

**ORGANIZING INTEGRATED CERVICAL CANCER SCREENING AND HPV
VACCINATION SERVICES AT A REGIONAL HOSPITAL IN OYO STATE, NIGERIA**

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Abstract

Background: Cervical cancer remains a major public health challenge in Nigeria, where it is a leading cause of cancer-related morbidity and mortality among women. Despite the availability of effective preventive measures such as HPV vaccination and cervical screening, service uptake remains low due to fragmented delivery systems, limited access, and socio-cultural barriers. This project aimed to address these gaps by organizing an integrated model for cervical cancer screening and HPV vaccination at a regional hospital in Oyo State, Nigeria.

Methods and Materials: This capstone project employed an implementation science framework using a mixed-methods approach. A three-month pilot program was conducted at Eruwa General Hospital. The methodology involved stakeholder engagement, development of an implementation toolkit (including training materials and service protocols), and training of healthcare providers. Integrated services were delivered through structured weekly sessions, combining health education, screening using visual inspection with acetic acid (VIA), and HPV vaccination. Data collection included service registers, client satisfaction surveys, and a focus group discussion with healthcare providers. Quantitative data were analyzed using descriptive statistics, while qualitative data were analyzed thematically.

Results: The pilot program exceeded its key targets, screening 167 women and vaccinating 47 eligible girls. The VIA positivity rate was 9.6%, with 94% of positive cases successfully referred for further management. Client satisfaction was high, with a mean score of 4.7 out of 5. The integrated model improved service uptake, enhanced provider capacity, and reduced missed opportunities for prevention. Key challenges identified included supply chain inconsistencies, documentation burden, and socio-cultural barriers, which were addressed through adaptive strategies during implementation.

Conclusion: The findings demonstrate that integrating cervical cancer screening and HPV vaccination services within a secondary healthcare facility is both feasible and effective in improving access to preventive care. The model enhances service delivery efficiency, increases

client satisfaction, and supports early detection and prevention efforts. This project provides a scalable framework for strengthening cervical cancer prevention programs in similar low-resource settings and contributes to progress toward global elimination targets.

Keywords: *Cervical cancer prevention; HPV vaccination; Screening integration; Health service delivery; Nigeria*

Introduction

Relevance of the Topic

Cervical cancer is the second most frequent cancer and cause of cancer-related deaths among women in Nigeria. According to Mafiana et al in 2022, every year, 14,943 women are diagnosed with cervical cancer, and 10,403 die from the disease in Nigeria. Based on a World Health Organization (2012) study, the VIA and cryotherapy “see and treat” or “single visit” approach is a feasible and effective method that can be implemented in low-resource settings such as Nigeria (Mafiana et al., 2022). Despite the WHO-recommended "90-70-90" elimination targets and Nigeria's National Cancer Control Plan, coverage of preventive services remains critically low. The cervical cancer control program in the country is not well-established. Occasionally, both government and non-governmental organizations conduct outreach programs for cervical cancer screening in communities, and some hospitals conduct occasional screening.

The current level of cervical cancer screening uptake in the country cannot be determined with certainty, largely due to the absence of a coordinated, systematic national program (Olumodeji et al., 2024). This absence results in late-stage diagnoses, high treatment costs, and devastating social impacts. A regional hospital serves as a critical access point for a large population.

Organizing integrated prevention services at this level addresses key barriers: service fragmentation, provider knowledge gaps, and missed opportunities for education.

This project is needed to address the profound burden of cervical cancer, a preventable disease that remains a leading cause of cancer death among women in Nigeria. The problem at Eruwa General Hospital, Oyo State, is an "opportunity gap": the essential tools for prevention (HPV vaccination and VIA screening) are available but not delivered in a coordinated, systematic manner.

Project Definition

This capstone project developed, implemented, and conducted an initial process evaluation of a three-month pilot program for integrated cervical cancer screening and HPV vaccination services at Eruwa General Hospital in Oyo State, Nigeria. The project aimed to create a coordinated service delivery model that would improve access to prevention services for eligible populations while building sustainable healthcare provider capacity within a secondary healthcare facility.

Project objectives

This project aims to achieve the following specific, measurable outcomes:

1. To secure formal approval and a Memorandum of Collaboration from the management of Eruwa General Hospital in Oyo State, Nigeria, and the relevant departments (Obstetrics/Gynecology and Community Health) for the implementation of the 3-month pilot program.
2. To develop a comprehensive implementation toolkit comprising: (a) a standardized client flow algorithm for integrated screening and vaccination, (b) client education materials (in English and Yoruba languages), and (c) a training curriculum for healthcare providers on integrated service delivery and counselling.
3. To train a core team of at least 8 healthcare providers (including nurses, midwives, and community health officers) from the hospital on the integrated service protocol, using the developed curriculum.
4. To implement a 3-month pilot of integrated services, achieving the following minimum outputs:
 - Screen at least 150 women (aged 25-49) for cervical cancer using VIA.
 - Administer at least the first dose of the HPV vaccine to 40 eligible girls (aged 9-14).
 - Ensure at least 90% of clients with positive VIA results are appropriately referred for cryotherapy or further evaluation.
5. To conduct an initial process evaluation of the pilot by collecting and analyzing data on service uptake, client satisfaction (via short exit surveys), and healthcare provider feedback (via a focus group discussion) to identify operational strengths and barriers.
6. To produce and deliver a final project report and presentation that includes the implementation toolkit, pilot data analysis, evaluation findings, and a set of actionable recommendations for the hospital management and Oyo State Ministry of Health for sustaining and scaling the model.

Chapter 1: Literature Review

Cervical cancer originates in the epithelial cells lining the cervix, a process primarily initiated by persistent infection with high-risk strains of the human papillomavirus (HPV). Without timely clinical intervention, these HPV-induced cellular abnormalities can proliferate, progressing to pre-cancerous lesions and ultimately invasive carcinoma that invades cervical and surrounding tissues. This malignancy represents one of the most profound examples of global health inequity, disproportionately affecting low- and middle-income countries (LMICs). More than 90% of

global cervical cancer cases and fatalities are concentrated in regions such as sub-Saharan Africa, Central America, and Southeast Asia, where it stands as a leading cause of cancer-related mortality among women (Lawson et al., 2023).

Nigeria exemplifies this regional crisis, bearing the highest cervical cancer burden in sub-Saharan Africa. Current epidemiological data indicate an annual incidence of approximately 12,075 to 13,700 new diagnoses, resulting in an estimated 7,100 to 7,968 deaths each year (Adenaya et al., 2025). The disease is the second most frequent cancer among Nigerian women aged 15 to 44, posing a persistent and severe threat to women's health and survival. Alarming, an estimated 61 million women and girls in Nigeria are currently at risk of developing cervical cancer—a number projected to rise without deliberate, large-scale, and sustained expansion of prevention and control initiatives (Okolie et al., 2025). The primary biological driver is infection with oncogenic HPV types 16 and 18. At any given time, an estimated 3.5% of women in the general population harbour these strains, which are collectively responsible for 66.9% to 75% of invasive cervical cancer cases globally (Lawson et al., 2023). Beyond HPV infection, a complex array of cofactors significantly elevates individual risk. These include entrenched socioeconomic determinants such as poverty and gender inequity, alongside behavioral and biological factors like obesity, physical inactivity, poor nutrition, smoking, high parity, and co-infection with HIV or other sexually transmitted agents. Ultimately, the stark geographic disparity in cervical cancer incidence is not merely a biological phenomenon but a direct consequence of structural inequities—specifically, the profoundly unequal global and national access to essential preventive health services, namely HPV vaccination, routine, high-quality screening, and timely, affordable treatment (Lawson et al., 2023).

Despite the clear availability of these evidence-based preventive tools, a profound implementation gap persists across Nigeria and similar settings. Research consistently reveals a critical and paradoxical disconnect between awareness and actionable health-seeking behaviour. For instance, studies within Nigeria report screening awareness as high as 68.4% among certain groups, such as female undergraduates. However, this awareness starkly contrasts with the reality of critically low utilization. A systematic review for Sub-Saharan Africa reported a Pap smear uptake rate of just 12.87%, and studies within Nigeria, including in Ibadan and North-Central communities, consistently document low participation. Even among healthcare practitioners in low-resource settings, a study found only 20.6% had undergone screening,

highlighting that knowledge alone is insufficient (Ike et al., 2025). This low uptake is fuelled by a complex, multi-layered matrix of interlocking barriers operating at individual, institutional, and socio-cultural levels. At the individual and psychosocial level, specific obstacles identified in research include a fundamental lack of knowledge about screening's importance (40.9%), low perceived personal susceptibility to cervical cancer (18.2%), and outright lack of awareness about the service (69.7%). Additional individual-level hurdles encompass direct and indirect financial constraints, fear of a painful or embarrassing procedure, and competing personal time demands (Ike et al., 2025). Institutional and systemic barriers further impede access and quality. These include concerns about misdiagnosis, a perceived lack of privacy and confidentiality in clinical settings, negative or discouraging attitudes from healthcare workers, insufficient and poorly targeted public education campaigns, and a critical scarcity of accessible, well-equipped screening facilities. Perhaps the most deeply rooted challenges are socio-cultural factors, particularly influential in rural and traditional communities. These encompass religious beliefs that may frame illness as divine punishment or a test of faith, a strong preference for seeking care from traditional or spiritual healers first, and the powerful, often determinative influence of husbands and in-laws on women's healthcare decisions. An analysis of barriers in other contexts corroborates that this multi-level challenge is not unique, identifying additional hurdles related to low self-efficacy, fatalism, lack of social support, and complex health system navigation (Ike et al., 2025).

In response to this substantial burden, the Nigerian government, in partnership with international agencies, has launched several pivotal initiatives. Current efforts are centred on a phased national HPV vaccination roll-out, initiated in 2023 across 16 states. This program, managed by the National Primary Healthcare Development Agency (NPHCDA) and supported by Gavi, the Vaccine Alliance, WHO, UNICEF, and IVAC, administers a single dose of vaccine to girls aged 9–14 years. Although the vaccine is provided free of charge and initial community acceptance showed promise, subsequent monitoring reports indicate challenges in sustaining and expanding coverage. Persistent myths and misconceptions—such as unfounded associations between vaccination and early sexual activity, concerns about long-term safety, fears of infertility, and the erroneous belief that natural immunity offers superior protection—continue to fuel hesitancy. These are actively countered through ongoing mass media and community-based information and health education campaigns led by organizations such as UNICEF (Adedipe et al., 2025).

For the midlife female population (aged 40–65 years), prevention currently relies solely on screening interventions, as the therapeutic benefit of vaccination in this age group remains under scientific investigation. In alignment with the WHO's ambitious 90-70-90 elimination targets for low- and lower-middle-income countries by 2030, Nigeria's guidelines recommend at least two screening visits in a woman's lifetime using high-performance tests. The preferred methods are either HPV DNA testing or visual inspection of the cervix with acetic acid or Lugol's iodine (VIA/VILI), scheduled at ages 35 and 45. This global strategy aims to catalyze a reduction in the median cervical cancer incidence rate by 42% by 2025 and by 97% by 2120, a projected effort that could avert an estimated 74 million new cases and over 62 million deaths worldwide.

Nevertheless, these standardized interventions and their prescribed age-based timelines have inherent limitations. Cervical cancer incidence peaks at varying ages, influenced by a complex interplay of factors such as geographic location, urban or rural residence, smoking status, HIV seropositivity, high parity, and other high-risk behaviours. A rigid, one-size-fits-all screening schedule may therefore fail to adequately address the heterogeneous risk profiles across different subpopulations, highlighting an urgent need for more tailored, risk-stratified approaches within the national prevention framework (Adedipe et al., 2025).

The World Health Organization's (WHO) global Call to Action to eliminate cervical cancer as a public health problem has mobilized key stakeholders, including national governments and international donors, to prioritize the disease in health agendas and funding allocations.

Achieving elimination is fundamentally contingent on the successful, widespread implementation of a synergistic dual prevention strategy: primary prevention through high-coverage HPV vaccination of adolescent girls and secondary prevention via high-coverage screening and prompt treatment of precancerous lesions. It is critical to emphasize that regular screening remains essential for all eligible women, even as HPV vaccination programs are introduced, due to the non-universal vaccine coverage and the long latency period of HPV-induced cancer. A significant reduction in cervical cancer incidence requires sustained screening coverage to reach at least 70% of the target adult female population. In many LMICs, including Nigeria, visual inspection with acetic acid (VIA) has served as the cornerstone screening method due to its relative affordability, minimal infrastructure requirements, and capacity to deliver immediate "see-and-treat" results without advanced laboratory support. However, a well-documented constraint of VIA is that its diagnostic effectiveness is highly variable and heavily

contingent on the skill, training, and experience of the healthcare provider, often exhibiting significant inconsistencies both within and between observers (Lawson et al., 2023). Consequently, HPV DNA testing is increasingly being adopted and recommended. This method offers several key advantages: it allows for easier specimen collection (including the empowering option of vaginal self-sampling), yields more objective, reproducible, and clinically sensitive results than VIA, and is now recommended by the WHO as the preferred screening test where resources and systems permit its integration. Finally, to successfully interrupt the carcinogenic progression, screening must be effectively and reliably linked to timely treatment. In most LMIC settings, the preferred and most accessible methods for treating screen-detected precancerous lesions are cryotherapy (freezing) and the Loop Electrosurgical Excision Procedure (LEEP), which can often be performed in an outpatient setting (Lawson et al., 2023). A primary, overarching obstacle exacerbating Nigeria's cervical cancer burden is the absence of a fully coordinated, costed, funded, and integrated national program for cervical cancer prevention and control (CCPC). As defined by the WHO, a National Cancer Control Programme (NCCP) is a strategic public health initiative designed to lower cancer incidence and mortality while enhancing patients' quality of life through the systematic, equitable, and efficient implementation of evidence-based strategies across the continuum of care—from prevention and early detection to diagnosis, treatment, and palliation. The critical importance of such a comprehensive, actionable national plan as the foundational cornerstone for any effective cancer control effort cannot be overstated, regardless of a nation's socioeconomic status (Okolie et al., 2025).

Chapter 2: Materials and Methods

Project Design and Setting

This capstone project employed an implementation science framework to design, execute, and evaluate a pilot integrated service delivery model. The project was conducted at Eruwa General Hospital in Oyo State, Nigeria, a state-owned secondary healthcare facility serving as a major referral center for its catchment area. The design followed a mixed-methods approach,

combining quantitative service delivery data with qualitative insights from stakeholders to assess both the output and the implementation process over a dedicated three-month pilot period.

Ethical Considerations

Prior to commencement, formal approval was obtained from the Hospital Management Committee of Eruwa General Hospital. A Memorandum of Collaboration (MoC) was signed, outlining roles, responsibilities, and data use agreements. Informed consent was sought from all healthcare providers participating in training and focus group discussions, and from all clients (or guardians of minors) for screening, vaccination, and participation in satisfaction surveys. Client data were anonymized for analysis, and all protocols respected participants' confidentiality and dignity.

Implementation Methodology: A Three-Phase Approach

Phase 1: Planning and Preparation (Weeks 1-8)

This foundational phase focused on situational analysis and resource mobilization.

Stakeholder Engagement and Needs Assessment: Key Informant Interviews (KIIs) were conducted with the Medical Superintendent, the Head of the Obstetrics & Gynecology Department, the Nursing Officer-in-Charge, and a representative from the Oyo State Ministry of Health Non-Communicable Disease (NCD) Unit. These interviews mapped existing workflows, identified resource gaps, and secured leadership buy-in.

Development of Implementation Toolkit: Based on WHO and Nigerian Federal Ministry of Health guidelines, and informed by the needs assessment, a comprehensive toolkit was developed. This included:

1. A standardized client flow algorithm for the integrated clinic.
2. Client education materials (pictorial flip charts and take-home brochures) in English and Yoruba.
3. A two-day training curriculum for healthcare providers covering cervical cancer epidemiology, VIA technique, HPV vaccination counselling, and client-centred communication.

Resource Mobilization: Coordination with the hospital pharmacy and the state immunization officer ensured the procurement and availability of essential supplies: acetic acid, speculums, cryotherapy gas, HPV vaccines, and data collection tools.

Phase 2: Capacity Building and Pilot Launch (Weeks 9-12)

This phase translated plans into action through training and service initiation.

Healthcare Provider Training: A two-day intensive training workshop was facilitated for a core team of 10 healthcare providers (nurses, midwives, community health officers). The curriculum employed interactive lectures, role-playing counselling scenarios, and hands-on VIA practice using anatomical models. Pre- and post-training knowledge assessments were administered.

Service Delivery Model: The integrated clinic was launched, operating one dedicated session per week. The model followed the developed algorithm: 1) Group health education, 2) Individual eligibility assessment and counselling, 3) Provision of VIA and/or HPV vaccination, 4) Post-procedure counselling, immediate referral for VIA-positive cases, and scheduling of next vaccine doses.

Phase 3: Monitoring, Evaluation, and Analysis (Weeks 13-17)

Continuous data collection enabled real-time monitoring and final evaluation.

Process Monitoring: A project-specific register tracked key output indicators: number of women screened, VIA results, number of girls vaccinated, and referral outcomes.

Data Collection for Evaluation:

Quantitative: A short, anonymous client exit survey using a 5-point Likert scale was administered to a systematic sample of clients to measure satisfaction with services, privacy, and counselling.

Qualitative: One Focus Group Discussion (FGD) was held with the 10 trained providers at the end of the pilot to explore their experiences, perceived challenges, operational barriers, and recommendations for improvement.

Data Analysis: Quantitative data from the service register and satisfaction surveys were analyzed using descriptive statistics (frequencies, percentages, means). Qualitative data from the FGD were transcribed and analyzed thematically to identify key themes related to implementation facilitators and barriers.

Research Methods

To ensure the project was evidence-based and contextually relevant, the following research activities underpinned the methodology:

1. *Comprehensive Desk Review:* A review of global (WHO) and national (Nigeria's National Cancer Control Plan 2023-2027) policies, along with peer-reviewed literature on the

implementation of cervical cancer prevention programs in LMICs, informed the project's design.

2. *Expert Consultations*: Semi-structured interviews with a gynecological oncologist at University College Hospital, Ibadan, and a program manager from a local cancer advocacy NGO provided insights into clinical best practices and community engagement strategies.
3. *Baseline Data Collection*: Historical data from the hospital on previous ad hoc screening numbers were collected to contextualize the pilot's output.

Evaluation Framework

Project success was evaluated against the pre-defined **SMART objectives** (Section 1.4), measuring:

- Output Achievement: Comparison of targets (e.g., screen 150 women) vs. actual outputs.
- Process Indicators: Client satisfaction scores, referral completion rates, and qualitative feedback from providers on feasibility.
- Implementation Fidelity: Adherence to the developed protocols and service algorithm.

Chapter 3: Results and Discussion

Process Evaluation Findings

Quantitative Outputs:

- Total clients served: 214 (167 women screened + 47 girls vaccinated)
- VIA positivity rate: 9.6% (16/167), consistent with regional estimates
- Client satisfaction: Mean score 4.7/5.0 (n=43 surveys)
- Average service time per client: 42 minutes (including education and counselling)
- No significant adverse events reported.

The project successfully met or exceeded most predefined objectives:

Objective	Target	Achievement
Secure Formal Approval	Memorandum of collaboration	MoC signed with Eruwa General Hospital and State MOH support secured.
Develop Implementation Toolkit	Complete toolkit (algorithm, materials, curriculum)	Toolkit developed and contextualized with job aids.

Train Healthcare Providers	8 providers	10 providers trained, including 2 designated as expert trainers.
Screen Women via VIA	150 women	167 women (aged 25-49) screened.
Administer HPV Vaccine	40 girls	47 girls (aged 9-14) received the first dose.
Refer VIA-Positive Cases	90%	94% (15 of 16 positive cases) referred for cryotherapy/further evaluation.
Evaluation & Reporting	Process evaluation and final report	Comprehensive mixed-methods evaluation completed and reported.

Table 1: Achievement of Project Objectives against Pre-Defined Targets.

The quantitative success of the pilot is noteworthy against the backdrop of historically low screening uptake in Nigeria and Sub-Saharan Africa, where rates as low as 12.87% have been documented. Screening 167 women in three months within a single facility demonstrates a latent demand for organized services and directly addresses the "missed opportunities" gap highlighted in the introduction. The high client satisfaction score is a critical finding. It suggests that the integrated, client-centred model—featuring group education, private counselling, and coordinated care—likely mitigated common barriers cited in the literature, such as fear of a painful procedure, perceived lack of privacy, and negative attitudes from healthcare workers. The 94% referral rate for VIA-positive cases is a key strength. It contrasts sharply with the typical loss to follow-up in fragmented systems and can be attributed to the immediate counselling and facilitated referral pathways built into the pilot’s protocol. This directly supports the WHO-recommended "single visit" approach as a feasible strategy for low-resource settings.

Synthesis of Findings: Outcomes, Insights, and Adaptive Management.

Thematic analysis of the Focus Group Discussion with the 10 trained providers yielded rich insights into the model's operational feasibility, highlighting both strengths and challenges that required adaptive management:

- **Increased Confidence and Workflow Appreciation:** Providers reported greater clinical competence and endorsed the integrated workflow's efficiency. This aligns with the project's aim to build sustainable capacity and suggests the model can improve job satisfaction and service quality.
- **Documentation Burden:** The paper-based system was found to be duplicative and time-consuming, underscoring a systemic issue in which vertical project reporting creates inefficiencies.

Adaptation & Lesson: This was partially addressed by streamlining data elements, underscoring the imperative of designing M&E tools that align with, rather than duplicate, routine health information systems from the outset.

- **Supply Chain Inconsistencies:** Intermittent stockouts of essential commodities like acetic acid and gloves were reported, reflecting a well-documented health system weakness in LMICs.

Adaptation & Lesson: This was relieved by establishing a local buffer stock and an early warning system, highlighting the need for proactive local procurement strategies within national programs.

- **Socio-Cultural Dynamics:** The need for male partner permission, encountered in several cases, directly mirrored the literature on gender-based decision-making as a barrier.

Adaptation & Lesson: We developed targeted informational materials for men and offered couple counselling, demonstrating that gender-sensitive interventions must be a core component of any cervical cancer program in similar settings.

Supply Chain Inconsistencies were mitigated by establishing a local buffer stock and an early warning system, highlighting the need for proactive local procurement strategies within national programs.

In summary, the results indicate that the integrated model is not only feasible but also effective and well-received. The discussion of challenges and adaptations provides a realistic blueprint for strengthening the model, emphasizing that success requires attention to both clinical protocols and the broader health system and social ecosystem.

Chapter 4: Conclusion and Recommendations

In conclusion, this capstone project successfully developed, implemented, and evaluated a pilot model for integrating cervical cancer screening and HPV vaccination services at Eruwa General Hospital in Oyo State, Nigeria. The project demonstrated clear feasibility and effectiveness, exceeding key output targets and achieving high levels of client and provider satisfaction. By screening 167 women and vaccinating 47 girls, the pilot directly contributed to primary and secondary prevention for a population at significant risk, providing a tangible step toward the WHO's 90-70-90 elimination targets. The process evaluation yielded critical insights, confirming that an integrated, "one-stop" approach can address known barriers of fragmentation and access while also revealing systemic challenges related to supply chains, documentation, and socio-cultural dynamics. This project serves as a proof-of-concept that can inform policy and practice, offering a replicable framework for organizing preventive services in similar secondary healthcare facilities across Nigeria and other low-resource settings.

Limitations

While this pilot project demonstrated feasibility and positive outcomes, several limitations should be acknowledged. First, the project was conducted at a single secondary healthcare facility over a relatively short three-month period, which may limit the generalizability of findings to other settings with different resources or patient populations. Second, the evaluation focused primarily on process indicators (coverage, satisfaction, operational challenges) rather than long-term health outcomes such as reductions in cervical cancer incidence or mortality. Third, the reliance on self-reported data for client satisfaction and provider feedback introduces the possibility of social desirability bias. Fourth, the pilot's success benefited from dedicated project supervision and external coordination, which may not be replicable under routine health system conditions without additional support. Finally, while the integrated model included both screening and vaccination, the adolescent cohort reached was relatively small, highlighting the ongoing challenge of accessing this population through facility-based services alone. Future implementations would benefit from longer timeframes, multiple sites, and more robust outcome evaluation to strengthen the evidence base.

Despite these limitations, this pilot provides a strong foundation for scaled implementation. The following recommendations are made to address these constraints and strengthen future programs.

Recommendations

For Sustained Implementation at Eruwa General Hospital, Oyo State:

1. Institutional Integration: Formalize the integrated clinic as a weekly routine service with designated staff, space, and budget line in the hospital's operational plan.
2. Strengthened Supply Chain: Implement a dedicated commodity-tracking system for cervical cancer prevention supplies, with buffer stock and automated reorder points.
3. Digital Documentation: Transition to a simple electronic medical record module for the service to reduce duplication and improve data quality.
4. Community Engagement Strategy: Develop structured partnerships with community leaders, women's groups, and religious institutions for sustained demand generation.
5. Continuous Quality Improvement: Establish monthly review meetings using service data to identify and address implementation gaps.

For Scale-up to Similar Facilities in Oyo State:

1. Adaptable Implementation Package: Refine the toolkit into a modular format that allows facilities to adapt based on existing capacity and resources.
2. Peer Learning Network: Create a community of practice among facilities implementing integrated services for shared problem-solving and innovation.
3. State-Level Support Systems: Advocate for dedicated budget lines, standardized training programs, and coordinated commodity supply at the state level.
4. Integration with Existing Platforms: Leverage maternal and child health weeks, immunization outreach, and other periodic health campaigns to offer cervical cancer prevention services.

For Policy and Programmatic Considerations:

1. National Guidelines Revision: Advocate for inclusion of integrated service delivery models in national cervical cancer prevention guidelines.
2. Task-Shifting Policy Support: Formalize roles for nurses and midwives in cervical cancer prevention service delivery by clarifying policies and providing supportive supervision.
3. Financing Mechanisms: Explore innovative financing mechanisms, including health insurance coverage, cross-subsidization, and public-private partnerships, to support sustainability.

4. **Monitoring and Evaluation Framework:** Develop standardized indicators and data systems for tracking integrated service delivery performance at the facility, state, and national levels.

Materials Delivered

1. **Integrated Service Delivery Protocol Manual (32 pages):** Step-by-step guide covering client flow, eligibility criteria, clinical procedures, infection prevention, documentation, and referral pathways.
2. **Healthcare Provider Training Curriculum (45 pages):** Complete package for 2-day training including facilitator guide, participant handouts, presentation slides, pre/post-tests, and evaluation forms.
3. **Client Education Materials:**
 - Pictorial flipchart for group health education (Yoruba and English versions)
 - Take-home brochure "Protecting Yourself from Cervical Cancer" (Yoruba and English)
 - Poster for clinic and community display
4. **Data Collection and Monitoring Tools:**
 - Integrated service register
 - Client satisfaction survey
 - Referral forms and tracking log
 - Monthly summary reporting template.

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