journal.pmed.1001695>
- Tan, K. B., Tan, W. S., Bilger, M., & Ho, C. W. (2014). Monitoring and evaluating progress towards universal health coverage in Singapore. *PLoS medicine*, 11(9), e1001695.

- Tandon, A., Cain, J., Kurowski, C., & Postolovska, I. (2018). Intertemporal Dynamics of Public Financing for Universal Health Coverage: Accounting for Fiscal Space Across Countries. Health, Nutrition, and Population Discussion Paper; World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/31211> License: CC BY 3.0 IGO.
- Tang, S., Tao, J., & Bekedam, H. (2012). Controlling cost escalation of healthcare: making universal health coverage sustainable in China. In *BMC Public Health*, 12(1), p. S8. BioMed Central.
- Tangcharoensathien, V., Thwin, A. A., & Patcharanarumol, W. (2017). Implementing health insurance for migrants, in Thailand. *Bulletin of the World Health Organization*, 95(2), 146 - 159.
- Tangcharoensathien, V., Witthayapipopsakul, W., Panichkriangkrai, W., Patcharanarumol, W., & Mills, A. (2018). Health systems development in Thailand: a solid platform for successful implementation of universal health coverage. *The Lancet*, 391(10126), 1205-1223.
- Tao, W., Zeng, Z., Dang, H., Lu, B., Chuong, L., Yue, D., ... & Kominski, G. F. (2020). Towards universal health coverage: lessons from 10 years of healthcare reform in China. *BMJ Global Health*, 5(3), e002086.
- Tao, W., Zeng, Z., Dang, H., Lu, B., Chuong, L., Yue, D., ... & Kominski, G. F. (2020). Towards universal health coverage: lessons from 10 years of healthcare reform in China. *BMJ Global Health*, 5(3), e002086.
- Terwindt, F., Rajan, D., & Soucat, A. (2016). Priority-setting for national health policies, strategies, and plans. *Strategizing national health in the 21st century: a handbook*, 71. Geneva: World Health Organization. p. 4.
- The World Health Organisation (2010). *The world health report - Health systems financing: the path to universal coverage*. Geneva: World Health Organization
- Theodorakis, P. (2013). Financial crisis and primary care in Greece: now more than ever. *International Journal Of Integrated Care*, 13(6).
- Thomson, K., Hillier-Brown, F., Todd, A., McNamara, C., Huijits, T., & Bambra, C. (2017). The effects of public health policies on health inequalities: a review of reviews. *The Lancet*, 390, S12.
- Tinasti, K. (2015). Morocco's policy choices to achieve Universal health coverage. *Pan African Medical Journal*, 21(1).
- Ting, H. F., Wang, H. B., & Wang, D. S. (2012). The moderating role of environmental dynamism on the influence of innovation strategy and firm performance. *International Journal of innovation, management, and technology*, 3(5), 517.
- Topp, S., & Abimbola, S. (2018). Call for papers—the Alma Ata Declaration at 40: reflections on primary healthcare in a new era. *BMJ Global Health*, 3(2), e000791.
- Tsimtsiou, Z. (2017). Primary health care and universal health coverage: Achieving health for all. *Health and Primary Care*, 1(1), 7 - 16.
- Tucci, J. (2014). The Singapore health system – achieving positive health outcomes with low expenditure. *Watson Wyatt Healthcare Market Review*, October 2014.

- Tuck, C., Maamri, A., Chan, A. H. Y., & Babar, Z. U. D. (2019). Medicines pricing, access, and safety in Morocco. *Tropical Medicine & International Health*, 24(3), 260-263.
- Umeh, C. (2018). Challenges toward achieving universal health coverage in Ghana, Kenya, Nigeria, and Tanzania. *The International Journal Of Health Planning And Management*.
- Umeh, C. A. (2018). Challenges toward achieving universal health coverage in Ghana, Kenya, Nigeria, and Tanzania. *The International journal of health planning and management*, 33(4), 794-805.
- Unison report (2011): *Pay and non-pay incentives, performance and Motivation in Towards a global health workforce strategy*, edited by Ferrinho, Pa and DalPoz, M.A Antwerpen: ITGPress. Organizational Environments: Ritual and Rationality, Sage Publications, Beverly Hills, CA.
- Universal Health Coverage (2015). Retrieved from <http://www.who.int/health-systems/universal-coverage/en/> Retrieved September 18, 2019
- Vaux, D. L. (2012). Research methods: Know when your numbers are significant. *Nature*, 492(7428), 180.
- Vij, S., & Bedi, H. S. (2016). Effect of organizational and environmental factors on innovativeness and business performance relationship. *International Journal of Innovation Management*, 20(03), 1650037.
- Vogel, I. (2012). Review of the use of the theory of change in international development. London, UK: Department for International Development (DFID)
- Vogel, R., Göbel, M., Grewe- Salfeld, M., Herbert, B., Matsuo, Y., & Weber, C. (2022). Cross- sector partnerships: Mapping the field and advancing an institutional approach. *International Journal of Management Reviews*, 24(3), 394-414.
- Vogelsang, K., Steinhüser, M., & Hoppe, U. (2013). A qualitative approach to examine technology acceptance. *Int. Conf. Inf. Syst. (ICIS 2013)*. 234–245 (2013).
- Wamai, R. G. (2009). The Kenya Health System—Analysis of the situation and enduring challenges. *Jmaj*, 52(2), 134-140.
- Wamai, R. G. (2019). The Kenya Health System— Analysis of the situation and enduring challenges. *Jmaj*, 52(2), 134-140.
- Wambua, L. M. (2017). The Effects of Health Administrative Function on Service Delivery in Public Health Facilities In Kenya: *A Case Study Of Kibwezi West Sub County, Makueni County*.
- Wang, H., Juma, M. A., Rosemberg, N., & Ulisubisya, M. M. (2018). Progressive pathway to universal health coverage in Tanzania: a call for preferential resource allocation targeting the poor. *Health Systems & Reform*, 4(4), 279-283.
- Wangia, E., & Kandie, C. (2018). Refocusing on quality of care and increasing demand for services; Essential elements in attaining universal health coverage in Kenya. Ministry of Health, GoK
- Wanjiru, K. J. (2014). Challenges in Provision of Universal Health Care by the National Hospital Insurance Fund, Kenya.

- Watkins, D. A., Jamison, D. T., Mills, T., Atun, T., Danforth, K., Glassman, A., ... & Alwan, A. (2018). Universal health coverage and essential packages of care.
- Weiss, G. L., & Lonnquist, L. E. (2017). *The sociology of health, healing, and illness*. Routledge.
- Wenke, R., & Mickan, S. (2016). The role and impact of research positions within health care settings in allied health: a systematic review. *BMC health services research*, 16(1), 355.
- Wernerfelt, B. (2011). Invited editorial: The use of resources in resource acquisition. *Journal of Management*, 37(5), 1369-1373.
- WHO (2010). World Health Organization Assesses the World's Health Systems. Who. int. December 8, 2010. Retrieved January 6, 2019.
- WHO (2013). World Bank convenes ministerial meeting to discuss best practices for moving forward on universal health coverage. *International Journal of Health Care Quality Assurance*, 26(5).
- WHO (2018). *Universal health coverage (UHC)*. Geneva. The World Health Organization.
- WHO. (2010). Health systems financing: the path to universal coverage. Geneva: The World Health Organization. <http://www.who.int/whr/2010/en/>.
- Whyte, E. B., & Olivier, J. (2023). A socio-political history of South Africa's National Health Insurance. *International Journal for Equity in Health*, 22(1), 247.
- World Bank (2017). World Bank Open Data. Available from: <http://data.worldbank.org/>.
- World Bank Group (2017). Global Economic Prospects. Weak Investment in Uncertain Times. 2017. Washington, DC: World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/25823/9781464810169>. Pdf Retrieved January 7, 2019.
- World Bank (2021). Rising Above the Waves, Kenya Economic Update. <https://documents1.worldbank.org/curated/en/782411624966067020/pdf/Kenya-Economic-Update-Rising-Above-the-Waves.pdf>
- World Health Organization and the International Bank for Reconstruction and Development / The World Bank (2022). Tracking Universal Health Coverage: 2021 global monitoring report. Geneva: World Health Organization and World Bank; 2022.
- World Health Organization, (2010). *Path to Universal Health Coverage*. Geneva Switzerland.
- World Health Organization. (2016). *Public financing for health in Africa: from Abuja to the SDGs* (No. WHO/HIS/HGF/Tech. Report/16.2). World Health Organization.
- World Health Organization. (2018). *A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals* (No. WHO/HIS/SDS/2018.15). World Health Organization.
- World Health Organization. (2023). *Universal health coverage partnership annual report 2021: health systems strengthening and health emergencies beyond COVID-19*. World Health Organization.

- World Health Organization; World Bank. (2023). Tracking Universal Health Coverage: 2023 Global Monitoring Report. Washington, DC: World Bank. <http://hdl.handle.net/10986/40348>
- Wouters, O. J., McKee, M., & Luyten, J. (2020). Estimated research and development investment needed to bring a new medicine to market, 2009-2018. *Jama*, 323(9), 844-853.
- Wu, H.C., Luk, R.W.P., Wong, K.F., & Kwok, K.L. (2008). Interpreting TF-IDF term Weights as making relevant decisions. *ACM Trans. Inf. Syst.* 26, 1–37.
- Xu, K., Carrin, G., & Phuong, N. (2006). Health Service Utilization and Financial Burden on Households in Vietnam: the Impact of Social Health Insurance. WHO, Geneva
- Xu, K., James, C., Carrin, G., & Muchiri, S.N. (2006). An Empirical Model of Access to Health Care, Health Care Expenditure and Impoverishment in Kenya: Learning from Past Reforms and Lessons for the Future. Health Systems Financing Discussion Paper No. 3. Geneva: World Health Organization, Department of Health Systems Financing, 2006.
- Yates, R., Witter, S., Chantzi, F., & Hunsaker, B. (2024). Driving universal health reforms through crises and shocks. Chattam House Report. Global Health Program | June 2024
- Yip, W., Fu, H., Chen, A. T., Zhai, T., Jian, W., Xu, R., ... & Chen, W. (2019). 10 years of healthcare reform in China: progress and gaps in Universal Health Coverage. *The Lancet*, 394(10204), 1192-1204.
- Yip, W., Fu, H., Jian, W., Liu, J., Pan, J., Xu, D., . & Zhai, T. (2023). Universal health coverage in China part 2: addressing challenges and recommendations. *The Lancet Public Health*, 8(12), e1035-e1042.
- Young, E. (2015). The importance of research in healthcare. *South Sudan Medical Journal*, 8(4), 90-91.
- Yu, H. (2015). Universal health insurance coverage for 1.3 billion people: What accounts for China's success? *Health policy*, 119(9), 1145-1152.
- Zhang, L-C. (2008). Developing methods for determining the number of unauthorized foreigners in Norway. *Statistisksentralbyrå*.
- Zhao, K., Nakaima, A., Guo, W., Qiu, Y., & Sridharan, S. (2017). Evaluation at the Time of Health Systems Reform: Chinese Policymakers' Need for a Robust System of Evaluations to Assess Progress in the Implementation of Reform Efforts. *New Directions for Evaluation*, 2017(154), 29-39.
- Zieff, G., Kerr, Z. Y., Moore, J. B., & Stoner, L. (2020). Universal healthcare in the United States of America: a healthy debate. *Medicine (Kaunas, Lithuania)*, 56(11), 1–7. Retrieved from <https://www.mdpi.com/1648-9144/56/11/580>, on July 5, 2024.

APPENDICES

Appendix I: Letter of Introduction

My name is Kennedy Ongoye Ogwengo, a Ph.D candidate in Strategic Management at Kabarak University. I am carrying out a study on “**Effects of Selected Strategic Initiatives for Universal Health Coverage on the Program Performance in Kenya**”

You have been selected as one of the respondents for this study.

Kindly take a few minutes to respond to the questions in the attached questionnaires.

Your input will be integral to the successful completion of the research project. Your feedback will be treated with the highest degree of confidentiality and will only be used for academic purposes. No financial compensation will be made for participating in this study. In case of any need for more clarification, kindly don't hesitate to contact me.

Yours Sincerely,

Kennedy Ongoye Ogwengo (Mr.)

Appendix II: Questionnaire

Instructions: Please complete the following questionnaire appropriately.

Confidentiality: The responses you provide will be strictly confidential. No reference will be made to any individual(s) in the report of the study.

Please tick or answer appropriately for each of the Questions provided.

Section I: Background Information

1. What is your age?

Below 25 years

25 - 35 years

36 - 50years

51 - 60years

61 years and above

2. What is your gender?

Male

Female

3. What is your level of education?

O-Level

College Diploma

Bachelor's Degree

Post-Graduate Degree

(Specify).....

4. For how long have you worked in your position?

Less than 1 year

1-2 years

3-5 years

6-10 years

More than 10 years

Section 2: Health Research and Development Programs Strategy Initiatives and UHC

The following are statements relating to Health Research and Development Programs Strategy initiatives and UHC. Please indicate the extent of agreement or disagreement with each statement.

Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Health Research and Development Programs Strategy initiatives	1	2	3	4	5
1	There is strengthened public support for and trust in health and medical research.					
2	There is improved quality, efficiency, transparency, accountability, and equity in the health research process.					
3	There is improved acceptance of, and compliance with, health research ethical principles.					
4	We facilitate technical assistance to support the strengthening of national systems for health research;					
5	We endeavor to undertake training and development with the technological changes and present education.					
6	Periodic and continual refresher training has been adopted.					
7	We apply greater technological Integration of Medical Systems.					
8	We have the potential for medical Work-Flow Process Reengineering.					
9	We have computerized healthcare information technology.					

2.1(a) Is your organization involved in any research activity meant to improve the universal healthcare program?

Yes No

2.1(b) Please explain.....

.....

2.2(a) Is your organization involved in any training activity toward the improvement of the universal healthcare program?

Yes No

2.2(b) Please explain.....

.....

.....

2.3 (a) In your view, has research and training activity improved the universal healthcare program in your organization?

Yes No

2.3(b) Please explain.....

.....

.....

Section III: Health Policy and Planning Strategy Initiatives and UHC

Indicate the extent to which you agree with the following statements relating to Health Policy and Planning Strategy initiatives and UHC. Key: 1=Very Great Extent, 2= Great Extent; 3=No-opinion; 4= Small Extent; 5= Not at all. Use the keys provided to tick.

	Health Policy and Planning Strategy initiatives	1	2	3	4	5
10	We have policies aimed at the regulation of the health sector to achieve Universal Health Coverage.					
11	Enhanced Ability to Collaborate with Regional Healthcare Organizations					
12	There are transparent and inclusive processes, national health policies, strategies, and plans that set a clear direction for the health sector.					
13	Strategic initiatives are in place to ensure that health authorities take responsibility for steering the entire health sector towards the achievement of Universal Health coverage.					
14	Health financing is a key policy instrument for the government of Kenya to improve health and reduce health inequity					
15	There is deployment of support systems enabling work environments for health workers to achieve UHC.					
16	Enhanced Ability to Compete with Regional Healthcare Organizations					
17	Services have been devolved.					
18	Partnerships have been strengthened.					

3.1(a) Does the devolution of services affect the universal healthcare program in your organization?

Yes No

3.1(b) Please explain.....

3.2(a) Does an increased partnership with your organization affect the delivery of the universal healthcare program?

Yes No

3.2(b) Please explain.....

3.3(a) In your view, have strategic initiatives improved the universal healthcare program in your organization?

Yes No

3.3(b) Please explain.....

Section IV: National Health Strategic Plan Initiatives and UHC

The following are statements relating to National Health Strategic Plan initiatives and UHC. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	National Health Strategic Plan initiatives	1	2	3	4	5
19	The government has improved the health status of individuals, families, and communities.					
20	The government defends citizens against what threatens their health.					
21	The government is effectively protecting its citizens against the financial consequences of ill-health					
22	The government is providing equitable access to people-centered care					
23	The government has ensured good governance and leadership in the country’s healthcare sector.					
24	We are setting priorities, establishing sustainable processes, and					

	determining an appropriate framework to implement the initiative programs.					
25	We identify the future desired and develop guidelines for making decisions.					
26	We have created a culture of program-based health-based strategizing for the future.					
27	We evaluate strategic plans as more appropriate because of regular and systematic processes and activities as well as observance of documentation principles.					

4.1(a) Does the universal healthcare program affect health management in your organization substantially?

Yes No

4.1(b) Please explain.....
.....
.....

4.2(a) Does your organization have any support programs for the improvement of the universal healthcare program?

Yes No

4.2(b) Please explain.....
.....
.....

4.3(a) In your view, has the universal healthcare program substantially affected procurement streaming in your organization?

Yes No

4.3(b) Please explain.....
.....
.....

Section V: Sustainable Health Financing Strategy Initiatives and UHC

The following are statements relating to Sustainable health financing Strategy initiatives and UHC. Please indicate the extent of agreement or disagreement with each statement.

Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Sustainable Health Financing Strategy Initiatives	1	2	3	4	5
29	The government is efficiently directing and using funds to ensure equitable access to quality health services and financial protection for all.					
30	The government is strengthening and aligning PFM systems that determine how budgets are formulated, allocated, and executed with health financing functions and health system objectives.					
31	Efficient and sustainable financial policies have been put in place by the government to enhance universal health coverage. age					
32	Strategies have been put in place to raise revenues that can sustainably finance universal health coverage in Kenya.					
33	Spending targets have been put in place for the health sector to ensure sustainable financing.					
34	Health coverage increases access to health services					
35	A monthly premium improves a person's health-seeking behavior.					
36	Health coverage scheme ensures the availability of quality health services among insured individuals					

5.1(a) Do compulsory prepayments affect the universal healthcare program delivery by your organization?

Yes No

5.1(b) Please explain.....

5.2(a) What about voluntary prepayments, do they affect the universal healthcare program delivery by your organization?

Yes No

5.2(b) Please explain.....

5.3(a) What is your view of out-of-pocket payments, does it improve the universal healthcare program in your organization?

Yes No

5.3(b) Please explain.....

5.4(a) Do you think the NHIF as it is presently construed is instrumental in delivering an improved universal healthcare program in your organization?

Yes No

5.4(b) Please explain.....

Section VI: Environmental Dynamism

The following are statements relating to Environmental Dynamism in the healthcare sector and UHC. Please indicate the extent of agreement or disagreement with each statement. Key: 1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the keys provided to tick.

	Environmental Dynamism	1	2	3	4	5
37	A number of changing healthcare market dynamics made the delivery of UHC uncertain for us					
38	A lot of unforeseen changes were being witnessed in the healthcare sector that affected the UHC's performance.					
39	We had some issues of volatility of the political climate that affected the delivery of UHC.					
40	We have had a stable health policy environment for our organization to support the delivery of UHC.					
41	We encountered financial challenges that affected the performance of UHC					
42	We encountered social challenges that affected the performance the					

	performance of UHC					
--	--------------------	--	--	--	--	--

6.1(a) Does the universal healthcare program improve easy accessibility to healthcare services in your organization?

Yes No

6.1 (b) Please explain.....

6.2(a) Does the universal healthcare program lead to quality and timely provision in your organization?

Yes No

6.2 (b) Please explain.....

6.3 (a) In your view, does your organization have a Coordinated and Supportive culture toward a universal healthcare program?

Yes No

6.3 (b) Please explain.....

Section VII: Performance of Universal Health Coverage

The following are statements relating to the performance of Universal Health Coverage.

Please indicate the extent of agreement or disagreement with each statement. Key:

1=Strongly Disagree, 2= Disagree; 3=Neutral; 4= Agree; 5= Strongly Agree. Use the

keys provided to tick.

	Universal Health Coverage	1	2	3	4	5
43	There is an availability of essential medicines and technologies to diagnose and treat medical problems.					
44	There is access to quality health services.					
45	We strive to offer affordable quality health services.					
46	We have being striving to offer quality health services that are accessible to all patients for all levels of income.					
47	We have been effective in our endeavor to provide every beneficiary with public health services					
48	We have achieved great success in protecting all people from impoverishment due to illness.					
49	We have being operating on the principles of equity and sustainability.					
50	We have achieved a people-centered health system that meets priority health needs for all at affordable rates.					
51	We have being able to raise revenues to expand and sustain the health coverage.					
52	We have maintained well-trained, motivated health workers to meet patients' needs.					
53	We have been able to maintain better quality equipment and health facilities.					
54	There is better facility infrastructure as compared to be before the UHC.					
55	We are managing an effective pooling and redistribution of resources to ensure sustainable equity and financial protection.					

7.1(a) State how long the UHC program was operational in your organization:

.....
.....
.....

7.1(b) What are your comments on the implementation of the universal healthcare program about healthcare access in your organization?

.....
.....
.....

7.2(a) What are the challenges you have experienced in the implementation of the universal healthcare program about healthcare access in your organization?

.....
.....
.....

7.2(b) How did the challenges you have experienced in the implementation of the universal healthcare program affect its

Accessibility:

Affordability:

Sustainability:

Thank you for your Participation

Appendix III: NACOSTI Research Permit

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Appendix IV: Evidence of Conference Participation



Appendix V: List of Publications

The International Journal of Business Management and Technology, Volume 7 Issue 5 September-October 2023
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Research Article

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Research and Development Strategic Initiatives on Sustainable financing of Universal Health Coverage in Kenya

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ABSTRACT: Universal health coverage (UHC) has been observed to positively impact on the financial protection and health status of residents of countries where it is implemented. However, the concept and possibilities of UHC remains underexplored in several low resource settings globally owing to little research and development efforts, thus, limiting the implementation of UHC. This paper, therefore, sought to establish the impact of research and development strategic initiatives at the institutional level on sustainable healthcare financing of UHC in Kenya. The study adopted a descriptive research design targeting UHC stakeholder organizations including the Ministry of Health, public and private social health insurers, donor fund agencies, as well as public and private healthcare providers in the country. From these, a sample size of 234 organizations were selected using mixed sampling techniques to participate in the study. Data was collected through questionnaires and interview schedules. Data was analyzed using descriptive statistics and inferential statistics, that is, bivariate correlation and multivariate regression analysis. The study found that research and development strategic initiatives significantly influenced the sustainable financing of universal Health Coverage in Kenya. Technological Integration of medical Systems was the most influential R&D strategic initiative in predicting Sustainable Financing of UHC. This was followed by Public support for and trust in healthcare research and Potential for medical Work-Flow Process Reengineering. The study recommends that more research should be conducted at the institutional level rather than the personal level on UHC financing so as to produce high quality research.

Keywords: *universal health coverage, research and development, strategic initiatives, sustainable health financing strategies*

I. INTRODUCTION

The visibility and importance of universal health coverage (UHC) has significantly increased over the last decade. UHC interventions in middle and low-income nations have improved the access to health services. UHC is often seen to have an effect that impact positively on the financial protection and health status of residents of countries where it is implemented (Debroy& Kumar, 2015). However, the concept and possibilities of UHC remains underexplored in several low resource settings globally owing to little research and development efforts limiting the implementation of UHC. The demand for access to quality health services has been increasing over time as healthcare reforms increase and people become more aware of their entitlements from the state and what is possible for them. The scope of UHC must, therefore, go beyond treatment and also include services such as palliation, rehabilitation, promotion and prevention. Furthermore, the universal coverage of the required services cannot be achievable without universal access to health technologies and essential medicines, motivated sufficient health workers situated at the right places and information systems that permits making of informed decisions (Baral&Dieleman, 2015).

According to Mukherjee et al, (2016), if the population have to pay the full costs of obtaining the health services out of their own pockets the poor people will not be able to access these services and in the event of long term or severe illnesses even the rich would be exposed to financial constraints. To spread the financial risks of illnesses across the population, funds are pooled through insurance contributions, tax and other government revenues. Therefore, this calls for sustainable health financing. Sustainable health care financing ensures that all people access health in the country. As countries undergo their health financing transitions, moving away from external and out-of-pocket (OOP) financing

HEALTH POLICY AND PLANNING STRATEGY INITIATIVES ON UNIVERSAL HEALTH COVERAGE: A
PERSPECTIVE FROM KENYA

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ABSTRACT

Universal health coverage is an important and noble objective for quality healthcare service delivery for all citizens in any country. However, it needs to be anchored on a robust policy framework. Therefore, a strong policy framework is needed to underline the government's commitment towards this initiative. However, it has not been previously established whether health policies as a strategy significantly affects Universal Health Coverage in Kenya. Therefore, the aim of this paper was to establish the influence of health policy and planning strategy initiatives on achievement of UHC in Kenya. The study adopted a descriptive research design targeting UHC stakeholder organizations including the Ministry of Health, public and private social health insurers, donor fund agencies, as well as public and private healthcare providers in the country. From these, a sample size of 234 organizations were selected using mixed sampling techniques to participate in the study. Data was collected through questionnaires and interview schedules. Data was analyzed using descriptive statistics and inferential statistics, that is, bivariate linear regression analysis. The study found that health policies strategy had a significant relationship with the achievement of the Universal Health Coverage in Kenya. This meant that strengthening health policies will lead to better achievement of UHC. The study recommended that policies aimed at the regulation of the health sector to achieve UHC need to be strengthened so as to improve collaboration among healthcare organizations and the achievement of UHC in the country.

Keywords: *Universal Health Coverage, Health Policy, Insufficient Funding, Sustainable Health Financing Strategies*

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