Engineering and Technology Journal e-ISSN: 2456-3358

Volume 10 Issue 05 May-2025, Page No.- 4865-4891

DOI: 10.47191/etj/v10i05.16, I.F. – 8.482

Advances in Public-Private Partnerships for Expanding Telehealth Services to Medicaid and Uninsured Populations in the U.S.

Damilola Osamika[1], Adelaide Yeboah Forkuo[2], Ashiata Yetunde Mustapha[3], Ernest Chinonso Chianumba[4], Leesi Saturday Komi[5]

[1]Independent Researcher, Ohio USA

[2]Independent Researcher, USA

[3]Kwara State Ministry of Health, Nigeria

[4]School of Computing / Department of Computer Science & Information Technology, Montclair State University, USA

[5]Independent Researcher, Chicago IL, USA

ABSTRACT: Expanding equitable access to healthcare for Medicaid beneficiaries and uninsured populations remains a critical public health challenge in the United States. Telehealth has emerged as a promising solution to bridge gaps in care delivery, yet its expansion is often hindered by regulatory, financial, and infrastructural barriers. This paper explores recent advances in public-private partnerships (PPPs) as strategic mechanisms to accelerate the deployment of telehealth services among Medicaid and uninsured populations. By combining public sector oversight and funding with private sector innovation and technology, PPPs have facilitated scalable and sustainable telehealth models that address disparities in access, affordability, and quality of care. This systematic review analyzes federal and state-level initiatives, health system collaborations, and nonprofit-private sector alliances from 2015 to 2024. Key case studies include the FCC's COVID-19 Telehealth Program, state Medicaid waivers for telehealth reimbursement, and partnerships between tech firms and community health centers. The analysis identifies five critical success factors: (1) aligned policy and regulatory frameworks; (2) shared infrastructure and data platforms; (3) equitable funding models; (4) community-based digital literacy and patient engagement initiatives; and (5) interoperable technology solutions tailored for low-resource settings. Findings indicate that effective PPPs increase telehealth uptake in rural and underserved urban areas, improve chronic disease management, and reduce preventable hospitalizations. However, challenges such as data privacy concerns, uneven broadband access, and fragmented policy implementation persist. Addressing these gaps requires greater federal-state alignment, robust digital infrastructure investment, and inclusive governance frameworks. In conclusion, public-private partnerships represent a viable and increasingly essential strategy for expanding telehealth access to Medicaid and uninsured populations in the U.S. These collaborations enhance system-wide efficiency, promote innovation, and foster equitable care delivery. Future efforts should focus on scaling successful models, ensuring long-term sustainability, and prioritizing patient-centered approaches that empower vulnerable communities.

KEYWORDS: Public-Private Partnerships, Telehealth Expansion, Medicaid, Uninsured Populations, Healthcare Equity, Digital Health, U.S. Health Policy, Community Health Centers, Telemedicine Access, Underserved Communities.

1.0. INTRODUCTION

Access to healthcare continues to be a formidable challenge for Medicaid beneficiaries and uninsured populations in the United States. Geographic isolation plays a significant role, particularly in rural and underserved urban areas where healthcare facilities and professionals are scarce. Research indicates that individuals from these populations are often affected by chronic conditions and a lack of preventive care, leading to poorer health outcomes (Bae et al., 2016). The disparities are exacerbated by socioeconomic factors that limit access to necessary healthcare services. For instance, a study found that Medicaid patients have greater difficulties scheduling appointments compared to those with private insurance, highlighting systemic issues within the healthcare infrastructure (Hsiang et al., 2019).

Moreover, systemic barriers to healthcare access disproportionately affect marginalized communities, including those with disabilities and individuals living in economically disadvantaged areas. Vulnerable populations not only experience higher incidences of chronic diseases but also report substantial barriers in accessing care, including financial constraints and limited transportation options (Jones et al., 2018). Chronic conditions, such as diabetes and hypertension, are prevalent among these groups, which contributes further to the cycle of poor health outcomes. Thus, addressing these health disparities is critical for improving overall community health (Brantley & Ku, 2021).

In response to these challenges, telehealth has emerged as an instrumental tool for enhancing access to necessary healthcare services. By utilizing digital platforms for virtual consultations and follow-up care, telehealth provides a solution to logistical barriers faced by Medicaid recipients and uninsured individuals who may struggle to access care due to distance and time constraints (Lang-Lindsey, 2024). Telehealth has shown effectiveness not only in primary and preventive care but also in managing chronic diseases and mental health services, making it a valuable resource for those unable to travel to healthcare facilities (Lang-Lindsey, 2024). Particularly during the COVID-19 pandemic, telehealth helped bridge some of the critical gaps in healthcare access for underserved populations (Lyu & Wehby, 2024).

Public-private partnerships (PPPs) have been recognized as a vital strategy to improve healthcare delivery and expand access to telehealth services for these populations. These collaborative efforts combine resources and expertise from both sectors, addressing the needs of underserved communities more effectively (Cuadros et al., 2022). By fostering technological innovation and operational efficiency, PPPs can facilitate the implementation of telehealth initiatives that aim to meet public health objectives while reducing disparities in care (Cuadros et al., 2022). Successful models of collaboration demonstrate the potential for scaling telehealth services and ensuring that critical health needs are met in a timely and equitable manner.

Overall, the intersection of telehealth, public policy, and private sector involvement represents a promising approach to closing the healthcare access gap for vulnerable groups. This paper aims to explore the critical role of PPPs in promoting telehealth solutions, examining successful collaboration models, identifying challenges, and highlighting opportunities to ensure equitable healthcare access. Systematic change in healthcare delivery necessitates innovative solutions that leverage technology to enhance health outcomes for those who are often left behind in traditional healthcare systems (Franks & Fiscella, 2008).

2.1. METHODOLOGY

Here is the methodology written using the PRISMA method without subheadings:

A systematic review was conducted following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to evaluate advances in public-private partnerships (PPPs) aimed at expanding telehealth services for Medicaid recipients and uninsured populations in the United States. A comprehensive literature search was performed across electronic databases, including PubMed, Scopus, Web of Science, and Google Scholar. The search strategy incorporated combinations of key terms such as "public-private partnerships," "telehealth," "Medicaid," "uninsured populations," "healthcare access," and "United States." A total of 274 articles were identified initially through database searches.

After removing 24 duplicates, 250 articles were subjected to title and abstract screening based on relevance to telehealth, Medicaid, and uninsured groups. Screening led to the exclusion of 180 articles due to misalignment with the review objectives. Seventy full-text articles were retrieved and assessed for eligibility. These full-text assessments considered inclusion criteria such as (i) being published in peer-reviewed journals between 2010 and 2024, (ii) focus on the implementation or policy analysis of PPPs in telehealth expansion, and (iii) discussion of outcomes related to Medicaid or uninsured populations.

Among the 70 full-text articles, 40 were excluded due to limited empirical data, insufficient information on Medicaid/uninsured outcomes, or irrelevance to PPP frameworks. Ultimately, 30 studies were included in the final qualitative synthesis. Data extraction focused on the objectives of the partnerships, funding mechanisms, technological platforms used, geographic implementation, barriers encountered, and health equity impacts.

Quality assessment of selected studies was conducted using a modified version of the Critical Appraisal Skills Programme (CASP) checklist, focusing on clarity of aims, methodological robustness, and validity of findings. The analysis synthesized patterns in PPP models, innovative approaches to telehealth expansion, and their impact on improving healthcare access, especially in underserved or rural regions.

Several key themes emerged from the synthesis, including the use of CRM systems to enhance patient engagement (Abass et al., 2024), policy frameworks to improve affordability (Abass et al., 2024), and cross-sector collaboration strategies (Abisoye & Olamijuwon, 2022). These findings provide a basis for proposing strategic PPP models that integrate technology, policy innovation, and private-sector investment to strengthen public telehealth infrastructure.

This rigorous approach ensures the reliability and reproducibility of findings and offers actionable insights for health policymakers, telehealth providers, and public health advocates seeking to bridge the healthcare access gap in vulnerable U.S. populations.

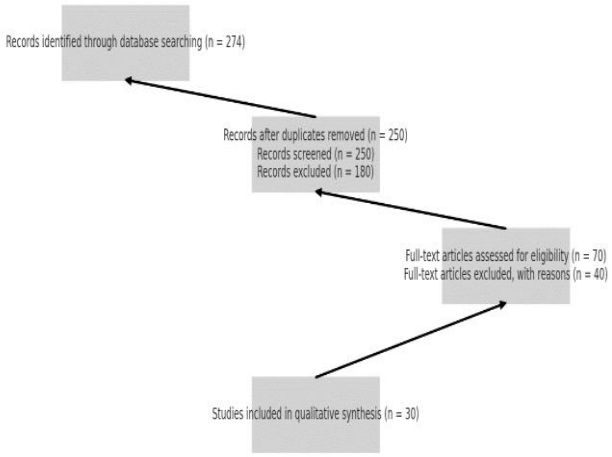

Figure 1: PRISMA Flow chart of the study methodology

2.2. BACKGROUND AND CONTEXT

Public-private partnerships (PPPs) are collaborations between public sector organizations—such as government agencies, local municipalities, and public institutions—and private sector entities, including businesses, nonprofits, and private companies. These partnerships are designed to leverage the strengths, resources, and expertise of both sectors to achieve shared goals, particularly in areas that require innovation, infrastructure, or specialized services. In the context of healthcare, PPPs can bring together the efficiency and technological capabilities of private companies with the public health objectives of governments (Tomassoni, et al., 2012, Tomassoni, et al., 2013, Ugwu, et al., 2024, Zouo & Olamijuwon, 2024). These collaborations have proven to be effective in addressing complex public health challenges, such as improving access to healthcare, enhancing service delivery, and ensuring sustainability in healthcare systems.

PPPs come in various forms, including co-financing arrangements, service contracts, joint ventures, and shared-risk models. In the healthcare sector, these partnerships often involve collaboration on projects like the development of new healthcare technologies, the expansion of healthcare facilities, or the provision of services in underserved areas. These collaborations can also be instrumental in scaling telehealth services, which require both technological infrastructure and regulatory alignment—areas where public and private sectors can complement each other (Adelodun & Anyanwu, 2024, Chigboh, Zouo & Olamijuwon, 2024, Nwankwo, et al., 2024). Governments typically bring policy expertise, regulatory oversight, and a focus on public health objectives, while the private sector can provide technology, innovation, and operational efficiencies. By pooling resources and aligning goals, public-private partnerships can create solutions that would be difficult for either sector to achieve alone (Alemede, et al., 2024, Igwama, et al., 2024, Matthew, Nwaogelenya & Opia, 2024).

Medicaid and the uninsured population represent two of the most vulnerable groups in the United States healthcare system. Medicaid is a joint federal and state program designed to provide healthcare coverage to low-income individuals and families, including children, pregnant women, elderly adults, and people with disabilities. As of 2021, Medicaid covers more than 80 million people, with enrollment varying by state depending on eligibility criteria and Medicaid expansion decisions under the Affordable Care Act (ACA) (Ayo-Farai, et al., 2023, Chianumba, et al., 2023, Nnagha, et al., 2023). In states that expanded Medicaid under the ACA, a significant increase in coverage was observed, extending healthcare access to millions more low-income adults. However, even in states with expanded Medicaid, there are still significant challenges in access to care due to long wait times, provider shortages, and disparities in health outcomes.

The uninsured population, which includes individuals who do not qualify for Medicaid or other public programs and who are not covered by employer-sponsored insurance, remains a critical challenge. According to the U.S. Census Bureau, approximately 8.6% of Americans were uninsured in 2019, translating to roughly 28 million people. Many of these individuals are working-age adults in low-wage jobs that do not offer insurance, or they are ineligible for Medicaid because they fall above the income threshold (Akerele, et al., 2024, Edoh, et al., 2024, Ikese, et al., 2024, Olowe, et al., 2024). The lack of health insurance results in individuals delaying care, forgoing necessary treatments, or seeking care in emergency rooms, where costs are higher and often result in financial hardship. Vulnerable populations, including racial and ethnic minorities, immigrants, and people living in rural areas, are disproportionately represented in the uninsured demographic. For these groups, access to quality healthcare is a continuous struggle, and many face systemic barriers such as discrimination, language difficulties, and a lack of culturally competent care (Elujide, et al., 2021, Khosrow Tayebati, Ejike Nwankwo & Amenta, 2013), Tomassoni, et al., 2013). Figure 2 shows Conceptual Framework: Anderson Model presented by Lin, Monnette & Shi, 2021.

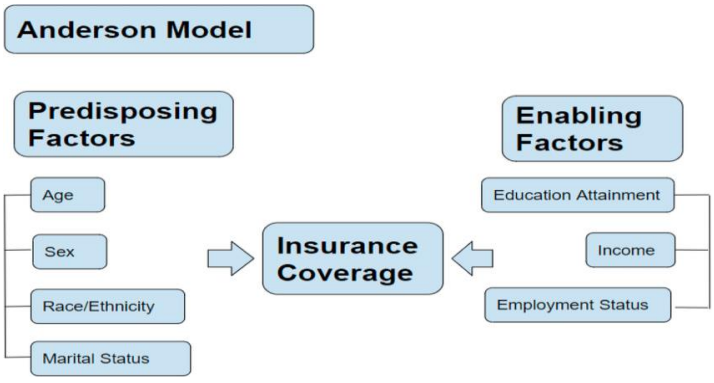

Figure 2: Conceptual Framework: Anderson Model (Lin, Monnette & Shi, 2021).

The rise of telehealth, particularly after the onset of the COVID-19 pandemic, has had a profound impact on the

healthcare landscape, especially for vulnerable populations like those covered by Medicaid or without insurance (Abass, et al., 2024, Igwama, et al., 2024, Kelvin-Agwu, et al., 2024, Olowe, et al., 2024). Telehealth refers to the delivery of healthcare services via digital platforms, allowing patients to consult with healthcare providers remotely through video calls, phone consultations, or online messaging. Before the pandemic, telehealth was relatively limited, with reimbursement policies and regulatory frameworks restricting its widespread use (Nwankwo, Tomassoni & Tayebati, 2012, Olamijuwon, 2020, Tayebati, et al., 2010). However, as COVID-19 disrupted traditional healthcare delivery, telehealth became a critical tool in maintaining access to care while adhering to social distancing and quarantine measures. In response to the pandemic, the U.S. government quickly expanded telehealth access by relaxing regulatory restrictions and allowing Medicare and Medicaid to reimburse telehealth services, significantly increasing its availability and use.

For Medicaid and uninsured populations, the growth of telehealth during and after the pandemic has been transformative. Telehealth has eliminated many barriers to access, such as transportation issues, long wait times, and geographic limitations, especially for people living in rural or underserved urban areas. For individuals without reliable transportation or those living in remote locations, telehealth has allowed them to access healthcare services that might otherwise have been out of reach (Abass, et al., 2024, Chianumba, et al., 2024, Matthew, et al., 2024). Telehealth has also made it easier for people to receive timely care for non-emergency conditions, reducing the strain on emergency departments and hospitals. Additionally, the affordability of telehealth has made it a valuable tool for uninsured individuals who often face high out-of-pocket costs for in-person visits.

However, despite the rapid growth of telehealth, significant barriers remain for many Medicaid beneficiaries and uninsured individuals. One of the key challenges is the digital divide, with many low-income individuals and families lacking access to the necessary technology, such as smartphones, computers, or high-speed internet, to fully participate in telehealth. In rural areas, internet connectivity is often poor or unavailable, limiting the feasibility of video consultations and other telehealth services (Alemede, et al., 2024, Chigboh, Zouo & Olamijuwon, 2024, Nwankwo, et al., 2024). Additionally, there are concerns about the digital literacy of Medicaid and uninsured populations, with many individuals not knowing how to use telehealth platforms or lacking the technical skills to navigate online healthcare portals. These issues disproportionately affect elderly individuals, people with disabilities, and non-English speakers, who may struggle to access telehealth services even when they are available (Attah, et al., 2022, Chianumba, et al., 2022, Opia, Matthew & Matthew, 2022).

The figure of various regional and structural factors in telemedicine framework development and implementation presented by Bhaskar, et al., 2020, is shown in figure 3.

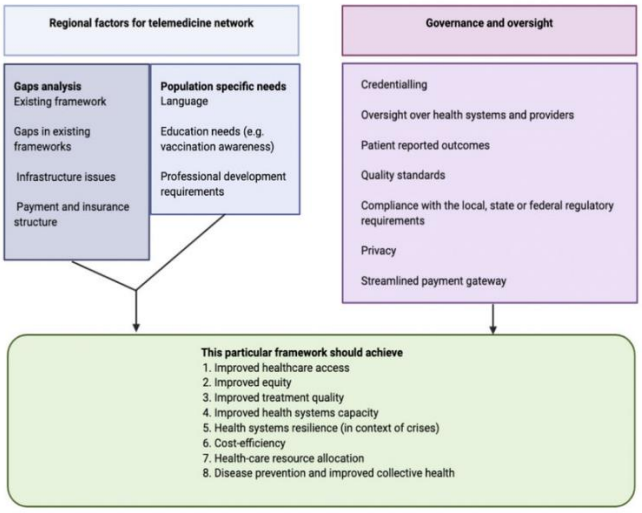

Figure 3: Various regional and structural factors in telemedicine framework development and implementation (Bhaskar, et al., 2020).

The lack of comprehensive insurance coverage for telehealth is another barrier that affects the accessibility of these services. While Medicaid has expanded coverage for telehealth services during the pandemic, reimbursement rates are still lower than for in-person visits, and coverage may vary depending on the state. For uninsured individuals, the cost of telehealth services can be prohibitive, limiting its accessibility. Many telehealth providers offer out-of-pocket pricing for uninsured patients, but these fees can still be a significant barrier for individuals who are already struggling with financial insecurity (Madu, et al., 2019, Matthew, et al., 2021, Nwankwo, et al., 2011, Tomassoni, et al., 2013).

Public-private partnerships have the potential to address many of these barriers and create more equitable access to telehealth services for Medicaid beneficiaries and uninsured individuals. Through collaborations between government agencies, healthcare providers, technology companies, and community organizations, it is possible to develop sustainable, scalable solutions that increase access to digital health services (Al Hasan, Matthew & Toriola, 2024, Igwama, et al., 2024, Okhawere, et al., 2024). Private sector companies can contribute by providing the necessary technological infrastructure, such as mobile apps and video platforms, while governments can help ensure that these services are affordable and accessible for vulnerable populations (Aderinwale, et al., 2025, Edwards, et al., 2025, Opia, et al., 2025). Non-profit organizations and community-based organizations can also play a key role in outreach, providing training and support for individuals who need assistance with using telehealth services. By working together, stakeholders can create a more inclusive telehealth system that addresses the unique needs of Medicaid and

uninsured populations (Afolabi, Ajayi & Olulaja, 2024, Igwama, et al., 2024, Ohalete, et al., 2024).

In conclusion, the growing importance of telehealth in addressing healthcare access disparities presents an opportunity to improve the health outcomes of Medicaid beneficiaries and uninsured individuals, particularly in underserved areas. Public-private partnerships are essential in overcoming the barriers to telehealth adoption and creating sustainable, equitable healthcare solutions. While telehealth has made significant strides, more must be done to ensure that all populations have the technology, support, and financial resources needed to access these services (Balogun, et al., 2024, Edoh, et al., 2024, Ikese, et al., 2024, Olowe, et al., 2024). Through innovative partnerships, targeted investments, and policy reforms, telehealth can become a critical tool in advancing healthcare equity for the most vulnerable groups in the U.S.

2.3. The Role of Public-Private Partnerships in Telehealth Expansion

Public-private partnerships (PPPs) have become a vital mechanism for expanding telehealth services, particularly in addressing healthcare access issues for Medicaid beneficiaries and uninsured populations in the United States. Telehealth, as a rapidly growing sector, offers the potential to bridge the gap between healthcare supply and demand, especially for underserved populations. However, its expansion requires significant investment in infrastructure, technology, and service delivery (Gabrielli, et al., 2010, Imran, et al., 2019, Nwankwo, et al., 2012). Given the challenges of funding and reaching marginalized communities, the collaboration between the public and private sectors offers a pragmatic solution for scaling telehealth services to meet the needs of vulnerable populations. The role of PPPs in telehealth expansion is multifaceted, encompassing the provision of technological infrastructure, operational efficiency, policy alignment, and improved access to services, which are all critical in overcoming healthcare disparities (Ayo-Farai, et al., 2023, Ezeamii, et al., 2023, Katas, et al., 2023).

Public-private partnerships facilitate the infrastructure development and service delivery required for the widespread implementation of telehealth solutions. In many low-income and rural areas, inadequate broadband infrastructure and poor network connectivity have been major barriers to telehealth adoption. To address these challenges, the private sector, especially telecommunications companies, plays a crucial role in expanding internet access and improving connectivity (Adelodun & Anyanwu, 2025, Edwards, et al., 2025, Udegbe, et al., 2023). Through PPPs, governments can partner with these companies to improve broadband infrastructure, ensuring that rural, remote, and underserved communities have the high-speed internet access necessary for effective telehealth consultations. The private sector can also provide the technical expertise needed to develop and deploy telemedicine platforms, mobile health applications, and electronic health record systems, ensuring that the services are scalable, user-friendly, and efficient. In return, the public sector can offer funding, policy support, and incentives for private sector participation, creating a shared value model where both sectors benefit.

The combination of public funding and private sector innovation brings significant benefits to telehealth expansion, especially in addressing the healthcare needs of Medicaid beneficiaries and uninsured populations. Governments typically have the ability to allocate public funds for large-scale health projects, but they often lack the capacity or incentive to drive innovation and technological advancement. Private companies, on the other hand, possess the technical expertise, resources, and agility to innovate and develop solutions at a faster pace than the public sector (Edwards & Smallwood, 2023, Ekpechi, et al., 2023, Obianyo & Eremeeva, 2023). Through PPPs, the public sector can leverage private sector capabilities, while ensuring that the focus remains on improving access to healthcare for underserved populations. This collaboration can lead to the development of cost-effective telehealth solutions that reduce healthcare disparities, improve patient outcomes, and enhance overall healthcare system efficiency (Adelodun & Anyanwu, 2024, Igwama, et al., 2024, Majebi, Adelodun & Anyanwu, 2024). Nduhura, et al., 2020, presented Themes of Collaboration shown in figure 4.

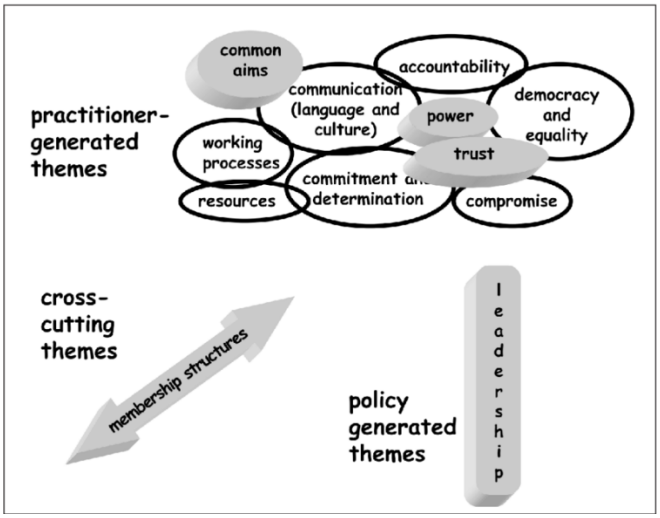

Figure 4: Themes of Collaboration (Nduhura, et al., 2020).

Private sector involvement also helps reduce the financial burden on the public sector. Telehealth infrastructure, including the development of telemedicine platforms, mobile health applications, and data management systems, often requires substantial investment. Through PPPs, the financial risks are shared, with private companies investing in the necessary technology and infrastructure while receiving incentives such as government funding, tax benefits, or revenue-sharing agreements (Adegoke, et al., 2022, Chianumba, et al., 2022, Patel, et al., 2022). This approach

reduces the financial burden on public health budgets, which are often constrained by limited resources. In return, the public sector can ensure that these telehealth services are accessible to low-income and uninsured populations, addressing disparities in healthcare access.

Several PPP models are relevant to telehealth, each offering unique advantages in expanding services to underserved populations. One model is the service contract model, where the government contracts with a private company to deliver telehealth services. In this model, the private sector is responsible for providing the technology, infrastructure, and operational support, while the government ensures that the services are accessible to Medicaid recipients and uninsured individuals (Kuo, et al., 2019, Matthew, et al., 2021, Nwankwo, et al., 2011, Tomassoni, et al., 2013). This model allows for the rapid deployment of telehealth services without requiring the government to directly invest in technology development or infrastructure. It also allows for flexibility in service delivery, with private companies able to innovate and adapt to changing healthcare needs.

Another model is the co-investment or joint venture model, where both the public and private sectors contribute resources to the development of telehealth infrastructure. In this model, the government and private sector share both the financial and operational responsibilities for telehealth service delivery. For example, the government may provide funding for the expansion of broadband infrastructure in underserved areas, while private companies develop and maintain the telehealth platforms. This model aligns the interests of both sectors, with the public sector ensuring that the services meet public health objectives, and the private sector driving innovation and cost efficiency (Ayo-Farai, et al., 2024, Edwards, et al., 2024, Nwankwo, et al., 2024). Joint ventures also allow for the scaling of telehealth services, as both sectors contribute their strengths to reach a larger number of individuals, particularly those who are uninsured or rely on Medicaid.

A third relevant model is the public-private consortium, which brings together multiple stakeholders from the public and private sectors, including healthcare providers, technology companies, telecommunications firms, and non-profit organizations. This collaborative model allows for a more holistic approach to telehealth expansion, where each partner brings unique expertise to the table (Bello, et al., 2024, Igwama, et al., 2024, Katas, et al., 2024, Okobi, et al., 2024). For instance, healthcare providers contribute their understanding of patient needs, while technology companies offer solutions to improve service delivery. Telecommunications firms are responsible for expanding connectivity, and non-profit organizations can assist with outreach to underserved communities (Akerele, et al., 2024, Edwards, et al., 2024, Ikhalea, et al., 2024, Zouo & Olamijuwon, 2024). In this model, the risk is shared among all partners, and the focus is on creating a comprehensive, community-based telehealth system that addresses both technological and social determinants of health.

Public-private partnerships can also be structured through performance-based contracts, where the private sector is incentivized to deliver telehealth services based on specific health outcomes. This model aligns the interests of both sectors by tying financial rewards to the achievement of measurable health improvements. For example, the private sector could be incentivized to expand telehealth services to high-risk populations or underserved geographic areas in exchange for payments linked to health outcomes such as increased vaccination rates, improved management of chronic diseases, or reduced hospital readmissions (Babarinde, et al., 2023, Chianumba, et al., 2023, Ogundairo, et al., 2023). Performance-based contracts ensure that telehealth services are not only delivered but are effective in improving the health of Medicaid recipients and uninsured individuals.

The role of PPPs in expanding telehealth services is particularly significant when considering the specific needs of Medicaid beneficiaries and uninsured populations. These groups face significant barriers to accessing traditional in-person healthcare services, including transportation issues, financial constraints, and limited provider availability (Gabrielli, et al., 2010, Khosrow Tayebati, et al., 2013, Nwankwo, et al., 2011). Telehealth offers a solution by removing many of these barriers, allowing individuals to receive care remotely through digital platforms. PPPs can ensure that these telehealth services are affordable, accessible, and effective for underserved populations by combining the strengths of both public and private sectors (Ariyibi, et al., 2024, Edwards, et al., 2024, Nwankwo, et al., 2024). Public sector involvement ensures that services meet the needs of vulnerable populations, while private sector involvement ensures that the services are delivered efficiently and with innovation.

Telehealth also has the potential to reduce healthcare costs, which is especially important for Medicaid and uninsured individuals, who often face significant out-of-pocket expenses. By expanding telehealth services through PPPs, both public and private sectors can help reduce the burden on emergency departments, decrease unnecessary hospital admissions, and improve the management of chronic diseases. These benefits not only contribute to better health outcomes but also result in cost savings for the healthcare system as a whole (Govender, et al., 2022, Matthew, Akinwale & Opia, 2022, Udegbe, et al., 2022).

In conclusion, public-private partnerships are a crucial mechanism for expanding telehealth services to Medicaid and uninsured populations in the United States. Through PPPs, governments can leverage private sector innovation and expertise to address barriers to healthcare access, improve service delivery, and ensure that digital health solutions are affordable and scalable. By combining public funding with

private sector efficiency, PPPs offer a sustainable approach to expanding telehealth services, which is particularly important for vulnerable populations who face systemic challenges in accessing care (Afolabi, Ajayi & Olulaja, 2024, Edwards, et al., 2024, Obianyo, Das & Adebile, 2024). The implementation of various PPP models can facilitate the expansion of telehealth infrastructure and service delivery, ensuring that all individuals, regardless of their insurance status, have access to the care they need.

2.4. Case Studies and Exemplars

Public-private partnerships (PPPs) have proven to be effective mechanisms for expanding telehealth services, particularly to Medicaid beneficiaries and uninsured populations in the U.S. These partnerships are crucial in overcoming the barriers to healthcare access and improving health outcomes for underserved communities. Through strategic collaborations, governments and private sector companies have been able to leverage resources, innovation, and technical expertise to scale telehealth services efficiently (Nwankwo, Tomassoni & Tayebati, 2012, Tayebati, Nwankwo & Amenta, 2013, Tomassoni, et al., 2013). Several case studies and exemplars illustrate how public-private collaborations have driven the expansion of telehealth services, providing valuable insights into successful funding models, partnership dynamics, and the broader impact of these efforts.

The Federal Communications Commission (FCC) COVID-19 Telehealth Program is one of the most notable examples of a public-private partnership aimed at expanding telehealth access during the COVID-19 pandemic. In response to the overwhelming strain on healthcare systems and the growing need for remote healthcare solutions, the FCC launched a funding program to support healthcare providers in deploying telehealth services. This program allocated $200 million in grants to a wide range of healthcare providers, including hospitals, community health centers, and rural health clinics, to help them implement telehealth systems (Adewuyi, et al., 2024, Edwards, Mallhi & Zhang, 2024, Ohalete, et al., 2024). These funds were used to purchase telemedicine equipment, expand broadband access, and cover operational costs related to the implementation of digital health technologies.

The partnership dynamics of the FCC's program involved both public sector funding and private sector contributions, particularly from telecommunications companies and technology providers. The private sector played a key role in providing the necessary technology, such as high-speed internet, telehealth platforms, and equipment for healthcare providers. In return, the public sector facilitated the distribution of funds and oversaw the allocation of grants to ensure that the support reached the areas and populations most in need (Ayo-Farai, et al., 2023, Chianumba, et al., 2023, Katas, et al., 2023). This collaboration not only helped healthcare providers quickly transition to telehealth during a public health emergency but also built the foundation for the long-term sustainability of telehealth services in underserved communities.

The outcomes of the FCC COVID-19 Telehealth Program have been positive, with many healthcare providers reporting increased access to care for Medicaid beneficiaries and uninsured populations. Telehealth usage surged during the pandemic, with remote consultations providing a lifeline for patients who could not otherwise access in-person care. The program also provided valuable lessons on the importance of ensuring broadband connectivity in rural and underserved areas, the need for ongoing technical support, and the necessity of creating scalable and adaptable digital health solutions (Anyanwu, et al., 2024, Ekwebene, et al., 2024, Obianyo, et al., 2024). One key lesson was the importance of aligning technology deployment with community needs and ensuring that healthcare providers have the necessary training to use telehealth platforms effectively.

State Medicaid waivers and private tech collaborations represent another successful example of PPPs that have expanded telehealth access to underserved populations. In the U.S., many states used Medicaid waivers to temporarily expand telehealth services and offer reimbursement for virtual consultations during the COVID-19 pandemic. These waivers allowed Medicaid to reimburse healthcare providers for telehealth services, including video consultations, phone visits, and remote monitoring, ensuring that beneficiaries could continue to access care without having to visit healthcare facilities in person (Ajayi, et al., 2024, Emeihe, et al., 2024, Johnson, et al., 2024, Olowe, et al., 2024). This policy reform was essential in reducing disruptions to care, particularly for individuals in high-risk groups or those living in rural areas with limited access to healthcare.

Several states have successfully used Medicaid waivers in collaboration with private telehealth platforms to improve access to care. For example, California's Medicaid program, Medi-Cal, partnered with private telehealth providers to offer virtual consultations for a wide range of healthcare needs, including primary care, mental health services, and chronic disease management. This collaboration helped to reduce wait times for appointments, improve access to specialty care, and provide timely mental health services, particularly for individuals who had difficulty accessing in-person care (Fuko, et al., 2025, Matthew, Nwaogelenya & Opia, 2025, Usuemerai, et al., 2024). Similarly, in Florida, the Medicaid program partnered with private telehealth platforms to enable virtual visits for Medicaid beneficiaries, particularly in underserved communities. These partnerships have shown that when state policies align with private sector innovations, the barriers to telehealth adoption can be reduced, making healthcare more accessible and efficient.

These state Medicaid waivers and private tech collaborations have provided valuable insights into the importance of reimbursement reform and regulatory flexibility. The ability to offer reimbursements for telehealth services has been a

game-changer for providers who were previously hesitant to adopt telehealth due to financial concerns. Medicaid and private insurers' willingness to cover telehealth services has driven up utilization rates, particularly among low-income individuals, including those who are uninsured (Adelodun & Anyanwu, 2024, Emeihe, et al., 2024, Majebi, Adelodun & Anyanwu, 2024). The lessons learned from these programs suggest that long-term telehealth integration into Medicaid requires not only temporary policy reforms but also permanent changes to reimbursement structures to ensure the sustainability of services.

Community Health Centers (CHCs), particularly Federally Qualified Health Centers (FQHCs), have been instrumental in expanding telehealth services, particularly to low-income, uninsured, and Medicaid populations. These centers are often located in underserved areas and provide primary and preventive care to individuals who have limited access to healthcare services. Over the past few years, many FQHCs have partnered with private technology companies to integrate telehealth services into their care models. These partnerships have focused on improving access to both routine care and chronic disease management, with a particular emphasis on preventive care and health education (Akerele, et al., 2024, Emeihe, et al., 2024, Kelvin-Agwu, et al., 2024).

One case study involving FQHCs and private-sector support comes from a collaboration between the National Association of Community Health Centers (NACHC) and a major telehealth technology provider. The partnership aimed to provide FQHCs with telehealth platforms, training, and ongoing support to enable them to offer virtual consultations to their patients (Abisoye & Olamijuwon, 2022, Chianumba, et al., 2022, Udegbe, et al., 2023). This initiative was especially important for individuals with chronic conditions such as diabetes, hypertension, and asthma, who required ongoing care and monitoring. By enabling FQHCs to provide virtual consultations, this partnership helped improve access to care for underserved populations while also reducing unnecessary in-person visits, which were particularly challenging during the COVID-19 pandemic.

The partnership model also extended to chronic disease management and preventive care. For instance, telehealth services were used to provide remote monitoring for patients with chronic conditions, allowing healthcare providers to track vital signs such as blood pressure and blood sugar levels in real-time. This approach not only improved the management of chronic conditions but also helped reduce the number of hospitalizations and emergency room visits. Furthermore, telehealth platforms were used to deliver health education, such as providing information on nutrition, physical activity, and medication adherence, to individuals who were unable to attend in-person health education sessions (Ayo-Farai, et al., 2024, Emeihe, et al., 2024, Kelvin-Agwu, et al., 2024).

The innovations in chronic disease management and preventive care facilitated by these public-private partnerships have had a significant impact on improving health outcomes for underserved populations. By combining the expertise of private technology companies with the community-centered approach of FQHCs, these partnerships have been able to address gaps in access, enhance the quality of care, and improve patient engagement. They also demonstrate the potential for telehealth to play a key role in reducing health disparities by ensuring that vulnerable populations have access to timely, effective care (Adhikari, et al., 2024, Eze, et al., 2024, Johnson, et al., 2024).

In conclusion, public-private partnerships have proven to be effective in expanding telehealth services to Medicaid and uninsured populations, providing valuable insights and models for future efforts. The FCC COVID-19 Telehealth Program, state Medicaid waivers, and community health center partnerships with private tech firms all offer concrete examples of how collaboration between the public and private sectors can overcome barriers to telehealth adoption (Elujide, et al., 2021, Khosrow Tayebati, et al., 2011, Nwankwo, et al., 2012). These initiatives have demonstrated the importance of flexible policies, reimbursement reform, and the need for infrastructure investment to ensure that telehealth can reach underserved populations. The lessons learned from these case studies highlight the need for continued collaboration, innovation, and investment to ensure that telehealth can be scaled effectively and equitably, helping to bridge the healthcare access gap for some of the most vulnerable populations in the U.S.

2.5. Critical Success Factors

The expansion of telehealth services to Medicaid and uninsured populations in the United States through public-private partnerships (PPPs) hinges on several critical success factors. These factors are necessary to ensure that telehealth solutions are not only accessible and effective but also equitable and sustainable (Adelodun & Anyanwu, 2025, Ekpechi, et al., 2025, Usuemerai, et al., 2024). The success of these partnerships requires careful consideration of policy frameworks, infrastructure, community engagement, funding, and data privacy. By addressing these elements, telehealth initiatives can achieve the desired outcomes of reducing healthcare disparities and improving access to care for underserved populations.

Aligned policy and regulatory frameworks are foundational to the success of telehealth programs. Telehealth involves a complex web of regulations, including reimbursement policies, licensing requirements, and standards for remote healthcare delivery. Without clear, consistent policies that support telehealth integration, both public and private partners can face confusion, inefficiencies, and delays in implementation (Okoro, et al., 2024, Olamijuwon & Zouo, 2024, Olorunsogo, et al., 2024). One key aspect is aligning telehealth policies with existing healthcare programs, such as

Medicaid and the Affordable Care Act, to ensure that digital health services are reimbursed appropriately. Medicaid, for instance, has expanded telehealth services, but reimbursement structures may still vary across states, limiting the uniformity and sustainability of telehealth services. PPPs must advocate for unified policy approaches at the state and federal levels to facilitate the expansion and integration of telehealth services across all sectors.

Furthermore, regulatory alignment is crucial in creating an environment where both public and private sectors can work together seamlessly. Government regulations should foster collaboration while ensuring patient safety and data protection. This includes adjusting licensing and credentialing processes for healthcare providers, enabling them to offer telehealth services across state lines, and ensuring that telehealth platforms adhere to standards of quality and security (Maduka, et al., 2023, Majebi, et al., 2023, Ogundairo, et al., 2023). Public-private partnerships must work to ensure that these regulatory adjustments support not just technological innovation but also the integrity of the healthcare system, ensuring that Medicaid and uninsured individuals receive care that meets the same standards as in-person visits.

Shared infrastructure and interoperability are other critical success factors. Telehealth systems cannot function in isolation. The integration of digital health platforms with existing health infrastructure is essential for improving healthcare access and quality. This requires building shared infrastructure between public health systems, private technology companies, and healthcare providers (Alemede, et al., 2024, Eze, et al., 2024, Katas, et al., 2024, Obianyo, et al., 2024). For example, interoperable electronic health records (EHRs) are vital for ensuring that patient information flows seamlessly between telehealth platforms and other healthcare providers, avoiding fragmentation and improving the coordination of care. Effective data sharing and communication systems enable healthcare providers to offer comprehensive care, particularly for individuals with complex health needs.

Interoperability also includes ensuring that telehealth platforms work effectively across various technologies and devices. In the context of Medicaid and uninsured populations, many patients may only have access to basic mobile phones or limited internet connectivity. As such, telehealth platforms must be designed to operate across a range of devices, from smartphones and tablets to basic feature phones. Telehealth solutions that require high-bandwidth internet connections or specific technological requirements may inadvertently exclude populations that are already disadvantaged (Abass, et al., 2024, Eze, et al., 2024, Johnson, et al., 2024, Olowe, et al., 2024). The collaboration between public and private sectors can ensure that telehealth solutions are designed with inclusivity in mind, ensuring broad access, even in areas with limited technological resources.

Community-based engagement and digital literacy initiatives are essential for ensuring that telehealth services reach those who need them most. Public-private partnerships must prioritize community involvement in the design and deployment of telehealth services to ensure that solutions meet the specific needs of underserved populations. This engagement should include outreach to community leaders, local healthcare providers, and vulnerable groups to understand their healthcare needs, preferences, and barriers to access (Chukwuma, et al., 2022, Gbadegesin, et al., 2022, Udegbe, et al., 2023). Community-based engagement also plays a key role in building trust. In many underserved communities, there may be skepticism about telehealth, especially if individuals are unfamiliar with digital technologies or have limited access to digital devices.

Digital literacy initiatives are also crucial in empowering patients to use telehealth services effectively. Many individuals in Medicaid and uninsured populations lack the necessary skills to navigate telehealth platforms. These initiatives should provide training in basic technology use, helping individuals access services like virtual consultations, digital health records, and online health information (Kuo, et al., 2019, Madu, et al., 2020, Nwankwo, et al., 2012, Tayebati, et al., 2011). Digital literacy programs can be delivered through community health workers, local schools, libraries, and other trusted community institutions. Empowering individuals with the knowledge and skills to use telehealth services can significantly increase adoption rates and improve health outcomes, particularly among populations who may not have been previously exposed to digital health solutions.

Equitable and sustainable funding models are vital for ensuring that telehealth services are not only accessible but also scalable and sustainable in the long term. One of the primary challenges for expanding telehealth services to Medicaid and uninsured populations is ensuring consistent and reliable funding. While some telehealth initiatives are supported through government grants or donor funding, these resources are often limited and time-bound. Public-private partnerships can play a crucial role in developing sustainable funding models by combining government funding with private sector investment (Balogun, et al., 2023, Eyeghre, et al., 2023, Mgbecheta, et al., 2023). For example, public funding can support infrastructure development and the initial rollout of telehealth services, while private sector partners can contribute to the technology, operational costs, and scaling of services.

Long-term funding models should focus on creating financially sustainable telehealth programs. This could involve embedding telehealth into public health insurance programs, ensuring reimbursement for telehealth services under Medicaid, or developing new insurance models that integrate digital health services. For uninsured populations,

partnerships between private health insurers, tech companies, and community health centers can help develop low-cost telehealth models that make services affordable (Nwankwo, Tomassoni & Tayebati, 2012, Ogbonna, et al., 2012, Tayebati, et al., 2013). Additionally, using performance-based funding models or value-based care approaches can align financial incentives with the goal of improving health outcomes through telehealth, ensuring that funding is tied to the effectiveness of the services provided rather than volume of services rendered.

Data-sharing agreements and privacy safeguards are crucial elements of any telehealth program, particularly in the context of Medicaid and uninsured populations. The sharing of patient data across different platforms and stakeholders is essential for providing coordinated and comprehensive care (Adelodun & Anyanwu, 2024, Ezeamii, et al., 2024, Majebi, Adelodun & Anyanwu, 2024). However, these data-sharing agreements must be governed by stringent privacy protections to ensure that sensitive health information is safeguarded. Telehealth platforms must comply with federal regulations, such as the Health Insurance Portability and Accountability Act (HIPAA), to ensure that patient data is secure and that individuals have control over how their data is used. Public-private partnerships must work together to establish clear data-sharing protocols that maintain patient confidentiality while enabling healthcare providers to access the information they need to deliver quality care.

Moreover, public-private collaborations should establish robust cybersecurity frameworks to protect patient data from breaches or unauthorized access. This is particularly important as telehealth systems expand and handle larger volumes of patient information. Ensuring that patients are confident in the privacy and security of their data is essential for building trust and encouraging the adoption of telehealth services, especially among vulnerable populations who may have concerns about sharing personal health information online (Akerele, et al., 2024, Ezeamii, et al., 2024, Kelvin-Agwu, et al., 2024).

In conclusion, the expansion of telehealth services to Medicaid and uninsured populations through public-private partnerships depends on several critical success factors. Aligned policy and regulatory frameworks, shared infrastructure and interoperability, community-based engagement, equitable funding models, and strong data privacy safeguards are all essential components of a sustainable and effective telehealth system. By addressing these factors, PPPs can help reduce healthcare disparities, improve access to care, and ultimately enhance health outcomes for underserved populations (Adaramola, et al., 2024, Ezeamii, et al., 2024, Ohalete, et al., 2024). These partnerships offer a promising pathway toward creating a more equitable healthcare system, where technology serves as a tool to bridge gaps in care and provide vulnerable populations with the services they need to live healthier lives.

2.6. Challenges and Limitations

Advancing public-private partnerships (PPPs) to expand telehealth services to Medicaid beneficiaries and uninsured populations in the United States has the potential to greatly improve access to care for underserved communities. However, the successful implementation and scaling of these initiatives face several challenges and limitations that must be addressed to achieve equitable and sustainable outcomes (Adelodun & Anyanwu, 2025, Ekpechi, et al., 2025, Usuemerai, et al., 2024). These challenges are multifaceted, spanning regulatory, technological, privacy, and integration barriers, each of which requires careful consideration to ensure that telehealth services are accessible, effective, and sustainable for vulnerable populations.

One of the most significant challenges is the inconsistency of regulatory frameworks and reimbursement policies across states. The telehealth landscape in the U.S. is fragmented, as states have different laws and policies that govern telemedicine, and these policies can significantly impact access to telehealth services. While some states have been proactive in expanding telehealth access, particularly in the wake of the COVID-19 pandemic, others have lagged behind in adopting necessary policy reforms (Okoro, et al., 2024, Olamijuwon, et al., 2024, Olorunsogo, et al., 2024). These discrepancies include variations in reimbursement rates for telehealth services under Medicaid, differences in the scope of services covered, and the lack of standardization for telehealth platforms. For instance, some states may allow telehealth consultations for a wide range of services, including mental health and chronic disease management, while others may have more restrictive policies. Additionally, the expansion of telehealth services has often been contingent on temporary waivers or emergency measures, which are not guaranteed to remain in place after the pandemic ends. The uncertainty surrounding these temporary policies leaves many public and private stakeholders unsure about the long-term sustainability of telehealth solutions. PPPs must work to harmonize regulations across states to ensure consistency in telehealth access and reimbursement policies, which would facilitate greater adoption and integration of telehealth services into the healthcare system.

Another major barrier is the disparity in broadband and device access, which creates a digital divide that disproportionately affects Medicaid recipients and uninsured populations. Access to reliable broadband internet is essential for telehealth to function effectively, particularly for video consultations and remote patient monitoring. However, millions of people in rural and low-income urban areas still lack access to high-speed internet, which impedes their ability to use telehealth services (Ayo-Farai, et al., 2024, Ezeamii, et al., 2024, Oboh, et al., 2024, Oshodi, et al., 2024). According to the Federal Communications Commission (FCC), broadband infrastructure remains inadequate in many rural and underserved regions, where fixed broadband services are

unavailable or prohibitively expensive. This connectivity gap leaves a large portion of the population unable to benefit from telehealth services, particularly in rural areas where healthcare facilities may be far away.

In addition to broadband connectivity, disparities in access to digital devices such as smartphones, tablets, and computers further exacerbate the issue. While mobile phones are ubiquitous, many individuals in low-income households cannot afford smartphones with the capabilities required for telehealth consultations. In some instances, the lack of access to appropriate devices means that even when internet access is available, individuals cannot fully engage with telehealth platforms (Adhikari, et al., 2024, Ezeamii, et al., 2024, Ogundairo, et al., 2024). These disparities are particularly pronounced among Medicaid recipients, who often live in economically disadvantaged areas and face financial challenges in purchasing and maintaining digital devices. Addressing these disparities requires targeted investment in infrastructure, including expanding broadband access to underserved regions and providing subsidies or low-cost digital devices to low-income individuals. Public-private partnerships can play a pivotal role in this effort, with technology companies and internet service providers collaborating with governments to extend coverage and make devices more affordable.

Privacy, security, and trust concerns represent another critical challenge for expanding telehealth services to Medicaid and uninsured populations. As telehealth platforms handle sensitive personal health data, ensuring robust privacy protections is essential for building trust and promoting widespread adoption. Medicaid beneficiaries and uninsured individuals are often particularly vulnerable to concerns about the confidentiality of their personal and health information (Madu & Nwankwo, 2018, Nasuti, et al., 2008, Nwankwo, et al., 2011, Tayebati, et al., 2013). In a digital age where data breaches and cyberattacks are increasingly common, individuals may hesitate to engage with telehealth services if they are uncertain about how their data is being handled and whether it will be secure.

The Health Insurance Portability and Accountability Act (HIPAA) provides federal protections for patient privacy and data security, but the rapid expansion of telehealth services during the COVID-19 pandemic has highlighted gaps in security protocols for digital health platforms. Many telehealth platforms were initially developed with the assumption that patient data would be managed in physical healthcare settings, but the transition to remote care has presented new challenges in terms of data storage, sharing, and protection (Babarinde, et al., 2023, Eyeghre, et al., 2023, Nwaonumah, et al., 2023). Moreover, the use of third-party platforms, such as mobile health apps or telemedicine services provided by private companies, raises questions about how health data is used, shared, and stored. These concerns are especially acute for Medicaid and uninsured populations, who may be more susceptible to identity theft or data misuse due to their social and economic vulnerabilities. To address these challenges, PPPs must prioritize the implementation of robust security measures, including encryption, secure data-sharing protocols, and transparent privacy policies. By fostering trust in telehealth services, these partnerships can help ensure that patients feel safe accessing care remotely.

The integration of telehealth services with existing healthcare systems is another critical issue that impacts the effectiveness of telehealth expansion. Many telehealth platforms operate as stand-alone systems, which can lead to fragmented care and inefficiencies in service delivery. Without seamless integration with electronic health records (EHRs) and other healthcare technologies, telehealth services may fail to provide a complete picture of a patient's health status, leading to missed diagnoses, treatment delays, and poor health outcomes (Adelodun, et al., 2018, Chianumba, et al., 2021, Tayebati, et al., 2012, Tomassoni, et al., 2013). Furthermore, healthcare providers who are unfamiliar with telehealth platforms may struggle to incorporate them into their workflow, leading to inefficiencies and resistance to adoption. For telehealth services to be effective, they must be fully integrated with existing health systems, including EHRs, lab data, prescription systems, and billing platforms. This requires collaboration between healthcare providers, technology developers, and policymakers to ensure that telehealth platforms are interoperable with other systems. Telehealth should be seen not as a replacement for in-person care, but as a complementary tool that enhances the efficiency and accessibility of healthcare (Akerele, et al., 2024, Fagbenro, et al., 2024, Kelvin-Agwu, et al., 2024). PPPs can help drive this integration by ensuring that private-sector technology developers work closely with public health systems to create interoperable platforms that facilitate data exchange and support continuity of care. Additionally, PPPs can help provide training and technical assistance to healthcare providers, ensuring that telehealth tools are fully integrated into their practices and improve care delivery rather than complicating it.

The lack of standardized metrics for evaluating the effectiveness of telehealth services is another limitation that can impede progress. The expansion of telehealth requires clear metrics to assess the quality of care, patient satisfaction, and cost-effectiveness. Without robust monitoring and evaluation frameworks, it is difficult to determine whether telehealth services are meeting their objectives or whether they are reaching the populations that need them most. These metrics are also critical for justifying continued investment and securing reimbursement for telehealth services (Ajibola, et al., 2024, Folorunso, et al., 2024, Majebi, Adelodun & Anyanwu, 2024).

To overcome these barriers, stakeholders in public-private partnerships must work together to develop standardized

metrics and outcome measures that align with the goals of expanding telehealth services to underserved populations. These metrics should include measures of access, quality, patient outcomes, and cost savings, and should be used to continuously improve telehealth services. Public-private partnerships can also support research efforts to evaluate the long-term impact of telehealth on healthcare outcomes, particularly for Medicaid recipients and uninsured individuals (Madu & Nwankwo, 2018, Nwankwo, et al., 2012, Nwankwo, Tomassoni & Tayebati, 2012).

In conclusion, the expansion of telehealth services through public-private partnerships offers significant potential to improve access to healthcare for Medicaid beneficiaries and uninsured populations. However, this expansion faces several challenges, including regulatory inconsistencies, disparities in broadband and device access, privacy concerns, and the need for stronger integration with existing healthcare systems. To overcome these challenges, it is crucial for public and private stakeholders to work together to address these barriers in a comprehensive and sustainable manner (Noah, et al., 2025, Opia & Matthew, 2025, Udegbe, et al., 2023, Usuemerai, et al., 2024). By addressing these critical issues, PPPs can help create a telehealth ecosystem that improves healthcare access, reduces disparities, and delivers quality care to underserved populations across the U.S.

2.7. Policy Recommendations and Strategic Opportunities

The expansion of telehealth services through public-private partnerships (PPPs) holds considerable promise for improving healthcare access, particularly for Medicaid beneficiaries and uninsured populations in the U.S. However, to realize this potential, policy reforms and strategic opportunities are needed to foster collaboration, incentivize innovation, and ensure long-term sustainability. In this context, several key policy recommendations and strategic opportunities emerge as critical for ensuring that telehealth services are both accessible and effective for vulnerable populations (Olowe, et al., 2024, Olulaja, Afolabi & Ajayi, 2024, Shittu, et al., 2024).

Enhancing federal and state collaboration on telehealth policy is essential for establishing a cohesive and comprehensive framework that enables telehealth to be fully integrated into the healthcare system. While telehealth has expanded significantly since the onset of the COVID-19 pandemic, the regulatory landscape remains fragmented, with each state implementing its own telehealth policies, which can create disparities in access to care. To address this issue, federal and state governments should work together to create standardized policies that provide clear guidelines for telehealth reimbursement, service delivery, and licensure (Okon, Zouo & Sobowale, 2024, Olamijuwon, et al., 2024, Olorunsogo, et al., 2024). Establishing a unified national telehealth framework that harmonizes state regulations would help eliminate barriers related to telehealth implementation, reduce confusion among providers, and ensure equitable access for patients across state lines. In particular, aligning policies related to reimbursement rates for telehealth services within Medicaid programs would ensure consistent access to these services, regardless of where a patient resides, thereby increasing the affordability and utilization of telehealth among underserved populations. Federal policies should also promote the permanent inclusion of telehealth services under Medicaid coverage, making these services an ongoing and reliable part of the healthcare system for low-income individuals.

Incentivizing inclusive, scalable PPPs is another critical strategy to ensure that telehealth services can be expanded effectively to Medicaid and uninsured populations. Successful public-private partnerships have the potential to leverage both public funding and private sector innovation, driving efficiency, scalability, and sustainability. However, to achieve long-term success, these partnerships need to be incentivized in ways that align both public health goals and business objectives (Adigun, et al., 2024, Folorunso, et al., 2024, Kelvin-Agwu, et al., 2024). Governments can create incentives for private companies to invest in underserved areas by offering tax breaks, grants, or performance-based funding linked to positive health outcomes. Private companies, in turn, can bring technological expertise and operational efficiency to telehealth initiatives, ensuring that services are delivered with high quality and at scale. By establishing mutually beneficial agreements, governments and private sector partners can collaborate to address healthcare gaps, reduce costs, and provide high-quality telehealth services. A key strategic opportunity is to engage technology firms, telemedicine providers, and insurance companies in PPPs, as these sectors are well-positioned to innovate and expand the reach of telehealth services while ensuring their affordability and sustainability.

Investing in digital infrastructure in low-income communities is essential for addressing one of the most significant barriers to telehealth adoption: the digital divide. Despite the growing use of smartphones and internet access, many low-income households and rural areas still lack reliable broadband connections or the necessary devices to engage in telehealth consultations. Addressing these gaps requires a concerted effort to expand digital infrastructure, including broadband access and affordable devices, in underserved communities (Uwumiro, et al., 2024, Wada, et al., 2025, Zouo & Olamijuwon, 2024). The government, in partnership with private technology companies and internet service providers, should prioritize infrastructure investment in rural and urban areas where connectivity is limited or non-existent. One strategic opportunity is for the federal government to increase funding for broadband expansion through initiatives like the Rural Digital Opportunity Fund (RDOF), while also working with private companies to offer subsidized or discounted devices to low-income households. Expanding broadband

access is crucial for ensuring that telehealth can be used to its full potential, particularly for Medicaid recipients and uninsured individuals who are most likely to face challenges in accessing in-person care. Additionally, private companies can collaborate with local governments to create public Wi-Fi networks or mobile hotspots that provide internet access for patients in areas without stable broadband infrastructure.

Promoting long-term evaluation and accountability mechanisms is another critical component for ensuring the effectiveness and sustainability of telehealth initiatives. As telehealth continues to expand, it is essential to establish robust systems for monitoring and evaluating the impact of these services on patient outcomes, healthcare utilization, and overall system efficiency. One of the strategic opportunities in this area is to create a national telehealth data collection framework that tracks key metrics such as access to care, patient satisfaction, healthcare costs, and health outcomes for Medicaid and uninsured populations. Such a framework would help policymakers and stakeholders assess the effectiveness of telehealth services and identify areas for improvement (Balogun, et al., 2023, Ezeamii, et al., 2023, Katas, et al., 2023, Usuemerai, et al., 2024). In addition, long-term evaluation efforts should include feedback mechanisms from patients, healthcare providers, and community organizations to ensure that telehealth services meet the needs of underserved populations. This ongoing feedback can guide adjustments in service delivery, technology use, and policy design, ensuring that telehealth services remain relevant and effective.

Accountability mechanisms should also be put in place to ensure that telehealth services are being used efficiently and that funds are being allocated properly. Governments and private sector partners should commit to transparency in reporting outcomes, and they should be held accountable for meeting specific health targets, such as reducing wait times for care, improving health outcomes, and increasing telehealth adoption among Medicaid beneficiaries and uninsured individuals. Performance-based funding models, which tie financial incentives to the achievement of health outcomes, could help ensure that telehealth services are delivering tangible improvements in patient care (Adelodun & Anyanwu, 2024, Ibikunle, et al., 2024, Ogugua, et al., 2024). These models would also encourage innovation and efficiency in the delivery of telehealth services.

Finally, stakeholder collaboration remains crucial in addressing the multifaceted challenges and ensuring the successful implementation of telehealth services. As the private and public sectors come together to address healthcare disparities, it is essential that all stakeholders—government agencies, technology companies, healthcare providers, insurers, and community organizations—work collaboratively to build trust, align goals, and create solutions that are both scalable and equitable (Ayo-Farai, et al., 2024, Ibikunle, et al., 2024, Oddie-Okeke, et al., 2024). A key strategy is to foster partnerships with community-based organizations that can help bridge the gap between technology and local populations. These organizations can provide critical insights into the cultural, social, and economic factors that affect telehealth adoption and can help ensure that telehealth services are designed and deployed in ways that are culturally sensitive and accessible.

In conclusion, the expansion of telehealth services to Medicaid beneficiaries and uninsured populations requires thoughtful policy reforms, strategic investments, and robust partnerships. The recommendations outlined here emphasize the importance of enhancing federal and state collaboration on telehealth policy, incentivizing inclusive and scalable PPPs, investing in digital infrastructure, and implementing long-term evaluation and accountability mechanisms (Anyanwu, et al., 2024, Idoko, et al., 2024, Kelvin-Agwu, et al., 2024). By addressing the barriers to telehealth access, policymakers can create a more equitable and sustainable healthcare system that leverages the power of digital technology to provide high-quality care to underserved populations. These efforts will help ensure that telehealth becomes a key tool in reducing healthcare disparities and improving health outcomes for Medicaid and uninsured individuals across the United States (Alemede, et al., 2024, Igwama, et al., 2024, Matthew, Nwaogelenya & Opia, 2024).

2.8. CONCLUSION

Public-private partnerships (PPPs) have proven to be a transformative force in expanding telehealth services to Medicaid beneficiaries and uninsured populations in the U.S., offering a model that combines the strengths of both sectors to address long-standing healthcare access issues. Through innovative collaborations, these partnerships have made significant strides in improving access to care, reducing disparities, and ensuring that underserved communities, including those in rural and low-income areas, can benefit from telehealth's promise. By leveraging private sector expertise and government support, PPPs have facilitated the creation of scalable, sustainable telehealth solutions that can reach vulnerable populations, offering them access to vital healthcare services such as primary care, mental health support, and chronic disease management.

Despite the challenges that remain—such as regulatory inconsistencies, technological barriers, and concerns over data security—public-private partnerships have demonstrated their potential to foster meaningful change. By aligning public health objectives with private sector innovation, PPPs can help overcome barriers such as geographic isolation, transportation issues, and the financial burden of traditional in-person visits, ensuring that Medicaid recipients and uninsured individuals have the same access to healthcare as those with more privileged resources. The progress made thus far showcases the promise of telehealth as a tool for improving healthcare delivery and health outcomes,

especially for those who face the most significant challenges in accessing care.

As telehealth continues to expand, it is essential to reaffirm its role as a critical tool for achieving health equity. The COVID-19 pandemic highlighted the importance of telehealth in maintaining healthcare access during times of crisis, but its potential goes far beyond emergency situations. By integrating telehealth into the fabric of the U.S. healthcare system, especially for marginalized populations, it can serve as a permanent solution to longstanding disparities. Through continued innovation, regulatory alignment, and infrastructure investment, telehealth has the capacity to bridge gaps in care, improve the efficiency of healthcare delivery, and enhance the overall health of underserved communities.

Looking to the future, there are ample opportunities for further research and development in the area of telehealth expansion. Future directions should focus on addressing gaps in digital literacy, improving broadband access in underserved areas, and exploring new models for sustainable funding. Research into the effectiveness of telehealth in different healthcare contexts, particularly for those with chronic conditions or complex healthcare needs, will also be essential to refine and optimize telehealth interventions. As new technologies emerge and the healthcare landscape continues to evolve, public-private partnerships must remain agile and responsive, adapting to the needs of patients and healthcare providers alike.

In conclusion, the advances made through public-private partnerships in expanding telehealth services have already had a profound impact on the accessibility of healthcare for Medicaid and uninsured populations. However, for telehealth to realize its full potential as a tool for equity, continued collaboration, policy reform, and targeted investments are necessary. By embracing these opportunities, stakeholders can work together to build a more inclusive and equitable healthcare system, ensuring that all individuals, regardless of their socioeconomic status, have access to the care they need.

REFERENCES

1. Abass, L. A., Usuemerai, P. A., Ibikunle, O. E., Alemede, V., Nwankwo, E. I., & Mbata, A. O. (2024). Enhancing patient engagement through CRM systems: A pathway to improved healthcare delivery. *International Medical Science Research Journal*, *4*(10).
2. Abass, L. A., Usuemerai, P. A., Ibikunle, O. E., Alemede, V., Nwankwo, E. I., & Mbata, A. O. (2024). Public-private partnerships to enhance healthcare access and affordability. *Int J Multidiscip Res Growth Eval*, *5*, 1327-44.
3. Abass, L.A., Usuemerai, P.A., Ibikunle, O.E., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. Enhancing patient engagement through CRM systems: A pathway to improved healthcare delivery. *International Medical Science Research Journal*, 4(10), pp.928-960. Available at: https://doi.org/10.51594/imsrj.v4i10.1648.
4. Abisoye, A., & Olamijuwon, J. I. (2022). A Practical Framework for Advancing Cybersecurity, Artificial Intelligence and Technological Ecosystems to Support Regional Economic Development and Innovation.
5. Adaramola, T. S., Omole, O. M., Wada, I., Nwariaku, H., Arowolo, M. E., & Adigun, O. A. (2024). Internet of thing integration in green fintech for enhanced resource management in smart cities. *World Journal of Advanced Research and Reviews*, *23*(2), 1317-1327.
6. Adegoke, S. A., Oladimeji, O. I., Akinlosotu, M. A., Akinwumi, A. I., & Matthew, K. A. (2022). HemoTypeSC point-of-care testing shows high sensitivity with alkaline cellulose acetate hemoglobin electrophoresis for screening hemoglobin SS and SC genotypes. *Hematology, Transfusion and Cell Therapy*, *44*(3), 341-345.
7. Adelodun, A. M., Adekanmi, A. J., Roberts, A., & Adeyinka, A. O. (2018). Effect of asymptomatic malaria parasitemia on the uterine and umbilical artery blood flow impedance in third-trimester singleton Southwestern Nigerian pregnant women. *Tropical Journal of Obstetrics and Gynaecology*, *35*(3), 333-341.
8. Adelodun, M. O., & Anyanwu, E. C. (2024). A critical review of public health policies for radiation protection and safety.
9. Adelodun, M. O., & Anyanwu, E. C. (2024). Environmental and patient safety: Advances in radiological techniques to reduce radiation exposure.
10. Adelodun, M. O., & Anyanwu, E. C. (2024). Evaluating the Environmental Impact of Innovative Radiation Therapy Techniques in Cancer Treatment.
11. Adelodun, M. O., & Anyanwu, E. C. (2024). Global Standards in Radiation Safety: A Comparative Analysis of Healthcare Regulations.
12. Adelodun, M. O., & Anyanwu, E. C. (2024). Health Effects of Radiation: An Epidemiological Study on Populations near Nuclear Medicine Facilities. *Health*, *13*(9), 228-239.
13. Adelodun, M. O., & Anyanwu, E. C. (2024). Integrating radiological technology in environmental health surveillance to enhance public safety.
14. Adelodun, M. O., & Anyanwu, E. C. (2025). Public Health Risks Associated with Environmental Radiation from Improper Medical Waste Disposal.

15. Adelodun, M. O., & Anyanwu, E. C. (2025). Recent Advances in Diagnostic Radiation and Proposals for Future Public Health Studies.
16. Adelodun, M., & Anyanwu, E. (2024). Comprehensive risk management and safety strategies in radiation use in medical imaging. *Int J Front Med Surg Res*, *6*.
17. Adeloduna, M. O., & Anyanwub, E. C. (2025). Telehealth implementation: a review of project management practices and outcomes.
18. Aderinwale, O. A., Sanni, T. A., Lemboye-Bello, R. T., Awonuga, D. O., Ogunfunmilayo, T. A., Raji, M. M., ... & Ugbeyo, N. G. (2025): Prevalence and Risk Factors for Obesity among Pregnant Women Managed at a Public Tertiary Health Facility, Southwest, Nigeria.
19. Adewuyi, A. Y., Anyibama, B., Adebayo, K. B., Kalinzi, J. M., Adeniyi, S. A., & Wada, I. (2024). Precision agriculture: Leveraging data science for sustainable farming. *International Journal of Scientific Research Archive*, *12*(2), 1122-1129.
20. Adhikari, A., Ezeamii, V., Ayo Farai, O., Savarese, M., & Gupta, J. (2024, August). Assessing Mold-Specific Volatile Organic Compounds and Molds Using Sorbent Tubes and a CDC/NIOSH developed tool in Hurricane Ian affected Homes. In *ISEE Conference Abstracts* (Vol. 2024, No. 1).
21. Adhikari, A., Smallwood, S., Ezeamii, V., Biswas, P., Tasby, A., Nwaonumah, E., ... & Yin, J. (2024, August). Investigating Volatile Organic Compounds in Older Municipal Buildings and Testing a Green and Sustainable Method to Reduce Employee Workplace Exposures. In ISEE Conference Abstracts (Vol. 2024, No. 1).
22. Adigun, O. A., Falola, B. O., Esebre, S. D., Wada, I., & Tunde, A. (2024). Enhancing carbon markets with fintech innovations: The role of artificial intelligence and blockchain. *World Journal of Advanced Research and Reviews*, *23*(2).
23. Afolabi, O., Ajayi, S., & Olulaja, O. (2024, October 23). *Barriers to healthcare among undocumented immigrants*. In *2024 Illinois Minority Health Conference*. Illinois Department of Public Health.
24. Afolabi, O., Ajayi, S., & Olulaja, O. (2024, October 23). *Digital health interventions among ethnic minorities: Barriers and facilitators*. Paper presented at the *2024 Illinois Minority Health Conference*.
25. Ajayi, A. M., Omokanye, A. O., Olowu, O., Adeleye, A. O., Omole, O. M., & Wada, I. U. (2024). Detecting insider threats in banking using AI-driven anomaly detection with a data science approach to cybersecurity.
26. Ajibola, F. O., Onyeyili, I. N., Adabra, M. S., Obianyo, C. M., Ebubechukwu, D. J., Auwal, A. M., & Justina, E. C. (2024). Adverse health effects of heavy metal pollution in the Enugu Area, Southeastern Nigeria. World Journal of Biology Pharmacy and Health Sciences, 20(3), 10-30574.
27. Akerele, J. I., Uzoka, A., Ojukwu, P. U., & Olamijuwon, O. J. (2024). Improving healthcare application scalability through microservices architecture in the cloud. International Journal of Scientific Research Updates, 8(02), 100-109.
28. Akerele, J.I., Uzoka, A., Ojukwu, P.U. and Olamijuwon, O.J. (2024). Optimizing traffic management for public services during high-demand periods using cloud load balancers. Computer Science & IT Research Journal. P-ISSN: 2709-0043, E-ISSN: 2709-0051 Volume 5, Issue 11, P.2594-2608, November 2024. DOI: 10.51594/csitrj.v5i11.1710: http://www.fepbl.com/index.php/csitrj
29. Akerele, J.I., Uzoka, A., Ojukwu, P.U. and Olamijuwon, O.J. (2024). Minimizing downtime in E-Commerce platforms through containerization and orchestration. International Journal of Multidisciplinary Research Updates, 2024, 08(02), 079–086. https://doi.org/10.53430/ijmru.2024.8.2.0056
30. Akerele, J.I., Uzoka, A., Ojukwu, P.U. and Olamijuwon, O.J. (2024). Data management solutions for real-time analytics in retail cloud environments. Engineering Science & Technology Journal. P-ISSN: 2708-8944, E-ISSN: 2708-8952 Volume 5, Issue 11, P.3180-3192, November 2024. DOI: 10.51594/estj.v5i11.1706: http://www.fepbl.com/index.php/estj
31. Akerele, J.I., Uzoka, A., Ojukwu, P.U. and Olamijuwon, O.J. (2024). Increasing software deployment speed in agile environments through automated configuration management. International Journal of Engineering Research Updates, 2024, 07(02), 028–035. https://doi.org/10.53430/ijeru.2024.7.2.0047
32. Al Hasan, S. M., Matthew, K. A., & Toriola, A. T. (2024). Education and mammographic breast density. *Breast Cancer Research and Treatment*, 1-8.
33. Alemede, V., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2024). Pharmacists as educators: Enhancing patient understanding and access to specialty medications through community workshops. *Magna Scientia Advanced Biology and Pharmacy*, 13(01), 001–009. https://doi.org/10.30574/msabp.2024.13.1.0053

34. Alemede, V., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2024). Impact of 340B drug pricing program on specialty medication access: A policy analysis and future directions. Magna Scientia Advanced Biology and Pharmacy, 13(1), 10–18.
35. Alemede, V., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2024). Designing state-level policies to support independent pharmacies in providing specialty care services in rural regions. Magna Scientia Advanced Biology and Pharmacy, 13(1), 19–29.
36. Anyanwu, E. C., Maduka, C. P., Ayo-Farai, O., Okongwu, C. C., & Daraojimba, A. I. (2024). Maternal and child health policy: A global review of current practices and future directions. *World Journal of Advanced Research and Reviews*, *21*(2), 1770-1781.
37. Anyanwu, E. C., Okongwu, C. C., Olorunsogo, T. O., Ayo-Farai, O., Osasona, F., & Daraojimba, O. D. (2024). Artificial Intelligence In Healthcare: A Review Of Ethical Dilemmas And Practical Applications. *International Medical Science Research Journal*, *4*(2), 126-140.
38. Ariyibi, K. O., Bello, O. F., Ekundayo, T. F., Wada, I. & Ishola, O. (2024). Leveraging Artificial Intelligence for enhanced tax fraud detection in modern fiscal systems.
39. Attah, J. O., Mbakuuv, S. H., Ayange, C. D., Achive, G. W., Onoja, V. S., Kaya, P. B., ... & Adekalu, O. A. (2022). Comparative Recovery of Cellulose Pulp from Selected Agricultural Wastes in Nigeria to Mitigate Deforestation for Paper. *European Journal of Material Science*, *10*(1), 23-36.
40. Ayo-Farai, O., Gupta, J., Ezeamii, V., Savarese, M., & Adhikari, A. (2024). Surface Microbial Activity in Hurricane Ian Affected Homes in Relation To Environmental Factors.
41. Ayo-Farai, O., Jingjing, Y., Ezeamii, V., Obianyo, C., & Tasby, A. (2024). Impacts on Indoor Plants on Surface Microbial Activity in Public Office Buildings in Statesboro Georgia.
42. Ayo-Farai, O., Momodu, P. A., Okoye, I. C., Ekarika, E., Okafor, I. T., & Okobi, O. E. (2024). Analyzing Knowledge Status and HIV Linkage to Care: Insights From America's HIV Epidemic Analysis Dashboard (AHEAD) National Database. *Cureus*, *16*(10).
43. Ayo-Farai, O., Obianyo, C., Ezeamii, V., & Jordan, K. (2023). Spatial Distributions of Environmental Air Pollutants Around Dumpsters at Residential Apartment Buildings.
44. Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2023). Telemedicine in Health Care: A Review of Progress and Challenges in Africa. *Matrix Science Pharma*, *7*(4), 124-132.
45. Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2024). Digital Health Technologies in Chronic Disease Management: A Global Perspective. *International Journal of Research and Scientific Innovation*, *10*(12), 533-551.
46. Ayo-Farai, O., Olaide, B. A., Maduka, C. P., & Okongwu, C. C. (2023). Engineering innovations in healthcare: a review of developments in the USA. *Engineering Science & Technology Journal*, *4*(6), 381-400.
47. Babarinde, A. O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., & Sodamade, O. (2023). Data analytics in public health, A USA perspective: A review. *World Journal of Advanced Research and Reviews*, *20*(3), 211-224.
48. Babarinde, A. O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., Ogundairo, O., & Sodamade, O. (2023). Review of AI applications in Healthcare: Comparative insights from the USA and Africa. *International Medical Science Research Journal*, *3*(3), 92-107.
49. Bae, S., Choi, E., Lee, I., Lee, I., & Chun, C. (2016). Health status and health service utilization: barriers and facilitators for korea medicaid beneficiaries. Journal of Korean Biological Nursing Science, 18(3), 144-152. https://doi.org/10.7586/jkbns.2016.18.3.144
50. Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2024). The Role of pharmacists in personalised medicine: a review of integrating pharmacogenomics into clinical practice. *International Medical Science Research Journal*, *4*(1), 19-36.
51. Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2023). Innovations in drug delivery systems: A review of the pharmacist's role in enhancing efficacy and patient compliance.
52. Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2023). Integrating AI into health informatics for enhanced public health in Africa: a comprehensive review. *International Medical Science Research Journal*, *3*(3), 127-144.
53. Bello, S., Wada, I., Ige, O., Chianumba, E., & Adebayo, S. (2024). AI-driven predictive maintenance and optimization of renewable energy systems for enhanced operational efficiency and

longevity. *International Journal of Science and Research Archive*, *13*(1).

54. Bhaskar, S., Bradley, S., Chattu, V. K., Adisesh, A., Nurtazina, A., Kyrykbayeva, S., ... & Ray, D. (2020). Telemedicine across the globe-position paper from the COVID-19 pandemic health system resilience PROGRAM (REPROGRAM) international consortium (Part 1). Frontiers in public health, 8, 556720.
55. Brantley, E. and Ku, L. (2021). Continuous eligibility for medicaid associated with improved child health outcomes. Medical Care Research and Review, 79(3), 404-413. https://doi.org/10.1177/10775587211021172
56. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., & Forkuo, A. Y. (2022). Developing a framework for using AI in personalized medicine to optimize treatment plans. Journal of Frontiers in Multidisciplinary Research, 3(1), 57–71. https://doi.org/10.54660/.IJFMR.2022.3.1.57-71
57. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2022). Integrating AI, blockchain, and big data to strengthen healthcare data security, privacy, and patient outcomes. Journal of Frontiers in Multidisciplinary Research, 3(1), 124–129. https://doi.org/10.54660/.IJFMR.2022.3.1.124-129
58. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2023). Exploring the role of AI and machine learning in improving healthcare diagnostics and personalized medicine. Journal of Frontiers in Multidisciplinary Research, 4(1), 177–182. https://doi.org/10.54660/.IJFMR.2023.4.1.177-182
59. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2022). Developing a predictive model for healthcare compliance, risk management, and fraud detection using data analytics. International Journal of Social Science Exceptional Research, 1(1), 232–238. https://doi.org/10.54660/IJSSER.2022.1.1.232-238
60. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2023). A conceptual framework for leveraging big data and AI in enhancing healthcare delivery and public health policy. IRE Journals, 5(6), 303–310. https://doi.org/10.36548/ijrte.2023.6.051
61. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2024). Evaluating the impact of telemedicine, AI, and data sharing on public health outcomes and healthcare access. International Journal of Advanced Multidisciplinary Research and Studies, 4(6), 1620–1625. https://doi.org/10.54871/ijamrs.2024.4.6.1620-1625
62. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2023). Framework for using behavioral science and public health data to address healthcare inequality and vaccine hesitancy. Journal of Frontiers in Multidisciplinary Research, 4(1), 183–187. https://doi.org/10.54660/.IJFMR.2023.4.1.183-187
63. Chianumba, E. C., Ikhalea, N., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2021). A conceptual framework for leveraging big data and AI in enhancing healthcare delivery and public health policy. IRE Journals, 5(6), 303–310. https://doi.org/10.54660/IJMOR.2023.2.1.281-287
64. Chigboh, V. M., Zouo, S. J. C., & Olamijuwon, J. (2024). Health data analytics for precision medicine: A review of current practices and future directions. *International Medical Science Research Journal, 4*(11), 973–984. https://www.fepbl.com/index.php/imsrj/article/view/1732
65. Chigboh, V. M., Zouo, S. J. C., & Olamijuwon, J. (2024). Predictive analytics in emergency healthcare systems: A conceptual framework for reducing response times and improving patient care. *World Journal of Advanced Pharmaceutical and Medical Research, 7*(2), 119–127. https://zealjournals.com/wjapmr/content/predictive-analytics-emergency-healthcare-systems-conceptual-framework-reducing-response
66. Chukwuma, C. C., Nwobodo, E. O., Eyeghre, O. A., Obianyo, C. M., Chukwuma, C. G., Tobechukwu, U. F., & Nwobodo, N. (2022): Evaluation of Noise Pollution on Audio-Acuity Among Sawmill Workers In Nnewi Metropolis, Anambra State, Nigeria. changes, 6, 8.
67. Cuadros, D., Gutiérrez, J., Moreno, C., Escovar, S., Miller, F., Musuka, G., … & MacKinnon, N. (2022). Impact of healthcare capacity disparities on the covid-19 vaccination coverage in the united states: a cross-sectional study.. https://doi.org/10.1101/2022.06.19.22276612
68. Edoh, N. L., Chigboh, V. M., Zouo, S. J. C., & Olamijuwon, J. (2024). Improving healthcare decision-making with predictive analytics: A conceptual approach to patient risk assessment and care optimization. *International Journal of Scholarly Research in Medicine and Dentistry, 3*(2), 1–10. https://srrjournals.com/ijsrmd/sites/default/files/IJSRMD-2024-0034.pdf
69. Edoh, N. L., Chigboh, V. M., Zouo, S. J. C., & Olamijuwon, J. (2024). The role of data analytics in reducing healthcare disparities: A review of predictive models for health equity. *International*

Journal of Management & Entrepreneurship Research, *6*(11), 3819–3829. https://www.fepbl.com/index.php/ijmer/article/view/1721

70. Edwards, Q. C., & Smallwood, S. (2023). Accessibility and Comprehension of United States Health Insurance Among International Students: A Gray Area.
71. Edwards, Q., Ayo-Farai, O., Sejoro, S., Chatterjee, A., & Adhikari, A. (2024, October). Associations between climate changes, airborne pollen, selected air pollutants, and asthma-related emergency department visits in Charleston, South Carolina, during 2017-2021. In *APHA 2024 Annual Meeting and Expo*. APHA.
72. Edwards, Q., Ayo-Farai, O., Uwumiro, F. E., Komolafe, B., Chibuzor, O. E., Agu, I., ... & NWUKE, H. O. (2025). Decade-Long Trends in Hospitalization, Outcomes, and Emergency Department Visits for Inflammatory Bowel Diseases in the United States, 2010 to 2020. *Cureus*, *17*(1).
73. Edwards, Q., Ayo-Farai, O., Uwumiro, F. E., Komolafe, B., Chibuzor, O. E., Agu, I., ... & Nwuke, H. O. (2025). Decade-Long Trends in Hospitalization, Outcomes, and Emergency Department Visits for Inflammatory Bowel Diseases in the United States, 2010 to 2020. *Cureus*, *17*(1).
74. Edwards, Q., Idoko, B., Idoko, J. E., Ejembi, E. V., & Onuh, E. P. (2024). Remote monitoring of social behavior in children with autism: The role of digital phenotyping in public programs.
75. Edwards, Q., Mallhi, A. K., & Zhang, J. (2024, October). The association between advanced maternal age at delivery and childhood obesity. In *APHA 2024 Annual Meeting and Expo*. APHA.
76. Edwards, Q., Qotineh, A., Okeke, C., & Zhang, J. (2024, September). The National Trend of Using Prescription Immunosuppressives. In *Arthritis & Rheumatology* (Vol. 76, pp. 3969-3970). 111 River St, Hoboken 07030-5774, NJ USA: Wiley.
77. Edwards, Q., Qotineh, A., Spurgeon, R., & Zhang, J. (2024, October). The association between h. pylori infection and risk of alzheimer's disease. In *APHA 2024 Annual Meeting and Expo*. APHA.
78. Ekpechi, D. A., Obiukwu, O. O., Nwankwo, E. I., & Okpalaku-Nath, V. C. (2023). Experimental study of the thermal and mechanical properties of epoxy-reinforced composites. *Journal of Applied Physical Science International*, *15*(1), 6-16.
79. Ekpechi, D. A., Obiukwu, O. O., Opara, U. V., Emeziem, V. C., Nwankwo, E. I., Ezeaku, N. I., ... & Opkalaku-nath, V. C. (2025). Evaluation of Key Performance Factors and Recommendation of Optimization Strategies of a Power Generation Company. *Engineering Science & Technology*, 52-68.
80. Ekpechi, D. A., Opkalaku-nath, V. C., Opara, U. V., Ezeaku, N. I., Nwankwo, E. I., Nwankwo, C. A., ... & Jackson, D. O. (2025). Modeling and Comparative Analysis of the Compressive Strength of Concretes of Varying Sand Zones Using Scheffe's Theory. *Engineering Science & Technology*, 177-201.
81. Ekwebene, O. C., Umeanowai, N. V., Edeh, G. C., Noah, G. U., Folasole, A., Olagunju, O. J., & Abazu, S. (2024). The burden of diabetes in America: A data-driven analysis using power BI. *Int. J. Res. Med. Sci*, *12*, 392-396.
82. Elujide, I., Fashoto, S. G., Fashoto, B., Mbunge, E., Folorunso, S. O., & Olamijuwon, J. O. (2021). Informatics in Medicine Unlocked.
83. Elujide, I., Fashoto, S. G., Fashoto, B., Mbunge, E., Folorunso, S. O., & Olamijuwon, J. O. (2021). Application of deep and machine learning techniques for multi-label classification performance on psychotic disorder diseases. Informatics in Medicine Unlocked, 23, 100545.
84. Emeihe, E. V., Nwankwo, E. I., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). Revolutionizing drug delivery systems: Nanotechnology-based approaches for targeted therapy. International Journal of Life Science Research Archive, 7(1), 40–58.
85. Emeihe, E. V., Nwankwo, E. I., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). The impact of artificial intelligence on regulatory compliance in the oil and gas industry. International Journal of Life Science Research Archive, 7(1), 28-39.
86. Emeihe, E. V., Nwankwo, E. I., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). Mobile health applications for disease management in rural areas: A systematic review. International Journal of Applied Research in Social Sciences, 6(8), 1725-1746.
87. Emeihe, E. V., Nwankwo, E. I., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). The impact of artificial intelligence on early diagnosis of chronic diseases in rural areas. International Journal of Biology and Pharmacy Research Updates, 5(8), 1828-1854.
88. Eyeghre, O. A., Dike, C. C., Ezeokafor, E. N., Oparaji, K. C., Amadi, C. S., Chukwuma, C. C., ... & Igbokwe, V. U. (2023). The impact of Annona muricata and metformin on semen quality and hormonal profile in Arsenic trioxide-induced testicular dysfunction in male Wistar rats. Magna

Scientia Advanced Research and Reviews, 8(01), 001-018.

89. Eyeghre, O. A., Ezeokafor, E. N., Dike, C. C., Oparaji, K. C., Amadi, C. S., Chukwuma, C. C., ... & Muorah, C. O. (2023). The Impact of Annona Muricata on Semen Quality and Antioxidants Levels in Alcohol-Induced Testicular Dysfunction in Male Wistar Rats.
90. Eze, C. E., Igwama, G. T., Nwankwo, E. I., & Emeihe, E. V. The role of big data in transforming financial management in US healthcare: A conceptual framework.
91. Eze, C. E., Igwama, G. T., Nwankwo, E. I., & Victor, E. (2024). AI-driven health data analytics for early detection of infectious diseases: A conceptual exploration of US public health strategies.
92. Eze, C. E., Igwama, G. T., Nwankwo, E. I., & Victor, E. (2024). Predictive modeling for healthcare needs in the aging US population: A conceptual exploration. *Global Journal of Research in Science and Technology*, *2*(02), 094-102.
93. Ezeamii, J. C., Edwards, Q., Omale, J., Ezeamii, P. C., Idoko, B., & Ejembi, E. V. (2024). Risk beyond the pap: A review of key epidemiological studies on cervical cancer risk factors and populations at highest risk.
94. Ezeamii, J. C., Edwards, Q., Omale, J., Ezeamii, P. C., Idoko, B., & Ejembi, E. V. (2024). Risk beyond the pap: A review of key epidemiological studies on cervical cancer risk factors and populations at highest risk.
95. Ezeamii, V. C., Gupta, J., Ayo-Farai, O., Savarese, M., & Adhikari, A. (2024). Assessment of VOCs and Molds Using CDC/NIOSH developed tools in Hurricane Ian affected Homes.
96. Ezeamii, V. C., Ofochukwu, V. C., Iheagwara, C., Asibu, T., Ayo-Farai, O., Gebeyehu, Y. H., ... & Okobi, O. E. (2024). COVID-19 Vaccination Rates and Predictors of Uptake Among Adults with Coronary Heart Disease: Insight From the 2022 National Health Interview Survey. *Cureus*, *16*(1).
97. Ezeamii, V., Adhikari, A., Caldwell, K. E., Ayo-Farai, O., Obiyano, C., & Kalu, K. A. (2023, November). Skin itching, eye irritations, and respiratory symptoms among swimming pool users and nearby residents in relation to stationary airborne chlorine gas exposure levels. In *APHA 2023 Annual Meeting and Expo*. APHA.
98. Ezeamii, V., Ayo-Farai, O., Obianyo, C., Tasby, A., & Yin, J. (2024). A Preliminary Study on the Impact of Temperature and Other Environmental Factors on VOCs in Office Environment.
99. Ezeamii, V., Jordan, K., Ayo-Farai, O., Obiyano, C., Kalu, K., & Soo, J. C. (2023). Dirunal and seasonal variations of atmospheric chlorine near swimming pools and overall surface microbial activity in surroundings.
100. Fagbenro, A., Amadi, E. S., Uwumiro, F. E., Nwebonyi, S. O., Edwards, Q. C., Okere, M. O., ... & Ekpunobi, C. (2024). Rates, Diagnoses, and Predictors of Unplanned 30-Day Readmissions of Critical Care Survivors Hospitalized for Lung Involvement in Systemic Lupus Erythematosus: An Analysis of National Representative US Readmissions Data. *Cureus*, *16*(11).
101. Folorunso, A., Mohammed, V., Wada, I., & Samuel, B. (2024). The impact of ISO security standards on enhancing cybersecurity posture in organizations. *World Journal of Advanced Research and Reviews*, *24*(1), 2582-2595.
102. Folorunso, A., Wada, I., Samuel, B., & Mohammed, V. (2024). Security compliance and its implication for cybersecurity. *World Journal of Advanced Research and Reviews*, *24*(01), 2105-2121.
103. Franks, P. and Fiscella, K. (2008). Reducing disparities downstream: prospects and challenges. Journal of General Internal Medicine, 23(5), 672-677. https://doi.org/10.1007/s11606-008-0509-0
104. Fuko, C. D., Magacha, H. M., Noah, G., & Ikwuka, O. V. (2025). Ethnic/Racial Disparities in Pancreatic Cancer Mortality Across the United States: A National Inpatient Sample Database Analysis. *Cureus*, *17*(1).
105. Gabrielli, M. G., Tomassoni, D., Accili, D., Nwankwo, I. E., & Panarello, S. (2010). Sialoglycoconjugate expression in the intestinal mucosa of obese Zucker rats. *IJAE: Italian Journal of Anatomy and Embryology: 115, 1/2 Supplement, 2010*, 73-73.
106. Gabrielli, M. G., Tomassoni, D., Panarello, S., Nwankwo, I. E., Acoli, D., Tayebati, S. K., Lokhandwala, M. F., & Amenta, F. (2010). Sialoglycoconjugate in the intestinal mucosa of obese Zucker rats. Italian Journal of Anatomy and Embryology, 115(1-2 Suppl.).
107. Gbadegesin, J. O., Adekanmi, A. J., Akinmoladun, J. A., & Adelodun, A. M. (2022). Determination of Fetal gestational age in singleton pregnancies: Accuracy of ultrasonographic placenta thickness and volume at a Nigerian tertiary Hospital. *African Journal of Biomedical Research*, *25*(2), 113-119.
108. Govender, P., Fashoto, S. G., Maharaj, L., Adeleke, M. A., Mbunge, E., Olamijuwon, J., ... & Okpeku, M. (2022). The application of machine learning to predict genetic relatedness using human mtDNA hypervariable region I sequences. Plos one, 17(2), e0263790.

109. Hsiang, W., Lukasiewicz, A., Gentry, M., Kim, C., Leslie, M., Pelker, R., … & Wiznia, D. (2019). Medicaid patients have greater difficulty scheduling health care appointments compared with private insurance patients: a meta-analysis. Inquiry the Journal of Health Care Organization Provision and Financing, 56. https://doi.org/10.1177/0046958019838118
110. Ibikunle, O.E., Usuemerai, P.A., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. Artificial intelligence in healthcare forecasting: Enhancing market strategy with predictive analytics. *International Journal of Applied Research in Social Sciences*, 6(10), pp.2409–2446. Available at: https://doi.org/10.51594/ijarss.v6i10.1640.
111. Ibikunle, O.E., Usuemerai, P.A., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. AI and digital health innovation in pharmaceutical development. *Computer Science & IT Research Journal*, 5(10), pp.2301-2340. Available at: https://doi.org/10.51594/csitrj.v5i10.1649
112. Idoko, J., David, O. S., Antwi, V., & Edwards, Q. (2024). Enhancing Information Literacy and User Engagement through Biomimicry in Social Media Design Using Adaptive and Personalized Product Approaches.
113. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). AI-enhanced remote monitoring for chronic disease management in rural areas. International Journal of Applied Research in Social Sciences, 6(8), 1824-1847.
114. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). AI and big data analytics for enhancing public health surveillance in rural communities. International Journal of Applied Research in Social Sciences, 6(8), 1797-1823.
115. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). The role of community health workers in implementing AI-based health solutions in rural areas. International Journal of Biology and Pharmacy Research Updates, 4(1), 1-17.
116. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). The role of AI in optimizing drug dosage and reducing medication errors. International Journal of Biology and Pharmacy Research Updates, 4(1), 18-34.
117. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). Enhancing maternal and child health in rural areas through AI and mobile health solutions. International Journal of Biology and Pharmacy Research Updates, 4(1), 35-50.
118. Igwama, G. T., Nwankwo, E. I., Emeihe, E. V., & Ajegbile, M. D. (2024). Artificial intelligence in predictive analytics for epidemic outbreaks in rural populations. International Journal of Biology and Pharmacy Research Updates, 4(8), 859-881.
119. Ikese, C. O., Adie, P. A., Onogwu, P. O., Buluku, G. T., Kaya, P. B., Inalegwu, J. E., ... & Awodi, G. O. (2024): Assessment of Selected Pesticides Levels in Some Rivers in Benue State-Nigeria and the Cat Fishes Found in Them.
120. Ikese, C. O., Ubwa, S. T., Okopi, S. O., Akaasah, Y. N., Onah, G. A., Targba, S. H., ... & Adekalu, O. A. (2024): Assessment of Ground Water Quality in Flooded and Non-Flooded Areas.
121. Ikhalea, N., Chianumba, E. C., Mustapha, A. Y., Forkuo, A. Y., & Osamika, D. (2024). A model for strengthening health systems in low-resource settings using AI and telemedicine. International Journal of Future Engineering Innovations, 1(1), 86–92. https://doi.org/10.54660/IJFEI.2024.1.1.86-92
122. Imran, S., Patel, R. S., Onyeaka, H. K., Tahir, M., Madireddy, S., Mainali, P., ... & Ahmad, N. (2019). Comorbid depression and psychosis in Parkinson's disease: a report of 62,783 hospitalizations in the United States. *Cureus*, *11*(7).
123. Johnson, O. B., Olamijuwon, J., Cadet, E., Osundare, O. S., & Ekpobimi, H. O. (2024). Optimizing predictive trade models through advanced algorithm development for cost-efficient infrastructure. International Journal of Engineering Research and Development, 20(11), 1305–1313.
124. Johnson, O. B., Olamijuwon, J., Cadet, E., Samira, Z., & Ekpobimi, H. O. (2024). Developing an integrated DevOps and serverless architecture model for transforming the software development lifecycle. International Journal of Engineering Research and Development, 20(11), 1314–1323.
125. Johnson, O. B., Olamijuwon, J., Cadet, E., Weldegeorgise, Y. W., & Ekpobimi, H. O. (2024). Developing a leadership and investment prioritization model for managing high-impact global cloud solutions. Engineering Science & Technology Journal, 5(12), 3232–3247.
126. Jones, M., Morris, J., & DeRuyter, F. (2018). Mobile healthcare and people with disabilities: current state and future needs. International Journal of Environmental Research and Public Health, 15(3), 515. https://doi.org/10.3390/ijerph15030515
127. Katas, K. U., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2023). The role of peer counseling in addressing substance abuse and addiction in high school students. International Journal of Management & Entrepreneurship Research, 5(12), December.
128. Katas, K. U., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2024). The

intersection of mental health and substance abuse: Exploring dual diagnosis and treatment strategies for young people. International Journal of Scholarly Research in Medicine and Dentistry, 3(1), 15–30.

129. Katas, K. U., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2023). Evaluating the impact of early intervention programs on substance abuse prevention in adolescents: A comprehensive review. IJARS, 5(10), December.
130. Katas, K. U., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2024). Public health campaigns and their influence on substance abuse awareness and prevention among youth: An analysis of media strategies. International Journal of Scholarly Research in Medicine and Dentistry, 3(1), 31–47.
131. Katas, K. U., Nwankwo, E. I., Igwama, G. T., Olaboye, J. A., & Anyanwu, E. C. (2023). Community-based approaches to combatting substance abuse among youth: A case study of urban and rural programs. International Journal of Applied Research in Social Sciences, 5(10), December.
132. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024): Enhancing Biomedical Engineering Education: Incorporating Practical Training in Equipment Installation and Maintenance.
133. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024): The Impact of Regular Maintenance on the Longevity and Performance of Radiology Equipment.
134. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024). Strategies for optimizing the management of medical equipment in large healthcare institutions. *Strategies*, *20*(9), 162-170.
135. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024). Advancements in biomedical device implants: A comprehensive review of current technologies. *Int. J. Front. Med. Surg. Res*, *6*, 19-28.
136. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024). Integrating biomedical engineering with open-source telehealth platforms: enhancing remote patient monitoring in global healthcare systems. *International Medical Science Research Journal*, *4*(9).
137. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024). The role of biomedical engineers in enhancing patient care through efficient equipment management. *International Journal Of Frontiers in Medicine and Surgery Research*, *6*(1), 11-18.
138. Kelvin-Agwu, M. C., Adelodun, M. O., Igwama, G. T., & Anyanwu, E. C. (2024). Innovative approaches to the maintenance and repair of biomedical devices in resource-limited settings.
139. Khosrow Tayebati, S., Ejike Nwankwo, I., & Amenta, F. (2013). Intranasal drug delivery to the central nervous system: present status and future outlook. *Current pharmaceutical design*, *19*(3), 510-526.
140. Khosrow Tayebati, S., Nwankwo, I. E., Amenta, F., Traini, E., & Borsa, M. (2011). New route for Tizanidine administration: a pharmacokinetics and light microscope autoradiography study. *IJAE: Italian Journal of Anatomy and Embryology: 116, 1 Supplement, 2011*, 183-183.
141. Khosrow Tayebati, S., Tomassoni, D., Ejike Nwankwo, I., Di Stefano, A., Sozio, P., Serafina Cerasa, L., & Amenta, F. (2013). Modulation of monoaminergic transporters by choline-containing phospholipids in rat brain. *CNS & Neurological Disorders-Drug Targets (Formerly Current Drug Targets-CNS & Neurological Disorders)*, *12*(1), 94-103.
142. Kuo, Y. M., Nwankwo, E. I., Nussbaum, R. L., Rogers, J., & Maccecchini, M. L. (2019). Translational inhibition of α-synuclein by Posiphen normalizes distal colon motility in transgenic Parkinson mice. *American journal of neurodegenerative disease*, *8*(1), 1.
143. Kuo, Y. M., Nwankwo, E. I., Nussbaum, R., Rogers, J., & Maccechini, M. L. (2019). Translational inhibition of α-synuclein by Posiphen normalizes distal colon motility in transgenic Parkinson mice. American Journal of Neurodegenerative Diseases, 8(1), 1–15.
144. Lang-Lindsey, K. (2024). Addressing true health disparities: the imperative of telehealth and telemental health services for rural americans.. https://doi.org/10.5772/intechopen.1004587
145. Lin, Y., Monnette, A., & Shi, L. (2021). Effects of medicaid expansion on poverty disparities in health insurance coverage. International Journal for Equity in Health, 20, 1-11.
146. Lyu, W. and Wehby, G. (2024). Effects of the families first coronavirus response act on coverage continuity and access for medicaid beneficiaries. Inquiry the Journal of Health Care Organization Provision and Financing, 61. https://doi.org/10.1177/00469580241282052
147. Madu, K. E., & Nwankwo, E. I. (2018). Effects of Friction on Critical Pressure Ratio of A Nozzle. *Journal of Industrial Technology*, *3*(1), 47-55.

148. Madu, K. E., Nwankwo, E. I., Okoronkwo, G. O., & Onyewudiala, J. I. (2019). Micro-Mechanics Mercerization Analysis on the Tensile Strength and Interphase Quality of Stipa Stem Fibre-Reinforced Polypropylene Composite Materials. *Iconic Research and Engineering Journals*, *3*(5), 73.
149. Madu, K. E., Nwankwo, E. I., Okoronkwo, G. O., & Onyewudiala, J. I. (2020). Investigative analysis of the tensile and impact strengths of hybridized aluminum metal matrix composite materials. *Journal of Scientific Research and Reports*, *26*(3), 72.
150. Madu, K., & Nwankwo, E. (2018). Evaluation of pump losses: An energy principle-A review. *Equatorial Journal of Engineering*, 85-91.
151. Maduka, C. P., Okongwu, C. C., Enahoro, A., Osunlaja, O., & Ajogwu, A. E. (2023). Integration of public health policy and laboratory science in Nigeria: a review of responses to Covid-19. *Int Med Sci Res J*, *3*(1), 24-46.
152. Majebi, N. L., Adelodun, M. O., & Anyanwu, E. C. (2024). *Community-based interventions to prevent child abuse and neglect: A policy perspective*. *International Journal of Engineering Inventions, 13*(9), 367–374.
153. Majebi, N. L., Adelodun, M. O., & Anyanwu, E. C. (2024). *Early childhood trauma and behavioral disorders: The role of healthcare access in breaking the cycle*. *Comprehensive Research and Reviews in Science and Technology, 2*(1), 080–090.
154. Majebi, N. L., Adelodun, M. O., & Anyanwu, E. C. (2024). *Integrating trauma-informed practices in US educational systems: Addressing behavioral challenges in underserved communities*. *Comprehensive Research and Reviews in Science and Technology, 2*(1), 070–079.
155. Majebi, N. L., Adelodun, M. O., & Anyanwu, E. C. (2024). *Maternal mortality and healthcare disparities: Addressing systemic inequities in underserved communities*. *International Journal of Engineering Inventions, 13*(9), 375–385.
156. Majebi, N. L., Drakeford, O. M., Adelodun, M. O., & Anyanwu, E. C. (2023). *Leveraging digital health tools to improve early detection and management of developmental disorders in children*. *World Journal of Advanced Science and Technology, 4*(1), 025–032.
157. Matthew, A., Opia, F. N., Matthew, K. A., Kumolu, A. F., & Matthew, T. F. (2021). Cancer Care Management in the COVID-19 Era: Challenges and adaptations in the global south. *Cancer*, *2*(6).
158. Matthew, K. A., Akinwale, F. M., & Opia, F. N. (2022). The impact of telehealth on cancer care access in minority populations during the pandemic era. *International Journal of Multidisciplinary Comprehensive Research*, 1(6), 18–24.
159. Matthew, K. A., Akinwale, F. M., Opia, F. N., & Adenike, A. (2021). The Relationship between oral Contraceptive Use, Mammographic Breast Density, and Breast Cancer Risk.
160. Matthew, K. A., Getz, K. R., Jeon, M. S., Luo, C., Luo, J., & Toriola, A. T. (2024). Associations of Vitamins and Related Cofactor Metabolites with Mammographic Breast Density in Premenopausal Women. *The Journal of Nutrition*, *154*(2), 424-434.
161. Matthew, K. A., Nwaogelenya, F., & Opia, M. (2024). Conceptual review on the importance of data visualization tools for effective research communication. *International Journal Of Engineering Research and Development*, *20*(11), 1259-1268. https://ijerd.com/paper/vol20-issue11/201112591268.pdf
162. Matthew, K. A., Nwaogelenya, F., & Opia, M. (2025). Culturally sensitive interventions for mental health in vulnerable populations: Bridging gaps in care. *International Journal of Research Publication and Reviews*, *6*(1), 2984-2997.
163. Mgbecheta, J., Onyenemezu, K., Okeke, C., Ubah, J., Ezike, T., & Edwards, Q. (2023): Comparative Assessment of Job Satisfaction among Frontline Health Care Workers in a Tertiary Hospital in South East Nigeria. *AGE (years)*, *28*, 6-83.
164. Nasuti, C., Falcioni, M. L., Nwankwo, I. E., Cantalamessa, F., & Gabbianelli, R. (2008). Effect of permethrin plus antioxidants on locomotor activity and striatum in adolescent rats. Toxicology, 251(1-3), 45–50.
165. Nduhura, A., Nuwagaba, I., Settumba, J. P., Molokwane, T., & Lukamba, M. T. (2020, October). Public private partnerships: systematic review of available models for improving health care services. In International Conference on Public Administration and Development Alternatives (IPADA). Pg (pp. 669-682).
166. Nnagha, E. M., Ademola Matthew, K., Izevbizua, E. A., Uwishema, O., Nazir, A., & Wellington, J. (2023). Tackling sickle cell crisis in Nigeria: the need for newer therapeutic solutions in sickle cell crisis management–short communication. *Annals of Medicine and Surgery*, *85*(5), 2282-2286.
167. Noah, G. U., Omohoro, M. U., Magacha, H. M., Fuko, C. D., Ezike, T., & Ezike, T. C. (2025). Racial Disparities in Hypertension-Related Hospital Mortality Among Adults in the United States. *Cureus*, *17*(3).
168. Nwankwo, E. I., Amenta, F., DI CESARE MANNELLI, L., Pacini, A., Bonaccini, L., Ghelardini, C., ... & Tomassoni, D. (2011). Central

nervous system changes in a model of compressive neuropathy: thioctic acid enantiomers activity.

169. Nwankwo, E. I., Emeihe, E. V., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). Innovative drug delivery methods for combating antimicrobial resistance. Volume 4, Issue 8, 834–858.
170. Nwankwo, E. I., Emeihe, E. V., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). Integrating telemedicine and AI to improve healthcare access in rural settings. International Journal of Life Science Research Archive, 7(1), 59–77.
171. Nwankwo, E. I., Emeihe, E. V., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). AI in personalized medicine: Enhancing drug efficacy and reducing adverse effects. International Journal of Biology and Pharmacy Research Updates, 4(8), 806-833.
172. Nwankwo, E. I., Emeihe, E. V., Ajegbile, M. D., Olaboye, J. A., & Maha, C. C. (2024). Artificial Intelligence in predictive analytics for epidemic outbreaks in rural populations. *International Journal of Life Science Research Archive*, *7*(1), 078-094.
173. Nwankwo, E., Amenta, F., Tomassoni, D., & Tayebati, K. S. (2012). Central Nervous System Changes in a Model of Compressive Neuropathy: Thioctic Acid Enantiomers Activity: PP356. *Pain Practice*, *12*, 95.
174. Nwankwo, I., Tomassoni, D., & Tayebati, K. (2012). P1-205 The Cholinergic Approach In Treatment Of Vascular Dementia: Evidence From Preclinical Studies. *Alzheimer's & Dementia*, *8*(4S_Part_5), P179-P179.
175. Nwankwo, I., Tomassoni, D., & Tayebati, K. (2012). The cholinergic approach in the treatment of vascular dementia: Evidence from preclinical studies. Journal of the Alzheimer's Association, 8(4), P179.
176. Nwankwo, I., Tomassoni, D., & Tayebati, K. (2012). The cholinergic approach in treatment of vascular dementia: Evidence from preclinical studies. *Alzheimer's & Dementia*, *8*(4), P179.
177. Nwankwo, I., Tomassoni, D., & Tayebati, S. K. (2012). The cholinergic approach in treatment of vascular dementia: Evidence from preclinical studies. Alzheimer's & Dementia, 8(4S_Part_5), P179–P179. (Poster presentation Abstract)
178. Nwankwo, I., Tomassoni, D., Amenta, F., Tayebati, S., & Traini, E. (2011). Pathogenesis of vascular dementia. Alzheimer's & Dementia, 7(suppl.), S705–S706. (Poster presentation Abstract)
179. Nwankwo, I., Tomassoni, D., Amenta, F., Tayebati, S., & Traini, E. (2011). P4-023: Pathogenesis of vascular dementia. *Alzheimer's & Dementia*, *7*, S705-S706.
180. Nwankwo, I., Tomassoni, D., Amenta, F., Tayebati, S., & Traini, E. (2011). Pathogenesis of vascular dementia. *Alzheimer's & Dementia*, *7*(4), S705-S706.
181. Nwankwo, I., Tomassoni, D., Tayebati, S., Di Cesare Manelli, L., & Amenta, F. (2012). Central nervous system activity of thioctic acid enantiomers in an animal model of cerebrovascular disease. Alzheimer's & Dementia, 8(4S_Part_5). (Poster presentation Abstract)
182. Nwankwo, I., Tomassoni, D., Tayebati, S., Di Cesare Manelli, L., & Amenta, F. (2012). P1-206: Central nervous system activity of thioctic acid enantiomers in an animal model of cerebrovascular disease. *Alzheimer's & Dementia*, *8*(4S_Part_5), P179-P179.
183. Nwankwo, I., Tomassoni, D., Tayebati, S., Manelli, L. D. C., & Amenta, F. (2012). Central nervous system activity of thioctic acid enantiomers in an animal model of cerebrovascular disease. *Alzheimer's & Dementia*, *8*(4), P179.
184. Nwaonumah, E., Riggins, A., Azu, E., Ayo-Farai, O., Chopak-Foss, J., Cowan, L., & Adhikari, A. (2023). A Refreshing Change: Safeguarding Mothers and Children from PFAS Exposure.
185. Obianyo, C., & Eremeeva, M. (2023). Alpha-Gal Syndrome: The End of Red Meat Consumption?.
186. Obianyo, C., Das, S., & Adebile, T. (2024). Tick Surveillance on the Georgia Southern University Statesboro Campus.
187. Obianyo, C., Ezeamii, V. C., Idoko, B., Adeyinka, T., Ejembi, E. V., Idoko, J. E., ... & Ugwu, O. J. (2024). The future of wearable health technology: from monitoring to preventive healthcare. World J Biol Pharm Heal Sci, 20, 36-55.
188. Obianyo, C., Tasby, A., Ayo-Farai, O., Ezeamii, V., & Yin, J. (2024). Impact of Indoor Plants on Particulate Matter in Office Environments.
189. Oboh, A., Uwaifo, F., Gabriel, O. J., Uwaifo, A. O., Ajayi, S. A. O., & Ukoba, J. U. (2024). Multi-Organ toxicity of organophosphate compounds: hepatotoxic, nephrotoxic, and cardiotoxic effects. *International Medical Science Research Journal*, *4*(8), 797-805.
190. Oddie-Okeke, C. C., Ayo-Farai, O., Iheagwara, C., Bolaji, O. O., Iyun, O. B., Zaynieva, S., & Okobi, O. E. (2024). Analyzing HIV Pre-exposure Prophylaxis and Viral Suppression Disparities: Insights From America's HIV Epidemic Analysis Dashboard (AHEAD) National Database. *Cureus*, *16*(8).
191. Ogbonna, C. C., Dori, G. U., Nweze, E. I., Muoneke, G., Nwankwo, I. E., & Akputa, N. (2012).

Comparative analysis of urinary schistosomiasis among primary school children and rural farmers in Obollo-Eke, Enugu State, Nigeria: Implications for control. Asian Pacific Journal of Tropical Medicine, 5(4), 796–802.

192. Ogugua, J. O., Anyanwu, E. C., Olorunsogo, T., Maduka, C. P., & Ayo-Farai, O. (2024). Ethics and strategy in vaccination: A review of public health policies and practices. *International Journal of Science and Research Archive*, *11*(1), 883-895.
193. Ogundairo, O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2023). Review on MALDI mass spectrometry and its application in clinical research. *International Medical Science Research Journal*, *3*(3), 108-126.
194. Ogundairo, O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. T. (2024). Review on MALDI Imaging for Direct Tissue Imaging and its Application in Pharmaceutical Research. *International Journal of Research and Scientific Innovation*, *10*(12), 130-141.
195. Ogundairo, O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., Babarinde, A. O., & Sodamade, O. (2023). Review On Protein Footprinting As A Tool In Structural Biology. *Science Heritage Journal (GWS)*, *7*(2), 83-90.
196. Ohalete, N. C., Ayo-Farai, O., Olorunsogo, T. O., Maduka, P., & Olorunsogo, T. (2024). AI-Driven Environmental Health Disease Modeling: A Review of Techniques and Their Impact on Public Health in the USA And African Contexts. *International Medical Science Research Journal*, *4*(1), 51-73.
197. Ohalete, N. C., Ayo-Farai, O., Onwumere, C., & Paschal, C. (2024). Navier-stokes equations in biomedical engineering: A critical review of their use in medical device development in the USA and Africa.
198. Ohalete, N. C., Ayo-Farai, O., Onwumere, C., Maduka, C. P., & Olorunsogo, T. O. (2024). Functional data analysis in health informatics: A comparative review of developments and applications in the USA and Africa.
199. Okhawere, K. E., Grauer, R., Saini, I., Joel, I. T., Beksac, A. T., Ayo-Farai, O., ... & Badani, K. K. (2024). Factors associated with surgical refusal and non-surgical candidacy in stage 1 kidney cancer: a National Cancer Database (NCDB) analysis. *The Canadian Journal of Urology*, *31*(5), 11993.
200. Okobi, O. E., Ayo-Farai, O., Tran, M., Ibeneme, C., Ihezie, C. O., Ezie, O. B., ... & Tran, M. H. (2024). The Impact of Infectious Diseases on Psychiatric Disorders: A Systematic Review. *Cureus*, *16*(8).
201. Okon, R., Zouo, S. J. C., & Sobowale, A. (2024). Navigating complex mergers: A blueprint for strategic integration in emerging markets. *World Journal of Advanced Research and Reviews, 24*(2), 2378–2390. https://wjarr.com/content/navigating-complex-mergers-blueprint-strategic-integration-emerging-markets
202. Okoro, Y. O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., & Sodamade, O. T. (2024). The Role of technology in enhancing mental health advocacy: a systematic review. *International Journal of Applied Research in Social Sciences*, *6*(1), 37-50.
203. Okoro, Y. O., Ayo-Farai, O., Maduka, C. P., Okongwu, C. C., & Sodamade, O. T. (2024). A review of health misinformation on digital platforms: challenges and countermeasures. *International journal of applied research in social sciences*, *6*(1), 23-36.
204. Olamijuwon, J., & Zouo, S. J. C. (2024). The impact of health analytics on reducing healthcare costs in aging populations: A review. *International Journal of Management & Entrepreneurship Research*. https://www.fepbl.com/index.php/ijmer/article/view/1690
205. Olamijuwon, J., Akerele, J. I., Uzoka, A., & Ojukwu, P. U. (2024). Improving response times in emergency services through optimized Linux server environments. International Journal of Engineering Research and Development, 20(11), 1111–1119. International Journal of Engineering Research and Development
206. Olamijuwon, J., Akerele, J. I., Uzoka, A., & Ojukwu, P. U. (2024). Reducing IT service downtime through data-driven incident management and root cause analysis. International Journal of Engineering Research and Development, 20(11), 1120–1126. International Journal of Engineering Research and Development.
207. Olamijuwon, O. J. (2020). Real-time Vision-based Driver Alertness Monitoring using Deep Neural Network Architectures (Master's thesis, University of the Witwatersrand, Johannesburg (South Africa)).
208. Olorunsogo, T. O., Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., & Onwumere, C. (2024). Mental health and social media in the US: A review: Investigating the potential links between online platforms and mental well-being among different age groups. *World Journal of Advanced Research and Reviews*, *21*(1), 321-334.
209. Olorunsogo, T. O., Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., & Onwumere, C. (2024). Bioinformatics and

personalized medicine in the US: A comprehensive review: Scrutinizing the advancements in genomics and their potential to revolutionize healthcare delivery.

210. Olorunsogo, T. O., Balogun, O. D., Ayo-Farai, O., Ogundairo, O., Maduka, C. P., Okongwu, C. C., & Onwumere, C. (2024). Reviewing the evolution of US telemedicine post-pandemic by analyzing its growth, acceptability, and challenges in remote healthcare delivery during Global Health Crises. *World Journal of Biology Pharmacy and Health Sciences*, *17*(1), 075-090.
211. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Review of predictive modeling and machine learning applications in financial service analysis. *Computer Science & IT Research Journal, 5*(11), 2609–2626. https://fepbl.com/index.php/csitrj/article/view/1731
212. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Conceptual frameworks and innovative biostatistical approaches for advancing public health research initiatives. *International Journal of Scholarly Research in Medicine and Dentistry, 3*(2), 11–21. https://srrjournals.com/ijsrmd/content/conceptual-frameworks-and-innovative-biostatistical-approaches-advancing-public-health
213. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Comprehensive review of advanced data analytics techniques for enhancing clinical research outcomes. *International Journal of Scholarly Research in Biology and Pharmacy, 5*(1), 8–17. https://srrjournals.com/ijsrbp/content/comprehensive-review-advanced-data-analytics-techniques-enhancing-clinical-research-outcomes
214. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Comprehensive review of logistic regression techniques in predicting health outcomes and trends. *World Journal of Advanced Pharmaceutical and Life Sciences, 7*(2), 16–26. https://zealjournals.com/wjapls/sites/default/files/WJAPLS-2024-0039.pdf
215. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Theoretical perspectives on biostatistics and its multifaceted applications in global health studies. *International Journal of Applied Research in Social Sciences, 6*(11), 2791–2806. https://www.fepbl.com/index.php/ijarss/article/view/1726
216. Olowe, K. J., Edoh, N. L., Zouo, S. J. C., & Olamijuwon, J. (2024). Conceptual review on the importance of data visualization tools for effective research communication. *International Journal of Engineering Research and Development, 20*(11), 1259–1268. https://ijerd.com/paper/vol20-issue11/201112591268.pdf
217. Olulaja, O., Afolabi, O., & Ajayi, S. (2024, October 23). *Bridging gaps in preventive healthcare: Telehealth and digital innovations for rural communities*. In *2024 Illinois Minority Health Conference*. Illinois Department of Public Health.
218. Opia, F. N., & Matthew, K. A. (2025): Empowering Unrepresented Populations Through Inclusive Policy Frameworks In Global Health Initiatives.
219. Opia, F. N., Matthew, K. A., & Matthew, T. F. (2022). Leveraging Algorithmic and Machine Learning Technologies for Breast Cancer Management in Sub-Saharan Africa.
220. Opia, F. N., Peterson–Sgro, K., Gabriel, O. J., Kaya, P. B., Ajayi, S. A. O., Akinwale, O. J., & Inalegwu, J. E. (2025). Housing instability and mental health among low-income minorities: Insights from Illinois BRFSS data.
221. Oshodi, A. N., Adelodun, M. O., Anyanwu, E. C., & Majebi, N. L. (2024). *Combining parental controls and educational programs to enhance child safety online effectively*. *International Journal of Applied Research in Social Sciences, 6*(9), 2293-2314.
222. Patel, R. D., Abramowitz, C., Shamsian, E., Okhawere, K. E., Deluxe, A., Ayo-Farai, O., ... & Badani, K. K. (2022, June). Is YouTube a good resource for patients to better understand kidney cancer?. In *Urologic Oncology: Seminars and Original Investigations* (Vol. 40, No. 6, pp. 275-e19). Elsevier.
223. Shittu, R. A., Ehidiamen, A. J., Ojo, O. O., Zouo, S. J. C., Olamijuwon, J., Omowole, B. M., & Olufemi-Phillips, A. Q. (2024). The role of business intelligence tools in improving healthcare patient outcomes and operations. *World Journal of Advanced Research and Reviews, 24*(2), 1039–1060. https://wjarr.com/sites/default/files/WJARR-2024-3414.pdf
224. Tayebati, S. K., Nwankwo, I. E., & Amenta, F. (2013). Intranasal drug delivery to the central nervous system: Present status and future outlook. Journal of Current Pharmaceutical Design, 19(3), 510–526.
225. Tayebati, S. K., Nwankwo, I. E., Borsa, M., Traini, E., & Amenta, F. (2011). New route for tizanidine administration: A pharmacokinetics and light microscope autoradiography study. Italian Journal of Anatomy and Embryology, 116(1), 183.
226. Tayebati, S. K., Nwankwo, I. E., Zamponi, B., Tavoletti, M., & Amenta, F. (2012). Effects of stereoisomers of thioctic acid on rat renal

vasculature microanatomy. Italian Journal of Anatomy and Embryology, 117(2), 187.

227. Tayebati, S. K., Tomassoni, D., Nwankwo, I. E., & Amenta, F. (2013). Activity of choline alphoscerate on cerebrovascular morphology and inflammatory markers in spontaneously hypertensive rats. European Journal of Histochemistry, 57(3), 9.
228. Tayebati, S. K., Tomassoni, D., Nwankwo, I. E., Di Stefano, A., Sozio, P., Cerasa, L. S., & Amenta, F. (2013). Modulation of monoaminergic transporters by choline-containing phospholipids in rat brain. Journal of CNS & Neurological Disorders-Drug Targets, 12(1), 94–103.
229. Tayebati, S. K., Tomassoni, D., Traini, E., Nwankwo, I. E., & Amenta, F. (2010). Effects of cholinergic enhancing drugs on cholinergic transporters in the brain of spontaneously hypertensive rats. Italian Journal of Anatomy and Embryology, 115(1-2 Suppl.).
230. Tomassoni, D., Amenta, F., Di Cesare Mannelli, L., Ghelardini, C., Nwankwo, I. E., Pacini, A., & Tayebati, S. K. (2013). Neuroprotective activity of thioctic acid in central nervous lesions consequent to peripheral nerve injury. BioMed Research International, November 2013.
231. Tomassoni, D., Amenta, F., Farfariello, V., Amantini, C., Di Cesare Mannelli, L., Nwankwo, I. E., Marini, C., & Tayebati, S. K. (2013). Brain activity of thioctic acid enantiomers: In vitro and in vivo studies in an animal model of cerebrovascular injury. International Journal of Molecular Science, 14(3), 4580–4595.
232. Tomassoni, D., Amenta, F., Mannelli, L. D. C., Ghelardini, C., Nwankwo, I. E., Pacini, A., & Tayebati, S. K. (2013). Research Article Neuroprotective Activity of Thioctic Acid in Central Nervous System Lesions Consequent to Peripheral Nerve Injury.
233. Tomassoni, D., Catalani, A., Cinque, C., Di Tulio, M. A., Tayebati, S. K., Cadoni, A., Nwankwo, I. E., Traini, E., & Amenta, F. (2012). Effects of cholinergic enhancing drugs on cholinergic transporters in the brain and peripheral blood lymphocytes of spontaneously hypertensive rats. Journal of Current Alzheimer Research, 1, 120–127.
234. Tomassoni, D., Di Cesare Mannelli, L., Nwankwo, I. E., & Ghelardini, C. (2013). Activity of thioctic acid enantiomers on spinal cord changes consequent to peripheral nerve injury. European Journal of Histochemistry, 57(suppl.).
235. Tomassoni, D., Nwankwo, I. E., Gabrielli, M. G., Bhatt, S., Muhammad, A. B., Lokhandwala, M. F., & Amenta, F. (2013). Astrogliosis in the brain of obese Zucker rat: A model of metabolic syndrome. Journal of Neuroscience Letters, 543, 136–141.
236. Tomassoni, D., Nwankwo, I. E., Gabrielli, M. G., Lokhandwala, M. F., & Tayebati, S. K. (2013). Brain morphological analysis of obese zucker rat: Model of metabolic syndrome. European Journal of Histochemistry, 57(1), 17–17.
237. Udegbe, F. C., Nwankwo, E. I., Igwama, G. T., & Olaboye, J. A. (2023). Utilizing microfluidic chips for rapid, on-site detection of antimicrobial resistance in infectious pathogens. International Medical Science Research Journal, 3(3), December.
238. Udegbe, F. C., Nwankwo, E. I., Igwama, G. T., & Olaboye, J. A. (2023). Advancing point-of-care diagnostics through nanotechnology: A focus on low-cost solutions for rural healthcare. International Journal of Applied Research in Social Sciences, 5(10), December.
239. Udegbe, F. C., Nwankwo, E. I., Igwama, G. T., & Olaboye, J. A. (2022). Development of portable diagnostic devices for early detection of zoonotic diseases: A one health approach. International Medical Science Research Journal, P-ISSN: 2707-3394, December.
240. Udegbe, F. C., Nwankwo, E. I., Igwama, G. T., & Olaboye, J. A. (2023). Real-time data integration in diagnostic devices for predictive modeling of infectious disease outbreaks. Computer Science & IT Research Journal, 4(3), December.
241. Udegbe, F. C., Nwankwo, E. I., Igwama, G. T., & Olaboye, J. A. (2024). Integration of blockchain technology in biomedical diagnostics: Ensuring data security and privacy in infectious disease surveillance. Engineering Science & Technology Journal, 3(2), August.
242. Ugwu, C., Okoazu, E., Okam, O., Ezike, T., & Noah, G. U. (2024). Equity in Vaccination: A Comprehensive Analysis of Federal Policies-Immunization Information Systems and Child Care Vaccination Laws-Impacting Immunization Uptake across Age Groups. *Health Sys Policy Res*, *11*(1), 001.
243. Usuemerai, P.A., Ibikunle, O.E., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. A conceptual framework for digital health marketing strategies to enhance public health outcomes in underserved communities. *World Journal of Advanced Pharmaceutical and Medical Research*, 7(2), pp.1–25. Available at: https://doi.org/10.53346/wjapmr.2024.7.2.0044.
244. Usuemerai, P.A., Ibikunle, O.E., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. A conceptual framework for integrating digital transformation in healthcare marketing to boost

patient engagement and compliance. *World Journal of Advanced Pharmaceutical and Medical Research*, 7(2), pp.26–50. Available at: https://doi.org/10.53346/wjapmr.2024.7.2.0045.

245. Usuemerai, P.A., Ibikunle, O.E., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. A sales force effectiveness framework for enhancing healthcare access through pharmaceutical sales and training programs. *World Journal of Advanced Pharmaceutical and Medical Research*, 7(2), pp.51–76. Available at: https://doi.org/10.53346/wjapmr.2024.7.2.0046.
246. Usuemerai, P.A., Ibikunle, O.E., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. A strategic brand development framework for expanding cardiovascular and endocrinology treatments in emerging markets. *World Journal of Advanced Pharmaceutical and Medical Research*, 7(2), pp.77–101. Available at: https://doi.org/10.53346/wjapmr.2024.7.2.0047.
247. Usuemerai, P.A., Ibikunle, O.E., Abass, L.A., Alemede, V., Nwankwo, E.I. and Mbata, A.O., 2024. Advanced supply chain optimization for emerging market healthcare systems. *International Journal of Management & Entrepreneurship Research*, 6(10), pp.3321–3356. Available at: https://doi.org/10.51594/ijmer.v6i10.1637.
248. Uwumiro, F. E., Ayo-Farai, O., Uduigwome, E. O., Nwebonyi, S., Amadi, E. S., Faniyi, O. A., ... & Aguchibe, R. (2024). Burden of In-Hospital Admissions and Outcomes of Thoracic Outlet Compression Syndrome in the United States From 2010 to 2021. *Cureus*, *16*(10).
249. Wada, I. U., Izibili, G. O., Babayemi, T., Abdulkareem, A., Macaulay, O. M., & Emadoye, A. (2025). AI-driven cybersecurity in higher education: A systematic review and model evaluation for enhanced threat detection and incident response.
250. Zouo, S. J. C., & Olamijuwon, J. (2024). Financial data analytics in healthcare: A review of approaches to improve efficiency and reduce costs. *Open Access Research Journal of Science and Technology, 12*(2), 10–19.http://oarjst.com/content/financial-data-analytics-healthcare-review-approaches-improve-efficiency-and-reduce-costs
251. Zouo, S. J. C., & Olamijuwon, J. (2024). Machine learning in budget forecasting for corporate finance: A conceptual model for improving financial planning. *Open Access Research Journal of Multidisciplinary Studies, 8*(2), 32–40. https://oarjpublication.com/journals/oarjms/content/machine-learning-budget-forecasting-corporate-finance-conceptual-model-improving-financial
252. Zouo, S. J. C., & Olamijuwon, J. (2024). The intersection of financial modeling and public health: A conceptual exploration of cost-effective healthcare delivery. *Finance & Accounting Research Journal, 6*(11), 2108–2119. https://www.fepbl.com/index.php/farj/article/view/1699