Critical Analysis of Personal Medical Health Insurance as an Approach to Managing Student Healthcare in Public Secondary Schools in Meru County, Kenya

Mbaabu Silas Muguna [1]*, Paul Maku Gichohi [1], Tarsilla Kibaara [1]

[1]*Kenya Methodist University, P.O. Box 267-60200, Meru, Kenya.*

**Correspondence email:* mbaabus@yahoo.com

Abstract

Provision of healthcare to secondary school students is paramount. However, in Kenya, this undertaking is often curtailed by inadequate funding, poor infrastructure, food insecurity, high poverty levels, and unemployment challenges. These challenges complicate the choice of a service model for managing healthcare of students in public secondary schools in Meru County - Kenya. The purpose of this study was to analyze personal medical insurance as an approach for managing students' healthcare in public secondary schools in Meru County. This study is systematic review paper where secondary sources of information were analyzed and synthesized as guided by the main theme. Documentary analysis coupled with systematic review of existing literature from reports, past studies and conference proceedings were central in forming the theoretical foundation and systematic argument developed in this paper. The study established that the adoption of personal medical insurance in secondary schools does not only affect the education outcomes, but it also enhances equity of secondary school education and leads to improved retention and completion rates of students in schools. However, its adoption in public secondary school is not widespread in Meru County, Kenya. This is attributed to shortages of infrastructures, resources, weak structures and mechanisms on health provision, and absence of policy on personal medical health insurance for students in public secondary school in Kenya. These findings raise questions on policies by Ministry of Education and Ministry of Health on provision of healthcare to students in secondary schools. Medical health insurance companies are called upon to remodel and customize their personal health insurance products to fit students in public secondary schools.

Key Words: *Students healthcare, school health services, personal medical insurance, health insurance, healthcare provision to students, school health provision model*

IJPP 9(1), 57-70

1.0 Introduction

Generally, healthcare refers to the total effort taken on maintenance or improvement of societal health via prevention, diagnosis, and treatment of diseases and illness, injuries, and other physical and mental impairments. This kind of care is usually delivered by health professionals and practitioners (Longest, 2014). Healthcare management requires diligence in order to

avoid loss of lives. In this paper, management of healthcare refers to the administration, oversight, maintenance, and enhancement of healthcare systems and medical facilities (Buchbinder & Shanks, 2012). From the school point of view, the aspect of management include the duty of ensuring effective healthcare systems, engagement of professionals where appropriate, ensuring unity of purpose, well-coordinated healthcare services, effective dissemination of information, and efficient utilization of resources (Longest, 2014).

The issue of health of learners is of great interest and has dominated discussions in different forums across the globe due to its significance in national development (Wasonga et al., 2014). Research shows that the health of young people is significant in determining the future well-being and economic productivity of populations (Kolbe, 2019). It is not disputable that learners in secondary schools are part of the youth that lack access to consistent high-quality healthcare, especially in developing countries. For example, approximately 60% of students who miss classes in Nigeria are due to ill-health (Kuponiyi et al., 2016).

Hence, there is need to re-think appropriate strategies for providing healthcare to learners in high schools. Notably, unhealthy students can hardly concentrate in class, while those at home due to sickness suffers absenteeism and, in the long run, lose track in the learning process (Sarkin-Kebbi & Bakwai, 2016). Continued absenteeism may ultimately curtail ambitions and plan to provide education for all (Sprig et al., 2017). Moreover, the desired academic achievement and aspirations can be frustrated if learners lack proper healthcare during the schooling period. This implies that barriers to health insurance encountered by many disadvantaged families may adversely affect academic performance of learners (Wahlstrom et al., 2014).

Both Wood Johnson Foundation (2016) and Sarkin-Kebbi and Bakwai (2016) note that failure to address the health of secondary school learners may cause chronic absenteeism. This may further affect one's academic performance and ultimately, the employment at a later stage. In the US for example, the report by Wood Johnson Foundation indicated that students miss approximately 14 million days every year which is largely attributed to physical and mental illness.

The report recommended a change in policy and systems for delivering healthcare, and further underscored the role played by national government, local education agencies, parents and school administrations in ensuring healthcare services to all students. In this regard, principals who are charged with the responsibility of managing a secondary school are expected to ensure that an effective healthcare delivery model is adopted.

The holistic approach to the provision and improvement of healthcare in secondary schools, which is advocated in this paper, is aimed at achieving access to healthcare services, improve retention of students in schools, as well as facilitate equity and completion of learners' education (Department of Health Western Australia, 2014; Sarkin-Kebbi & Bakwai, 2016; Rasberry et al. (2017; Wood Johnson Foundation, 2016). As such, appropriate healthcare management approach is meant to promote wellbeing, prevent and control communicable diseases, and provide emergency care solutions to students (Munyasya, 2014), hence, the motivation to carry out this study.

The overall aim of this study was to contribute to a theoretical argument which will help in the development and implementation of healthcare systems in secondary schools in Kenya. This paper specifically aims at expanding knowledge and understanding of personal medical health insurance as a healthcare delivery model in public secondary schools in Meru County, Kenya; and other countries in similar geopolitical and economic regions.

Models of delivering healthcare to students in secondary schools

Globally, there is inadequate literature on healthcare service provision models to learners in secondary schools. However, studies conducted by Baltag and Levi (2013) describe five common models of delivering school healthcare in WHO European countries.

They include: dedicated school-based model, where school health professionals are permanently available in schools, or are part-time based in schools; the dedicated community-based model, where school health professionals are based outside the school premises; integrated primary care model, where healthcare services are statutory and delivered by primary care teams who either visit schools or are visited by pupils for primary healthcare; mixed school-based model; healthcare services that are statutory and delivered by primary care teams, who, either visit schools or are visited by learners in primary healthcare facility; mixed community-based model that involve school health professionals that are based outside the school premises.

There is also statutory provision of school health services (SHS) by primary care teams. Despite all the above models, there is dearth of literature on appropriate models and approaches for providing healthcare to high school students using personal medical insurance model.

Overview of Health Services in Public Secondary Schools in Kenya and Meru County

Kenya is one of the African countries that are slowly considering addressing the health of students. The new constitution of Kenya which was promulgated in 2010 stipulates that every child has the right to healthcare and basic education. In that regard, the Ministry of Education and the Ministry of Health developed a national school health strategy implementation plan, 2011-2015 but the success of the implementation of this strategy faced serious drawbacks.

Moreover, Kenya has a health policy under the Ministry of Health (MoH) in line with the country's Vision 2030 which aims at providing equitable, affordable and quality healthcare to the entire country through a network of over 4700 health facilities. MoH regulates and provides policy support and technical guidance to priority health-related national programs and stays in charge of the national referral hospitals, and remains responsible for human resources for health (university teaching hospitals, public universities and medical schools).

In pursuance to health agenda, the President in 2018 launched a health insurance cover for all students in public secondary schools, which covers students for the duration of full-time study in Public Secondary Schools. The cover also requires a student to be registered with Hospital Insurance Fund (NHIF) and be in National Education Management Information System (NEMIS) database (Capital Digital Media, 2018; Ministry of Education and NHIF, 2018).

In spite of the directive and good intention on healthcare services to students in public secondary schools, the initiative is facing unprecedented challenges emanating from lack of elaborate structures and implementation mechanisms. Most public secondary schools in Kenya have an alarming shortage, or lack of basic infrastructure to support the provision of this noble service (USAID, 2013). Besides the lack of healthcare personnel, the insufficient budgetary allocation to the Ministry of Health and the Ministry of Education, there has been a constant challenge where the majority of public secondary schools, mainly in the rural regions, have no access to good medical facilities within the school premises and in the vicinities (USAID, 2013).

This poses a real challenge to the management of healthcare services of students, a scenario that present a healthcare management challenge to principals of public secondary schools. The stroppy situation is no different in public secondary schools in Meru County. According to the Meru County Government (2018), there were 175 public secondary schools that admit students from both public and private primary schools. These schools had a total enrolment of 54,682, with the majority attending public secondary schools. Just like in other counties, the infrastructure in most of these public secondary schools largely, do not meet the bare minimum for teaching and learning,let alone the provision of healthcare services.

Undoubtedly, providing healthcare services to such a high population of students is therefore very challenging, especially with the recent government's directive of 100% students' transition from primary to secondary school.

Meru County has one level 5 hospital, eight-level 4 hospitals, 31 levels 3 facilities (health centers, nursing homes, and maternity homes) and 260 level 2 facilities (dispensaries and clinics) (Meru County Government, 2019). Apart from the Corona virus (COVID 19) which threatened the entire world, the major diseases affecting residents in the county are skin diseases, intestinal worms, HIV/AIDS and respiratory diseases among others.

Cancer has also emerged as a serious chronic disease in this county. This status has worsened low labor productivity and poverty levels due to high medication expenses (Meru County Government, 2019)in spite of the government willingness to ease the medical burden on its citizens. The condition is also ripple-affecting students of secondary schools. This indicates weaknesses in the healthcare provision model to learners in secondary schools in this county; hence, the need to explore appropriate approaches that would ensure equitable access to healthcare by all students in public secondary schools. This systematic review paper explores personal medical health insurance model as a probable solutions to the provision of medical healthcare services to students in public secondary schools in Meru County.

2.0 Materials and Methods

A systematic review of existing literature was used in exploring probable solutions to the provision of medical healthcare services to students in public secondary schools with special attention to personal medical health insurance. Secondary sources of information gotten from online electronic databases and print resources were analyzed and synthesized as guided by the identified theme.

Documentary and systematic review of existing literature from reports, past studies, conference proceedings, and print resources were central in developing the theoretical foundations and argument which are propagated in this paper. Results from review are provided in narrative form and discussed under pre-defined themes. A large scale study was to be carried at a later stage in order to provide the empirical evidence to the propositions.

3.0 Results and Discussion

The Provision of Personal Medical Health Insurance in Public Secondary Schools

Pursuing secondary education school can be a rewarding experience as learners prepare to face the future. However, the ambitions can be curtailed by lack of tuition fees and funds for meeting health needs among many other factors. Both tuition and health costs are ever increasing and can be a serious strain to learners and parents or guardians (Medical Billing and Coding Online, 2019). A medical health insurance policy has been identified as significant in mitigating the cost of healthcare provision challenge in developed and developing countries.

In this context, a personal medical health insurance refers to a risk handling arrangement that take care of the whole or a part of medical expenses of an individual by spreading the risk over numerous members of a given health insurance scheme. In such a scenario, the overall risk of healthcare and health system expenses is spread over a pool of risks. The concerned health insurance company usually comes up with appropriate routine finance structures which can be done periodically to cater for the healthcare benefits that are specified in the health insurance contract (Health Insurance Association of America, 2008; Medical Billing and Coding Online, 2019). Certainly, a personal medical health insurance plan can offer health expenses a reprieve and further enable a high school learner to concentrate on education matters. With a personal medical health insurance, the costs associated with unexpected illness, injury, or any other emergency medical needs are addressed in an effective and efficient manner (Ayimbillah, 2012).

Cohodes et al. (2014) said that personal medical health insurance increases the rate of high school completion. Rickard et al, (2011) also reported a relationship between personal medical health insurance of students and education outcomes, and hence recommended collaborations in getting students enrolled in personal medical health insurance. This points out the role of school principals in advocating, lobbying and fostering health insurance for students in secondary schools. Rickard et al, (2011), however analyzed views collected from superintendents and negated views from students and principals of secondary schools. Hence, the management challenges associated with health insurance approach in providing healthcare to students could not be informed by the collected data.

Notably, parents in Kenya have increasingly been spending a lot of money on healthcare of their children in schools; something that is rapidly becoming difficult to handle. This calls for intervention undertaken by the government of Kenya to address introduction of a health insurance cover for learners in public secondary schools. However, the systems of managing students' healthcare in secondary schools are not elaborate (Wasonga et al., 2014). There have been many previous attempts to impose

control and direction by government through the Ministry of Education and Ministry of Health, but the two ministries have not managed to provide a fail-safe healthcare service delivery model for students in secondary schools. There are handful studies done in Kenya on school healthcare. A synopsis of literature shows that majority of past studies have focused on policy, statuses and health programmes among other issues.

Personal medical health insurance which is at the center of this discussion is a form of health insurance cover that protects an individual from paying directly for illness (Laycock, 2019). It refers to a mechanism where people protect themselves from the potentially extreme financial costs of medical care if they become ill, and ensure that they have access to health care services whenever they need them. Many countries have embraced halth insurance as a means of ensuring access to healthcare and to protect patients from financial risk (Yip & Berman, 2001). The companies that provide personal health insurance services usually pools the risk of health care costs across a large number of people, hence spreading the risks which eventually make the cost of health care reasonably affordable to many people (Health Insurance Association of America, 2008).

Obviously, the principal member of a personal medical health insurance usually pays a monthly subscription depending on the terms that are agreed with an insurance company. The monthly subscription normally varies with health insurance companies and the prescribed services (health insurance products) (Laibuch, 2019). According to Health Insurance Association of America (2008), personal medical health insurance cover can be provided by public organizations through national insurance program and / or private health insurance companies, where, medical insurance cover is procured or sponsored by employers or through private arrangement by individuals.

The personal medical insurance cover takes three different forms. There are cases where the parents have a medical insurance cover which is gotten through the organization where the parent is working and hence, the benefits are extended to cover the spouses' children who are under eighteen years. This is usually referred to as employer-sponsored health insurance (Heck & Makuc, 2000). In such a case, medical bills for the prescribed conditions are met by the health insurance companies as contracted by the employer organization of the parent. A good example is the one by Stanbic bank (2019). In some organizations, the person benefiting from a personal medical insurance pays some money at the end of every month while in others; the medical insurance company receives deductions of money from the principal member of the medical cover salary in a kind of a co-pay arrangement (Bose, 2016; Laibuch, 2019).

Parents who have a job in established organizations or who have sufficient family income are also able to individually facilitate personal health insurance coverage for their children (Heck & Makuc, 2000). Notably, students with special needs rely heavily on government-sponsored insurance rather than employer-sponsored insurance, although many students with special needs often remain uninsured. This is due to the fact that some parents relinquish employment to take care of their special needs children.

The study further noted that some students were enjoying dual coverage, that is, both government-sponsored and employer-

sponsored health insurance covers. The study by Heck and Makuc gathered data from parents and children, and utilized logistic regression models in the analysis. However, the results of this study have adoption limitations in Kenya because opinions which can inform the management approaches such as from principals of secondary schools were not solicited. The second form of personal medical insurance cover is where parents or guardians procure individual medical insurance cover from a private life insurance company to cover family members.

The third form is where a given secondary school procures a medical insurance cover for its entire student population. This option ensures that students get the best treatment (Schoolsure, 2015). The main benefits associated with this form of personal medical health insurance is that, there is no worry on whether a student has medical aid or the financial means to afford a private hospital or ambulance service.

This further ensures that students have access to medical emergency services even when they are on a school outing or playing sport in a different school. In such scenarios, a policy usually exists which outlines how the medical provider is involved, the communication role of the school, how the affected students should benefit from the agreed health services and how to involve parents or guardians (Schoolsure, 2015). The last two forms of personal medical insurance are contributory schemes where the parents submit health insurance premium as agreed with an insurance company or the school.

Literature from developed and developing countries shows the existence and widespread use of personal medical health insurance by parents and guardians especially those working in formal organizations (Heck & Makuc, 2000). Consequently, some secondary school students have benefited in accelerated access to healthcare. There are few cases where high schools have contracted an insurance company to provide medical insurance cover to its students, yet in other countries, for example, Unites States, public health insurance program have been expanded to the uninsured populace, something that has positively improved childhood access to healthcare (Cohodes et al., 2014).

A personal medical health insurance cover for students is characterized by various features which include declaration of pre-existing condition– a health problem that a person had before applying for a medical cover policy; the waiting period which the beneficiary will have to wait before the medical cover company starts to pay for the pre-existing conditions, cost involved; capping policy with reference to spending threshold, and accompanying package (Bose, 2016; Laibuch, 2019; Stanbic bank (2019). The scope of coverage in personal medical health insurance varies with each product. Majority include inpatient benefits, maternity, outpatient benefits, medical check-up, wellness package, dental, optical, dialysis, disability, dismemberment, accidental death, overseas treatment services among others (Bose, 2016).

Despite its significance, the global adoption of personal medical health insurance cover as a means of facilitating access to medical care by students of secondary school is facing serious drawbacks. Notably, some parents usually associate personal medical health insurance with high cost of paying the prescribed premiums. It is also clear that some specialists prefer treating patients who

are paying cash money than those who are using medical health insurance covers, citing the long waiting periods before the insurance company pays for the medical expenses incurred (Breslau, 2014).

In other cases, medical officers may prescribe drugs which are not available in hospitals or pharmacies that are accredited by a given health insurance company; something that forces sick high school students to use money for upkeep in buying drugs elsewhere. Obviously, this is an additional financial burden to parents. Moreover, some conditions are not covered in the scope of the prescribed medical services; for example, travel vaccines, acupuncture, cosmetic surgery, nursing home care, weight loss services, and others (Muli, 2018).

Many times, it forces the affected students to seek services elsewhere at own costs. Also noted is that some insurance companies suffer from bad reputation and / or faces integrity issues leading to losses of funds through corrupt deals (Breslau, 2014; Muli (2018). There are also cases raised in regard to poor coordination in secondary schools whenever a student has fallen sick within the compound (Nation Team, 2018; Muli, 2018).

Personal Medical Health Insurance Provision to High School Students: The Experience from selected Countries

China is one of the most developed countries in the world that has a high population of human beings. Its government under the Ministry of Health developed a health insurance cover for its citizens. According to Fang et al. (2019), those people who live in rural areas and those who live in urban areas have different insurance covers. Initially, China had rural co-operative medical scheme which was covering people in the rural areas, and an urban employee basic medical insurance which caters for the urban residents' basic medical insurance.

Additionally, the government of China made a legal requirement for all students (local and international) in China to have a personal medical insurance. As a country, China has actually achieved a near-universal health insurance coverage, which has gone a long way in increasing public access to healthcare services (Fang et al., 2019). The common modes of payments noted among numerous medical health insurance included an arrangement where costs are met by students directly and then reimbursed by the insurance company later. In other cases, there is the use of direct billing card – where a student receives a card which one uses to pay for the expenses in the hospital directly. Research by Fang et al. (2019) shows that China is strengthening measures to ensure efficiency in health system and services for all its citizens.

In Africa, Egypt was among the first countries to provide school health insurance programme to all students in the school enrolment (Yip & Berman, 2001). In Egypt, the School Health Insurance Programme (SHIP) was anchored in law in 1992 which opened up the coverage to all school children regardless of their enrollment status (Yip & Berman, 2001). The programme in Egypt is subsidized through government health insurance system whose primary goal is to improve access and equity in access to health care of school children. The Health Insurance Organization (HIO) in Egypt are mandated to providing the school health insurance where they offer a comprehensive benefit package that include preventive

services, outpatient care, inpatient care, and subsidized pharmaceuticals.

The study by Yip and Berman (2001) reported existence of other medical insurance apart from SHIP, such as private insurance and employer-provided insurance through parents, although their market share in Egypt was very small (3%) (Yip & Berman, 2001). Despite providing very useful empirical data, the study by Yip and Berman (2001) collected data from households in finding out the impact of school health insurance programme on access to health care. It did not interrogate the beneficiaries of the school health insurance programme, hence the report negated the views from principals of schools and from students.

Ghana is a country in West Africa that has a well-regulated health insurance industry as guided by National Health Insurance Act of 2012, where the National Health Insurance Scheme (NHIS) is mandated to providing equitable access and financial coverage for basic health care services for the citizens. NHIS further provides licenses to private insurance companies so that they are kept under check. In this country, the private insurance schemes were initially associated with elites but people later accepted public insurance scheme.

The regulated health insurance companies are noted to be offering various personal covers to high school students. The main services provided through NHIS are consultation, prescription of medicine, optical, dental, hospital deliveries and surgeries (Ayimbillah, 2012). The main challenges affecting NHIS from card holders' perspectives were reported by Ayimbillah which included: poor patient-provider relationship, delays in medical and administrative procedures and other operational lapses of hospitals.

Although, the study by Ayimbillah (2012) collected views from personal insurance card holders who were drawn from general patients in selected hospitals, it provides important highlights on the key issues which also affect student-patients who have access to health insurance cards. From Ayimbillah's study, it is clear that the nature of prequalified or accredited hospitals was a critical consideration to patients owing to the significance of physical outlook in terms of décor, layout, cleanliness, and ambience of hygienic environment and facilities, as well as the waiting time, and provider demeanor in delivering the expected healthcare to patients. The study further pointed out the shortcoming in government policy in implementing NHIS and hence called for concerted efforts from all stakeholders in creating appropriate operational environmental conditions for health insurance.

In South Africa, the National Health Insurance (NHI) was initiated in 2011 with an aim to ensuring that everyone has access to appropriate, efficient and quality health services (Naidoo, 2012). Despite facing challenges like lack of human resources and underperformance of public institutions, the success of NHI in South Africa has been anchored on social justice principles which focus on the right to access healthcare, adoption of innovative health service delivery models, universal and equity coverage with care, cognizance of health as a public good, and efficient administrative structures (Naidoo, 2012). However, the role of principals in the use of NHI among secondary school students is ambiguous since the emphasis is mostly on hospital-based benefits at designated health facilities.

In Kenya, there are many companies that provide personal medical health insurance cover. They include Jubilee health insurance, Madison insurance, Britam insurance, UAP insurance among others (Laibuch, 2019). These healthcare firms work with pre-qualified medical providers and offer various products to different clients and markets. Depending on the nature of a prescribed personal medical health insurance cover, the outpatient services offered to students may include: outpatient consultation, diagnostic laboratory and radiology services, prescribed drugs and dressings, chronic and pre-existing conditions, and day care specialized surgery. The inpatient services offered to students consist of: hospital accommodation charges, pre-hospitalization diagnostic services, doctor's fees, medication and internal surgical appliances, diagnostic services, rehabilitative services, operating theater services, radiological diagnostics, for example, x-ray services; CT scan, MRI and ECG. Other services include dental, optical, and ambulance services (Muli, 2018).

4.0 Conclusion

There is enormous literature on school health, most of which have focused on analyzing the health services and activities offered to high school students. The reviewed literature has indicated that the adoption of personal medical health insurance among secondary school students in Kenya is not widespread. This is attributed to high cost of premium payments, unemployment, unstable jobs, lack the knowledge on health insurance and the fact that many parents are peasant farmers or are self-employed hence lack exposure and information on medical insurance. It has also emerged that the structures and mechanisms for providing personal medical health insurance to students in secondary schools in Meru County, Kenya are not elaborate and lack profound operational systems and policy.

5.0 Recommendations

Ministry of Health and Ministry of Education should collaboratively come up with measures of providing reprieve by sponsoring or subsidizing medical expenses of public secondary school students. This has implications on national healthcare provision policies and budgetary allocations in order to provide affordable personal health insurance cover to all students of public secondary schools in Meru County and Kenya in general. The Ministry of Health should also enact policies that provide conducive operational conditions for health insurance companies with a view to widening the coverage to secondary school students.

The medical insurance companies should on their part remodel and customize their personal health insurance products in order to encourage secondary schools to corporately pursue personal medical health insurance for their students. The study further draws principals to the center of this study considering their leadership role in the entire healthcare provision programmes in public secondary schools in Kenya. They are therefore expected to advocate, lobby and foster personal health insurance for students in public secondary schools.

References

Ayimbillah, A. R. (2012). Healthcare quality under the National Health Insurance Scheme in Ghana. *International Journal of Quality & Reliability Management*, *29*(2), 144–161. https://doi.org/10.1108/02656711211199883

Baltag, V., & Levi, M. (2013). Organizational models of school health services in the WHO European Region. *Journal of Health Organization and Management*, *27*(6),733–746. https://doi.org/10.1108/JHOM-08-2011-0084

Bose, A. (2016). *Ten important features of health insurance policy.* https://www.businessworld.in>article>ten-important-feature-of-your-health-insurance-policy

Breslau, E. (2014). *The 8 things your insurance company doesn`t cover.* https://www.huffpost.com>entry>the 8 things your insurance company doesn`t cover.

Buchbinder, S. B., & Shanks, N. H. (Eds.). (2012). *Introduction to health care management* (2nd ed.). Jones & Bartlett Learning.

Capital Digital Media. (2018). *President launches Sh4bn NHIF cover for students in public secondary schools*. https://www.capitalfm.co.ke/news/2018/04/president-launches-sh4bn-nhif-cover-students-public-secondary-schools/

Cohodes, S., Grossman, D., Kleiner, S., & Lovenheim, M. F. (2014). *The effect of child health insurance access on schooling: Evidence from public insurance expansions* (Working Paper No. 20178). National Bureau of Economic Research. https://doi.org/10.3386/w20178

Department of Health Western Australia, (2014). *School health service rationale.* 74. https:/healthwa.wa.gov.au/Artiles/S_T/School-health-services

Fang, H., Eggleston, K., Hanson, K., & Wu, M. (2019). Enhancing financial protection under China's social health insurance to achieve universal health coverage. *The BMJ*, *365*(2378), 1–4. https://doi.org/10.1136/bmj.l2378

Health Insurance Association of America, (2008). *How private insurance works: A primer. The Henry J. Kaiser family foundation.* https://www.kff.org/health-costs/report/how-private-insurance-works-a-primer/

Heck , K. E. & Makuc. D. M. (2000). Parental employment and health insurance coverage among school-aged children with special health care needs. *American Journal of Public Health, 90*(12), 1856 – 1866. 10.2105/ajph.90.12.1856

Kuponiyi, O. T., Amoran, O. E., & Kuponiyi, O. T. (2016a). School health services and its practice among public and private primary schools in Western Nigeria. *BMC Research Notes*, *9*. https://doi.org/10.1186/s13104-016-2006-6

Kolbe, L. J. (2019). School health as a strategy to improve both public health and education. *Annual Review of Public Health, 40*(1), 443–463. https://doi.org/10.1146/annurev-publhealth-040218-043727

Laibuch, N. (2019). *Top 10 best insurance companies in Kenya 2019.* https://www.fleekbook.com

Laycock, R. (2019). *Types of personal insurance coverage.* https://www.finder.com>personal-insurance.

Longest, B. B., & Darr, K. (2014). *Managing health services organizations and systems* (6th ed.). Health Professions Press.

Medical Billing and Coding Online, (2019). *Medical insurance guide for students* Medical Billing and Coding Online: Learn About the Industry! http://www.medicalbillingandcodingonline.com/medical-insurance-for-students/

Meru County Government, (2018). *Meru county integrated development plan, 2018-2022*. file:///C:/Users/intern/Downloads/20180815_meru_county_integrated_development_plan_2018_2022.pdf

Ministry of Education, Ethiopia. (2012). *National school health and nutrition strategy*. https://www.iapb.org/wp-content/uploads/Ethiopia_National-School-Health-Nutrition-Strategy.pdf

Ministry of health, (2017*). Organization structure*. http://www.nhif.or.ke/healthinsurance/Objectives

Muli, F. (2018). *All you need to know about the new medical cover for secondary school students*. https://www.kahawatungu.com/2018/10/18/medical-cover-secondary-school-students-nhif/

Munyasya, J. M. (2014). *Factors influencing efficiency of health services in public secondary schools in Kitui Central District, Kitui County, Kenya*. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiW2IjGhtrkAhXsAmMBHboABwsQFjAAegQIABAC&url=http%3A%2F%2Ferepository.uonbi.ac.ke%2Fbitstream%2Fhandle%2F11295%2F101356%2FFACTORS%2520INFLUENCING%2520EFFICIENCY%2520OF%2520HEALTH%2520SERVICES%2520IN%2520PUBLIC%2520SECONDARY%2520SCHOOLS.pdf%3Fsequence%3D1%26isAllowed%3Dy&usg=AOvVaw2h3nOqqGUCAYJyYWewa-lA

Naidoo, S. (2012). The South African national health insurance: A revolution in health-care delivery! *Journal of Public Health, 34*(1), 149–150. https://doi.org/10.1093/pubmed/fds008

Nation Team. (2018). *Schools ill-equipped to take care of sick students, survey reveals*. https://www.nation.co.ke/news/Survey--Schools-ill-equipped-to-take-care-of-sick-students/1056-4377076-5euxmi/index.html

Rasberry, C. N., Tiu, G. F., Kann, L., McManus, T., Michael, S. L., Merlo, C. L., Lee, S. M., Bohm, M. K., Annor, F., & Ethier, K. A. (2017).

Health-related behaviors and academic achievement among high school students—United States, 2015. *MMWR. Morbidity and Mortality Weekly Report*, *66*(35), 921–927. https://doi.org/10.15585/mmwr.mm6635a1

Rickard, M. L., Hendershot, C., Khubchandani, J., Price, J. H., & Thompson, A. (2010). School nurses' perceptions and practices of assisting students in obtaining public health insurance. *Journal of School Health*, *80*(6), 312–320. https://doi.org/10.1111/j.1746-1561.2010.00506.x

Rickard, M. L., Price, J. H., Telljohann, S. K., Dake, J. A., & Fink, B. N. (2011). School superintendents' perceptions of schools assisting students in obtaining public health insurance. *Journal of School Health*, *81*(12), 756–763. https://doi.org/10.1111/j.1746-1561.2011.00655.x

Sarkin-Kebbi, M., & Bakwai, B. (2016). Revitalising school health programme for effective school administration in Nigeria. *International Journal of Tropical Educational Issues*, *1*(2), 199–211. https://www.researchgate.net/publication/322580399_Revitalising_School_Health_Programme_for_Effective_School_Administration_in_Nigeria

Schoolsure. (2015). *School Insurance—School Insurance South Africa—School Insurance.* https://www.schoolsure.co.za/faq

Sprigg, S. M., Wolgin, F., Chubinski, J., & Keller, K. (2017). School-based health centers: A funder's view of effective grant making. *Health Affairs*. https://doi.org/10.1377/hlthaff.2016.1234

Stanbic bank. (2019). *Personal or family medical insurance | Stanbic Bank—Kenya*. https://www.stanbicbank.co.ke/kenya/personal/Personal-Insurance/Personal-or-Family-Medical-Insurance

United States Agency for International Development. (2013). *Human resources for health assessment report for nothern Kenya overview of health workforce distribution across 10 counties. Healthcare in Kenya*, 21-26. http://www.health.go.ke/wpcontent/uploads/2015/09/Final%20merged%20NK%20HRH%20Report.pdf

Wahlstrom, K., Dretzke, B., Gordon, M., Peterson, K., Edwards, K., & Gdula, J. (2014). *Examining the impact of later high school start times on the health and academic performance of high school students: A Multi-site study*. http://conservancy.umn.edu/handle/11299/162769

Wasonga, J., Ojeny, B., Oluoch, G., & Okech, B. (2014). Kenya comprehensive school health policy: Lessons from a pilot program. *Journal of Public Health in Africa*, *5*(1), 43–46. https://doi.org/10.4081/jphia.2014.313

Wood Johnson Foundation, R. (2016, September 1). *The relationship between school attendance and health*. RWJF. https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html

Yip, W., & Berman, P. (2001). Targeted health insurance in a low income country and its impact on access and equity in access: Egypt's school health insurance. *Health Economics, 10*(3), 207–220. https://doi.org/10.1002/hec.589