



STRENGTHENING HIGH IMPACT INTERVENTIONS FOR AN
AIDS-FREE GENERATION (AIDSFREE) PROJECT

AIDSFree NIGERIA HEALTH CARE WASTE MANAGEMENT WORKPLAN

AUGUST 2015-SEPTEMBER 2016



AIDSFree

The Strengthening High Impact Interventions for an AIDS-free Generation (AIDSFree) Project is a five-year cooperative agreement funded by the U.S. Agency for International Development under Cooperative Agreement AID-OAA-A-14-00046. AIDSFree is implemented by JSI Research & Training Institute, Inc. with partners Abt Associates Inc., Elizabeth Glaser Pediatric AIDS Foundation, EnCompass LLC, IMA World Health, the International HIV/AIDS Alliance, Jhpiego Corporation, and PATH. AIDSFree supports and advances implementation of the U.S. President's Emergency Plan for AIDS Relief by providing capacity development and technical support to USAID missions, host-country governments, and HIV implementers at the local, regional, and national level.

Recommended Citation

Strengthening High Impact Interventions for an AIDS-free Generation (AIDSFree) Project. 2015. *AIDSFree Nigeria Health Care Waste Management Workplan (August 2015–September 2016)*. Arlington, VA: AIDSFree Project.

AIDSFree Nigeria

JSI Research & Training Institute, Inc.
Health Care Waste Management Project
Gwandal Center - Plot 1015 Fria Close off Coree Bay Crescent - Wuse II
Abuja, FCT

JSI Research & Training Institute, Inc.

1616 Fort Myer Drive, 16th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480



STRENGTHENING HIGH IMPACT INTERVENTIONS FOR AN
AIDS-FREE GENERATION (AIDSFREE) PROJECT

AIDSFree NIGERIA HEALTH CARE WASTE MANAGEMENT IN NIGERIA

AUGUST 2015-SEPTEMBER 2016

This publication is made possible by the generous support of the American people through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) with the U.S. Agency for International Development (USAID) under the terms of Cooperative Agreement Strengthening High Impact Interventions for an AIDS-free Generation (AIDSFree), number AID-OAA-A-14-00046. The contents are the responsibility of AIDSFree and do not necessarily reflect the views of USAID, PEPFAR, or the U.S. Government.

AIDSFree Nigeria

AIDSFree Nigeria will provide technical assistance in health care waste management interventions to PEPFAR-supported health facilities in seven states and the Federal Capital Territory to ensure that patients, health workers, communities, and the environment are protected against infection from medical waste. In addition, the project will provide capacity building on injection safety to ensure that each injection given is safe and necessary, and does not pose a risk to the patient, health care provider, or community. AIDSFree Nigeria will work with state Ministries of Health to promote sustainable medical risk waste management systems and increase compliance with standard universal precautions among health workers. The project will also advocate for strengthened regulatory systems and a review of pre-service training in medical infection prevention to foster sustainability. Regulatory policies for proper disposal of medical waste will be developed in states that do not currently have such policies.

CONTENTS

Acronyms	vii
Executive Summary	ix
Objectives	ix
Expected Outcomes	ix
Introduction	1
Background on HIV and HCWM in Nigeria	2
Current Gaps.....	3
Goals and Objectives.....	4
Target Population.....	5
Critical Assumptions	5
Implementation Plan	7
Health Care Waste Management	8
Standard Universal Precautions.....	11
Monitoring and Evaluation	13
Targets (2015-2017).....	13
Collaboration and Coordination	15
Management and Staffing Plan	17
AIDSFree in Nigeria	17
Establishment of the Project Office, Administrative & Financial Systems, Hiring of Staff	17
Staffing Plan	17
Annex 1. Timeline	19
Annex 2. Summary Budget	23

ACRONYMS

CME	continuing medical education
EHW	environmental health workers
GON	Government of Nigeria
FCT	Federal Capital Territory
HCW	health care waste
HEFAMAA	Health Facility Monitoring and Accreditation Agency
IPC	infection prevention and control
IS	injection safety
JSI	JSI Research & Training Institute, Inc.
LAWMA	Lagos State Waste Management Authority
LGA	local government area
LMIS	logistics management information system
M&E	monitoring and evaluation
MMIS	Making Medical Injections Safer
MOH	Ministry of Health
NPHCDA	National Primary Health Care Development Agency
PEPFAR	U.S. President’s Emergency Plan for AIDS Relief
PHC	primary health center
PMP	project monitoring plan
PPE	personal protective equipment
SOP	standard operating procedure
TA	technical assistance
USAID	U.S. Agency for International Development
USG	U.S. Government
WHO	World Health Organization

EXECUTIVE SUMMARY

Despite significant progress made to date, much remains to be done to ensure the expansion and sustainability of health care waste management (HCWM) as a key component of infection prevention and control (IPC) in Nigeria. The goal of the Strengthening High Impact Interventions for and AIDS-Free Generation (AIDSFree) project (August 2015–July 2017) is to provide technical assistance in HCWM interventions to focal sites to ensure that patients, health workers, communities, and the environment are protected from the adverse effects of poor medical waste management. In addition, AIDSFree will provide injection safety (IS) technical assistance to ensure that each injection given is safe and necessary, and does not pose an infection risk to the patient, health care provider, or community.

Objectives

Working with the U.S. Government (USG) team, implementing partners of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), and governments of the target states, this activity will:

- Increase compliance with standard precautions among health care workers in targeted health facilities in PEPFAR priority local government areas (LGAs)
- Promote the institution of sustainable state-owned HCWM systems
- Strengthen the IPC and HCWM component of the pre-service training curriculum for healthcare workers
- Develop a curriculum for a short certificate course in HCWM
- Increase compliance with injection safety, including phlebotomy.

Expected Outcomes

The project will work towards the following specific outcomes within a 24-month time frame:¹

Infection Prevention and Control Practices

- States have an approved IPC policy.
- Staff at intervention sites are practicing consistent hand washing.
- Personal protective equipment (PPE) is used consistently by staff in intervention facilities.
- Intervention sites comply with national IPC policies and guidelines.
- Clinical service providers and environmental health workers (EHWs) in intervention sites have received training according to national guidelines.
- Sharps safety boxes are in place at intervention sites.

¹ A Project Monitoring Plan (PMP) will be developed for USAID approval with final targets and milestone indicators.

IPC Logistics

- IS and HCWM commodities are integrated into the facility logistics management information system in intervention sites.
- Intervention sites have up-to-date stock cards for IPC commodities.
- Intervention facilities are budgeting regularly for IS and HCWM commodities.

Health Care Waste Management

- Certificate course in health care waste management is developed.
- Intervention facilities have appropriate color-coded waste segregation materials.
- Intervention facilities are implementing the World Health Organization's (WHO) HCWM minimum package.
- Baseline survey on HCWM practices is conducted.
- States adopt a state-level HCWM policy.
- In year two, two of these states will be selected for further interventions through a pilot of a sustainable HCWM system selected based on their political commitment and private sector engagement in the project activities.
- States have HCWM transport systems integrated into the state waste management system.

Pre-Service and In-Service Training Systems Strengthening:

- Training curricula in health worker training institutions are reviewed to incorporate best practices in IPC and HCWM.
- IPC and HCWM modules are developed to be accredited for continuing medical education (CME).

AIDSFree Nigeria will work in PEPFAR-supported facilities in priority LGAs in seven focal states (Akwa Ibom, Benue, Cross River, Kaduna, Lagos, Nasarrawa, and Rivers States) and the Federal Capital Territory (FCT) to institutionalize WHO standard IPC and HCWM practices. Based on the response and acceptability of the project from the state governments, AIDSFree Nigeria will work to scale up interventions in seven states and the FCT, using a staggered roll-out approach, to adopt/adapt the national IPC/HCWM Policy, and use the adapted policy as a guide to build a sustainable state-owned HCWM system. Lessons learned from Lagos will provide a case study for success. In addition, AIDSFree Nigeria will support other USG/PEPFAR sites for treatment and prevention of mother-to-child transmission of HIV—vital services for the PEPFAR intervention in Nigeria—in “maintenance states,” outside the AIDSFree target states. In these states, the project will provide IPC and HCWM capacity building with a focus on institutionalizing universal precautions. Based on discussions with the U.S. Agency for International Development (USAID), AIDSFree Nigeria has agreed to train up to 30 percent of its target trainees (12,000) as directed.

To match the AIDSFree program year cycle and USAID’s program cycle, this workplan is dated August 1, 2015 through September 30, 2016. However, it represents budgeted 12-month activities through July 31, 2016.

INTRODUCTION

In Nigeria, the U.S. Agency for International Development (USAID) has supported activities in injection safety (IS) and health care waste management (HCWM) since 2004 to identify gaps and implement interventions according to World Health Organization (WHO) standards in focal states. Under the USAID-funded Making Medical Injections Safer (MMIS), John Snow, Inc. (JSI) provided technical assistance (TA) to the Government of Nigeria (GON) from 2004 through 2009 to promote best practices in IS and HCWM. Results included the bundling of syringes with safety boxes and the use of reuse preventive devices within therapeutic services.

In 2009, when the MMIS project ended, USAID/Nigeria provided funding through the AIDS Support and Technical Assistance Resources (AIDSTAR-One) project to further strengthen the IS progress made in Nigeria. Seed stocks of HCWM commodities were distributed to focal health facilities in 24 local government areas (LGAs) in new scale-up states, and training in IS and HCWM was conducted in health facilities across 12 states and the Federal Capital Territory (FCT). The project also facilitated the development of the GON policy on introduction of reuse prevention syringes and discontinuation of conventional syringes in Federal tertiary hospitals. Additionally, safe phlebotomy practices were introduced as a strategy for eliminating the use of standard disposable syringes used for phlebotomy.

The decentralization of services for prevention of mother-to-child transmission (PMTCT) and antiretroviral therapy (ART) to primary health centers (PHCs) necessitated an increase in clinical activities at the PHC level, and consequently increased the health care waste generated. AIDSTAR-One provided technical assistance for capacity building and training in HCWM to the National Primary Health Care Development Agency (NPHCDA) to address this increase. AIDSTAR-One technical assistance supported approximately 50 PHCs to promote universal best practices in IS and HCWM for sites that provided PMTCT and ART services.

This current workplan for August 2015–July 2017 will focus on infection prevention and control (IPC) with an emphasis on the states identified for scale-up by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) (Akwa Ibom, Benue, Cross River, FCT, Kaduna, Lagos, Nasarrawa, and Rivers States). AIDSFree Nigeria will focus on institutionalizing universal precautions and setting up sustainable state-driven HCWM systems. Gaps identified in the 2013 HCWM study in FCT and Benue State will be used as a guide for developing interventions, while similar assessments will be carried out in the other focus states. The project will advocate for the adoption of the National HCWM Policy, working with at least two selected state governments to adopt or adapt the National IPC/HCWM Policy, thus providing a regulatory framework for a sustainable IS/HCWM response.

Background on HIV and HCWM in Nigeria

Nigeria has a population of approximately 160 million in 36 states and a Federal Capital Territory, and the overall HIV prevalence rate is 3.4 percent.² Though the national prevalence rate is low, AIDSFree Nigeria's target states all exceed the national average, ranging from 4.4 percent in Cross River State to 15.2 percent in Rivers State. Nigeria's population of people living with HIV and AIDS (3.4 million) is the world's third largest, representing 10 percent of the global prevalence. About 1,423,000 of Nigeria's HIV-positive people require treatment, and only about 543,000 are currently on treatment.

Health care waste poses serious risks to public health and the environment. As a result, its management is a critical issue. However, partly because of limited resources and political will, HCWM often has not received sufficient attention. Medical waste is handled, collected, and disposed of together with domestic waste without safeguards, posing a great risk to the health of waste handlers, the public, and the environment, including water sources.³

To achieve the epidemic control target of 90-90-90 by 2020, as set by the Joint United Nations Programme on HIV/AIDS, the U.S. Government (USG) is working with the Government of Nigeria (GON) to scale up treatment services in selected high HIV burden states and LGAs in Nigeria. This strategy requires decentralizing services to secondary hospitals and PHCs, where people can most readily access care. The increase in activities in these facilities has led in turn to an increase in the quantity of medical waste generated, and a greater-than-ever need to strengthen HCWM systems. Developing and implementing a more coordinated, centralized HCWM system is imperative. Linkages among services and agencies are particularly pertinent, because policymakers, public health facility managers, and municipal environmental sanitation agencies have demonstrated a lack of collaboration and coordination in strengthening the HCWM system.

USAID has previously supported development of the national HCWM policy in Nigeria, which led to the development of both sector-specific and state-specific strategies. The NPHCDA partnered with AIDSTAR-One to develop a HCWM strategic framework and a five-year implementation plan to strengthen HCWM systems within primary health care facilities. This partnership resulted from the increase in PHC-level services with the advent of the Midwife's Service Scheme and the

² National HIV/AIDS and Reproductive Health Survey (2012). Available at: <http://naca.gov.ng/new/content/hiv-prevalence-rate-states>.

³ Fatusi, Adesegun, Temitope Ojo, and Abimbola O. Sowande. 2014. An Assessment of Injection Safety and Health Care Waste Management in Nigeria at Selected Health Facilities in Abuja Municipal Area Council, Federal Capital Territory, and Makurdi Local Government Area, Benue State. Arlington, VA: USAID's AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1.

Saving One Million Lives project initiated by the Minister of State for Health, which also focuses on delivery of quality health care at PHC level.

In Lagos State, AIDSTAR-One worked with the Lagos State Waste Management Authority (LAWMA) to develop an innovative Public-Private HCWM Partnership which is currently still operating effectively. This public-private partnership approach in Lagos will serve as the basis of AIDSFree's new activities. In the FCT also, AIDSTAR-One engaged with the Health and Human Services Secretariat and the Abuja Environmental Protection Board to develop a HCWM strategy and plan for the FCT.

Current Gaps

In 2013, the AIDSTAR-One waste generation study in Benue State and the FCT demonstrated that most intervention facilities had substantially complied with at least some of the recommended HCWM standards. Health workers showed universal knowledge of transmission of infection by injection. Very few health workers in intervention facilities reported reuse of syringes and needles during the preceding year. Intervention facilities revealed significantly greater prevalence over non-intervention facilities in a broad range of areas, including:

- Providers washing their hands before preparing a vaccination ($p=0.022$) or therapeutic injection ($p=0.025$)
- Availability of job aids supporting injection safety ($p=0.019$)
- Use of heavy-duty gloves and boots ($p=0.050$) and environmental health worker (EHW) knowledge about heavy-duty gloves ($p<0.001$), boots ($p=0.002$), aprons ($p=0.007$), overalls ($p=0.025$), and goggles ($p=0.002$)
- Availability of the National Policy on Injection Safety and Healthcare Waste Management and National Standards and Norms on Injection Safety and Healthcare Waste Management (though staff patterns for the use of both were not significantly different at intervention and non-intervention facilities)
- Clinical service providers' knowledge about general waste ($p=0.026$), anatomical and highly infectious wastes ($p=0.003$), and color coding of wastes ($p<0.001$); and EHW knowledge about segregating wastes ($p<0.001$) and pharmaceutical wastes ($p=0.004$)
- Claims by the Officer-in-Charge (of waste disposal) about waste segregation at the source ($p=0.010$); waste weighing ($p=0.010$); waste receptacle color coding ($p=0.002$); use of bin liners for segregating and storing waste ($p=0.002$); and lack of waste storage container shortages ($p=0.038$)
- For hazardous and nonhazardous waste, separate collection and storage ($p=0.035$) and transportation ($p=0.018$)
- Presence of color-coded bin liners ($p=0.004$) and HCW containers ($p<0.001$)
- Availability of facilities to transport HCW for off-site treatment ($p=0.014$).

These findings demonstrate the success of AIDSTAR-One's training/capacity building model for the institutionalization of universal precautions in Benue State and the FCT. However, improvements are still needed. The intervention group data did not always reveal statistically significant differences between intervention and non-intervention facilities in compliance with safe HCWM and injection protocols. For instance, no statistically significant difference was found between intervention and non-intervention facilities with respect to having a HCWM workplan and annual report; respondent claims for syringe availability, use, and reuse; knowledge of disease transmission via improper HCWM and needle stick; observed reuse-prevention syringes, and sharps safety box availability; and whether staff had undergone training on EHW universal precautions. Lastly, a substantial proportion of facilities still experience critical shortages of HCWM commodities.

Despite the significant progress made to date, particularly in Benue, Lagos, and FCT, much remains to be done to ensure the expansion and sustainability of HCWM as a key component of IPC within PEPFAR-supported sites in Nigeria. The Federal Ministry of Health has shown commitment to improving IPC and HCWM in Nigeria through the approval of the comprehensive National IPC Policy and strategy by the 56th National Health Council. The National Policy for HCWM was also approved by the Federal Executive Council in 2013. An enabling environment is therefore in place at the national level for establishing sustainable HCWM systems that can be translated into practice at the level of the state Ministries of Health and health facilities. This activity will thus focus primarily at the state level.

Goals and Objectives

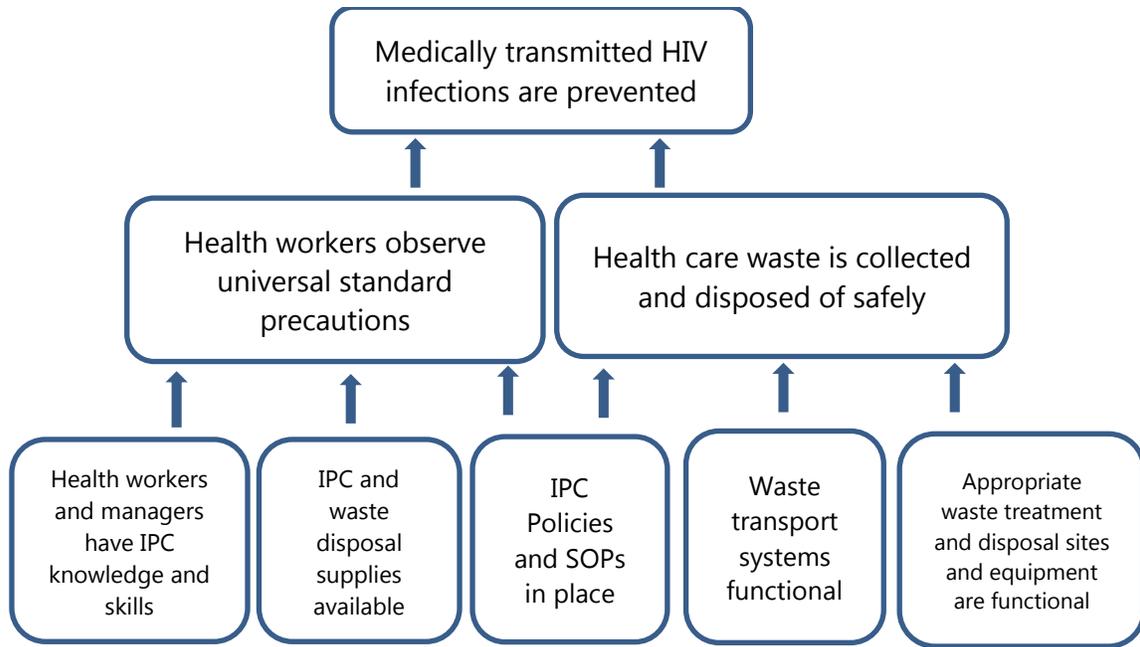
The goal of the AIDSFree Nigeria activity (August 2015–July 2017) is to eliminate medical transmission of HIV at PEPFAR-supported sites. This will be accomplished by institutionalizing universal precautions in health facilities and promoting sustainable HCWM systems in focal sites to ensure that patients, health workers, communities, and the environment are protected. In addition, AIDSFree will provide technical assistance on injection safety to ensure each injection given is safe and necessary, and does not pose a risk to the patient, health care provider, or community.

The USAID/Nigeria identified objectives of the workplan are the following:

- Assist the target states with the development of a State HCWM policy
- Institutionalize standard HCWM systems in target facilities and states
- Increase compliance with IPC standard precautions among health care workers.

A log frame for the activity appears below.

Figure 1. Conceptual Framework for HCWM Activities in Nigeria



Target Population

Target populations include:

At the facility level, hospital management, doctors, nurses, pharmacists, laboratory scientists, phlebotomists, community health officers, environmental health officers, storekeepers, and waste handlers are targeted with *training, mentoring and messaging* on best practices in hospital IPC and HCWM.

Officials of State Ministries of Health and municipal/state waste management authorities are targeted with *advocacy and capacity building* for improved planning, coordination and management of healthcare waste management systems including development of innovative public-private partnership mechanisms.

Government policymakers, line ministries, medical education programs, and state AIDS control agency/program staff are targeted for *advocacy* to leverage policy decisions, guidelines, and sustainability issues.

Critical Assumptions

Achievement of program objectives and workplan activities assumes the following conditions:

- Timely adoption of state-level IPC and HCWM policies by State Ministries of Health

- Significant political commitment from the target State Ministries of Health for sustainable state-owned HCWM systems
- Favorable private sector engagement for project activities
- Commitment from relevant regulatory bodies for timely accreditation of HCWM modules for CME
- Collaboration and commitment from health worker training institutions
- Absence of U.S.-based political changes that will reduce USAID assistance levels below those currently planned
- Maintenance of access and security in the LGAs where AIDSFree Nigeria sites operate.

IMPLEMENTATION PLAN

AIDSFree Nigeria will work in 32 PEPFAR priority LGAs in the seven focal states and the FCT (see Table 1). The goal will be to implement activities through the hospital management, state hospital management boards, and state Ministries of Health and Environment to ensure cost-effectiveness and sustainability beyond the life of the project.

Hospital-level interventions will target tertiary and secondary facilities in a cluster model, in which facilities will be selected to serve as model training centers for surrounding health facilities. In total, AIDSFree Nigeria will train at least 12,000 health facility staff in Year One. State-level interventions will target two states (Benue and FCT) intensively in the initial funding period, while additional states will be brought on board in subsequent cycles following rapid assessments in each. AIDSFree will use a systems approach to tackle the gaps identified in the 2013 AIDSTAR-One assessment, such as low rates of waste segregation and handwashing, and improper treatment and disposal of medical wastes. This approach will be based on adoption of the HCWM policy at the state level to serve as the backbone for a sustainable system. AIDSFree Nigeria will use the AIDSTAR-One HCW generation study to facilitate the intervention in Benue State and the FCT, and will use the LAWMA lessons learned facilitate in Lagos State. The project will conduct assessments to guide programming in Akwa Ibom, Cross River, Kaduna, Nasarawa, and Rivers States.

Table 1. Priority LGAs (Kaduna State TBD)

State	LGA	Agency Lead
Akwa Ibom	Ikot Ekpene	USAID
Akwa Ibom	Okobo	USAID
Akwa Ibom	Oron	USAID
Akwa Ibom	Uruan	USAID
Akwa Ibom	Uyo	USAID
Nasarawa	Doma	CDC
Nasarawa	Karu	CDC
Nasarawa	Lafia	CDC
Nasarawa	Nasarawa	CDC
Nasarawa	Obi	CDC
Benue	Buruku	CDC
Benue	Guma	CDC
Benue	Gwer West	CDC
Benue	Katsina-Ala	CDC

Benue	Konshisha	CDC
Benue	Logo	CDC
Benue	Tarka	CDC
Benue	Ushongo	CDC
Cross River	Calabar South	USAID
Cross River	Calabar Municipal	USAID
FCT	Abuja Municipal	CDC
FCT	Bwari	CDC
Lagos	Agege	USAID
Lagos	Ajeromi	USAID
Lagos	Alimosho	CDC
Lagos	Apapa	USAID
Lagos	Ifako Ijaye	CDC
Lagos	Ikeja	CDC
Lagos	Mushin	CDC
Lagos	Surulere	USAID
Rivers	Eleme	USAID
Rivers	Obio/Akpor	USAID
Rivers	Portharcourt	USAID

Health Care Waste Management

Site-Level: Minimum Package for HCWM

AIDSFree Nigeria will work to promote the WHO minimum HCWM package (See Figure 2) at the facility level. The work will entail adoption of a cluster model in which AIDSFree facilities can serve as model training centers for other facilities. To improve quality assurance systems for HCWM, AIDSFree Nigeria will work with focal persons at the health facility level to develop functional facility-based HCWM plans. Support to facilities may also include training of incinerator operators, where applicable, to promote optimal HCWM practices.

AIDSFree Nigeria will work closely with hospital management, state hospital management authorities, and PEPFAR implementation partners to carry out needs assessments and document consumption data for HCWM equipment and supplies; and will encourage and facilitate the procurement of HCWM commodities at project focal sites. The project will engage in advocacy meetings with physicians at health facilities and relevant policy makers at the state and LGA levels to increase awareness about the need to support budgeting for HCWM.

The project will also work with USG PEPFAR partners to ensure a feedback mechanism on progress with the implementation of the minimum package for HCWM at PEPFAR-supported sites.

Table 2. Minimum Package for HCWM

	PHCs	Hospitals
Waste Segregation	Safety boxes (for sharps). Black, yellow, red liners	Safety boxes (for sharps). Black, yellow, red liners
Storage	Secured room not assessable to unauthorized personnel for storing filled safety boxes prior to treatment / transportation	Secured room not assessable to unauthorized personnel for storing filled safety boxes prior to treatment / transportation
Treatment	<p>Either of the following:</p> <p>Emptying waste in a protected pit (with or without burial)</p> <p>Secure confinement until transportation off site to a facility for final disposal</p>	<p>Any of the following:</p> <p>A double-chamber high- or medium-temperature incinerator (above 800 degrees C)</p> <p>Emptying waste in a protected pit (with or without burial)</p> <p>Use of autoclave (with or without use of a shredder)</p> <p>New technology that becomes an internationally accepted standard</p> <p>Secure confinement until transportation off site to a facility for final disposal</p>
Disposal		Ash pits (if final disposal is on-site and using a high-temperature incinerator)

Above-Site HCWM System Strengthening

AIDSFree Nigeria will work with USG implementing partners and state governments to identify and implement practical, affordable, and effective means of waste handling and final disposal of health care waste in accordance with WHO standards. As stated above, the project will take lessons learned from LAWMA, and the HCWM assessment findings generated by the AIDSTAR-One project from FCT and Benue, and apply these to programming. Rapid assessments will be prioritized in the other five scale-up states within the first six months of project start-up, and the results used to inform planning for a sustainable HCWM system that operates at the state level to service both public and private facilities.

To increase capacity for sustainable waste management, AIDSFree Nigeria will support state Ministries of Health and state hospital management boards to develop and implement strategic HCWM frameworks that include standard operating procedures (SOPs) and a supervision and monitoring system for HCWM at the various service delivery levels. These have already been

developed for FCT and Benue State; the same will be done for Akwa Ibom, Cross River, Kaduna (in Year Two), Nasarrawa (in Year Two), and Rivers States.

The project will work to support implementation states to adapt the National HCWM Policy. This policy will form the basis of a sustainable HCWM system that will be developed in each state. The project will focus on supporting states to approve the policy within the first six months of the project, with government commitment and support, enabling relevant laws to help in the enforcement of the policy. Lessons learned from the Lagos State HCWM Guidelines will be applied to institutionalize training and re-training of health workers using revised IPC/HCWM training modules.

The expected outcome will be that states adopt the HCWM policy. In states that have adopted the policy, AIDSFree Nigeria will assess political commitment to determine which two states may move forward in project year two to pilot a sustainable HCWM system. In these two states, AIDSFree will work with USAID Nigeria to determine what contributions (including basic infrastructure) would achieve the target of replicating the LAWMA model. Geographic information-based maps of health care waste treatment and disposal sites, completed by AIDSTAR-One Nigeria, will also inform planning. AIDSFree will develop a schema/framework to outline requirements at each level—facility, LGA, and state—and the private sector engagement necessary to successfully operationalize the system design. This pilot would require significant state government commitment and engagement of the private sector for sustainability.

South-to-South TA and Public-Private Partnerships

AIDSFree Nigeria will encourage south-to-south TA to share best practices by facilitating exchange visits to Lagos State similar to those previously conducted for officials of the Environmental Health Officers' Registration Council of Nigeria (EHOREGON) officials. An international study tour may be considered in year two based on GON commitment and the development of an action plan.

AIDSFree Nigeria will encourage the development of public-private partnerships to develop shared waste treatment and disposal sites, which requires significant commitment from, and the political will of, the state governments. The project will promote these partnerships through advocacy: for example, by conducting a panel presentation and half-day workshop to allow the participating states to share lessons learned from government officials and private service providers in Lagos State. Across all the target states, the project will explore various routes and private mechanisms for transporting waste to existing incinerators, using lessons learned from the PEPFAR waste drive.

Pre-Service and Continuing Medical Education

AIDSFree Nigeria will identify two health manpower training institutions (such as Schools of Nursing and Schools of Health Technology) in target states that have not yet been included in

the project's activities, and will update IPC issues in their curricula. The two institutions will be selected on the basis of their responsiveness and commitment to addressing the disposal of medical waste, including contribution of resources.

The project will develop a short certificate course on HCWM for the institutions to prepare graduates for HCWM jobs in secondary and tertiary health facilities. USAID will identify a USG-funded health systems strengthening (HSS) initiative as a potential approach for selecting the institutions and supporting them to implement the certificate course.

In addition, AIDSFree Nigeria will attend and present at clinical meetings for prescribers and medical doctors to offer IPC updates. The project will work with the relevant regulatory bodies to initiate the process to get IPC and HCWM modules accredited for continuing medical education (CME) to make the courses more attractive for health care personnel. Recent experiences with Ebola outbreak in West Africa have created demand for IPC training and updates.

Standard Universal Precautions

As a strategy for promoting and sustaining standard precautions (hand hygiene, personal protective equipment or PPE, needle stick and sharps injury prevention, respiratory hygiene and cough etiquette, medical risk waste disposal, and safe injection practice) in supported facilities, AIDSFree Nigeria will work closely to support state Ministries of Health to operationalize or develop state-specific IPC policies for use in all public and private health care facilities within the target states. Once the policies are developed, AIDSFree Nigeria will seek innovative strategies to mainstream them within the statutes of regulatory bodies, such as the State Health Facility Monitoring and Accreditation Agencies, to ensure adequate supervision and compliance.

Hospital IPC Committees for an Enabling Environment

At the facility level, AIDSFree Nigeria will facilitate establishment of hospital IPC committees to institutionalize standard precautions. The project will ensure that approved SOPs are available in supported facilities, and that a system is in place to monitor compliance, so that all providers observe an approved minimum level of standard precautions when treating all patients. Staff at health facilities will be equipped with skills in risk assessment to enable them assess all health care activities and determine the levels of personal protection that is indicated for each. To ensure sustainability beyond the project's life, AIDSFree Nigeria will conduct follow-up activities to ensure that health workers apply the SOPs and that the IPC committees are functional.

Training, Mentoring, and Supervision of Health Workers

AIDSFree Nigeria will support target health facilities to strengthen the health workers' knowledge and skills in IPC practices. The project will coordinate training on IPC best practices for multiple cadres of health workers (including prescribers, providers, laboratory staff, and phlebotomists),

following current WHO guidelines. AIDSFree Nigeria will facilitate harmonization of health facility documentation of accidental occupational injuries and will promote correct application of post-exposure prophylaxis (PEP) protocol. Supervisory staff will receive orientation on the New Entrants Training Package to enable them train new staff who may not have received formal in-service training on injection safety. To ensure institutionalization of these trainings in hospitals, AIDSFree Nigeria will work with state Ministries of Health and Hospital Management Boards to promote the importance of dedicating a budgetary allocation to continue this process.

Logistics and LMIS

AIDSFree Nigeria will build capacity at the hospital and state levels to quantify and forecast commodity needs for infection prevention equipment and supplies (e.g., safety boxes, reuse prevention syringes, phlebotomy equipment, waste bins, bin liners, and PPE) for both preventive and curative services. The appropriate staff members will receive training in logistics and inventory management. To ensure sustainability, the project will work with and strengthen the logistics system already in operation for other hospital commodities. For cost-effectiveness, training for staff at target facilities will take place during project Year One at GON health facilities.

The project will provide seed stock of IPC and HCWM commodities to facilitate the institutionalization of IPC and HCWM best practices, while working with hospital management and state Ministries of Health to build the commodity logistics system.

To encourage a shift in policy towards the use and reuse of prevention needles and syringes rather than standard disposable needles/syringes, AIDSFree Nigeria will promote bundling procurement (purchasing syringes together with safety boxes) among partners that procure injection safety commodities.

MONITORING AND EVALUATION

The AIDSFree Nigeria Monitoring and Evaluation (M&E) Advisor will work with the AIDSFree Senior M&E Advisor (at AIDSFree headquarters or HQ) and the Nigeria Monitoring and Evaluation Management Systems to review the project monitoring plan. The project will track key process and output indicators to ensure that the workplan is implemented as planned and objectives are being met. The comprehensive M&E plan will describe how the data for the indicators will be collected, managed, analyzed, and used.

Overall coordination and oversight of project M&E will be the responsibility of the project’s M&E Advisor in Nigeria. The M&E Advisor will work with the HCWM Advisor to oversee the baseline HCWM assessments in five states. AIDSFree Nigeria will ensure that facilities have standardized systems in place for monitoring and improving IPC and HCWM practices, and for reporting needle stick injuries using the Ministry of Health's harmonized registers. The project will provide technical assistance in monitoring and evaluating safe injection inputs and their outcomes by strengthening supportive supervision of documentation among health workers and waste handlers. AIDSFree Nigeria will assess strengths and weaknesses in M&E and will make recommendations for improving the facility's system for reporting needle stick injuries, with particular attention to barriers to reporting, including availability of reporting forms. All information collected through indicators, as well as implementation lessons learned, will be used to inform and improve programmatic planning.

Targets (2015-2017)

1. Number of service outlets with functional IPC/HCWM committees	120
2. Number of individuals trained in IPC/HCWM	24,000
3. Number of service outlets providing a minimum HCWM package	120

COLLABORATION AND COORDINATION

AIDSFree Nigeria will report to the USAID Mission in Nigeria throughout all phases of this workplan, and for submission of all deliverables. All activities will be coordinated, and approvals obtained from both USAID Nigeria and the AIDSFree USAID Agreement Officer's Representative team.

AIDSFree Nigeria will collaborate closely with USG partners, including the Centers for Disease Control and Prevention, Department of Defense, and USAID for training and capacity building of health workers at designated PEPFAR sites. The project will strengthen existing local partnerships with governments and stakeholders and establish new ones as it expands into new states.

AIDSFree Nigeria recognizes that it is required to contribute to AIDSFree's cost-share requirement and will work with the AIDSFree home office to develop a cost-share plan.

MANAGEMENT AND STAFFING PLAN

AIDSFree in Nigeria

JSI Research & Training Institute, Inc. (JSI), as the prime contractor of AIDSFree and implementing organization of AIDSFree Nigeria, will be responsible for all administrative and financial issues, including office set-up, hiring and management of support staff, financial systems, and development of policies for the AIDSFree Nigeria office.

Establishment of the Project Office, Administrative & Financial Systems, Hiring of Staff

AIDSFree will establish an office in Abuja. Administration will locate suitable office space and hire key personnel as well as administrative and support staff. AIDSFree will coordinate with other local JSI projects for collaboration and seek out opportunities for operational coordination and collaboration. In addition, AIDSFree Nigeria is exploring options for a low-cost office presence in Akwa Ibom or Cross River State.

Staffing Plan

The workplan will be implemented by AIDSFree. Abuja-based staff includes a Chief of Party, a HCWM Advisor, a Director of Finance and Administration, a Logistics Advisor, an SBCC/IPC Training Advisor, an M&E Advisor, and a Regional Program Officer covering Akwa Ibom, Cross River, and Rivers States, with an implementation base in one of those states.

AIDSFree HQ staff will provide the country team with back-up support in program and technical management, communication and knowledge management, M&E, and financial management. HQ staff will conduct international trips to Nigeria to support the team for financial, programmatic, M&E, and close-out management. These trips will be reflected in the project workplan.

The AIDSFree Nigeria Chief of Party will ensure communication and coordination with USG partners, target health facilities, state Ministries of Health, the USG team, and AIDSFree. The Chief of Party will also ensure general overall supervision of the technical intervention areas and timely submission of reports and deliverables.

ANNEX 1. TIMELINE

The following workplan provides a detailed breakdown of proposed Project Year One activities (August 2015 – September 2016) aligned with the goals and objectives outlined above.

AIDSFree Nigeria: YEAR 1 (PY 1) WORKPLAN-August 1, 2015 through September 30, 2016 ¹															
Key Activity	Sub Activity	Timelines (August 2015–September 2016)													
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Project Start-up	Establish project staffing structure and recruit staff	X	X												
	Identify and establish office in Abuja	X	X												
	Determine presence in Akwa Ibom/Cross River/Rivers	X	X	X											
	Develop workplan	X	X												
	Develop PMP	X	X	X											
	Develop EMMP		X	X											
Health Care Waste Management (HCWM)	Meeting with CMDs/MDs of facilities and relevant policymakers at state/LGA levels to increase their understanding of the need to support budgeting for HCWM				X	X	X	X	X	X	X	X	X	X	X
	Work with USG PEPFAR partners to ensure feedback mechanism on the implementation of the minimum package for HCWM				X	X	X	X	X	X	X	X	X		

¹ To match the AIDSFree program year cycle and USAID’s program cycle, this workplan is dated August 1, 2015 through September 30, 2016. However, it represents budgeted 12-month activities through July 31, 2016.

	Work with focal persons at the health facility level to develop functional facility-based HCWM plans			X	X	X	X	X	X	X					
	Facilitate LAWMA to share best practices with focal states through exchange visits			X	X		X	X	X		X	X			
	Develop and implement strategic HCWM frameworks which include standard operating procedures (SOP) and a supervision and monitoring system for HCWM				X		X	X	X			X	X		X
	Advocate to encourage the development of public-private partnerships to develop shared waste treatment and disposal sites			X	X	X	X	X	X	X	X	X	X		
	Develop a schema/framework to outline requirements at each level (facility, LGA, and state) and the private sector engagement necessary to successfully operationalize a HCWM system design									X	X	X	X	X	
Infection Prevention and Control (IPC)	Operationalize or develop state-specific IPC policies that will be used in all health care facilities within the target states				X	X	X	X	X	X	X	X	X		
	Reproduce/adapt and distribute relevant behavior change and communication materials to support all levels of IPC, HCWM, and safe injection			X	X	X	X	X	X	X	X	X	X	X	X
	Facilitate harmonization of facility-level documentation of accidental occupational injuries & promote correct application of PEP protocol			X	X	X	X	X	X	X	X	X			
	Facilitate the establishment of hospital IPC committees to institutionalize standard precautions			X		X	X	X		X	X				
Logistics	Carry out needs assessments and document consumption data for HCWM equipment and supplies				X	X	X	X	X						

	Conduct trainings in logistics and inventory management using a cluster model (a central facility serves as a model hands-on training site for surrounding facilities)				X	X	X	X	X	X	X					
	Procure and distribute seed stock of IPC and HCWM commodities will be provided in sites where IPC and HCWM activities have previously not been implemented					X	X	X	X	X	X	X				
	Promote bundling procurement (syringes with safety boxes) among partners that procure injection safety commodities			X		X		X		X		X		X		
Training and Capacity Building	Revise the training curriculum to include IPC; hold stakeholders meeting to approve revised curriculum		X	X												
	Training of trainers for reorientation on revised curriculum				X											
	Periodic meetings with USG PEPFAR partners to plan for/coordinate training				X		X		X		X		X		X	
	Organize and conduct IPC (IS, HCWM & LMIS) training for focal sites including sensitization on the New Entrants Package						X	X	X	X	X	X	X	X		
	Advocacy to state MOH and Hospital Management Boards to secure a budgetary allocation to continue training, mentoring, and supervision				X	X	X	X	X	X	X	X	X	X	X	X
	Conduct training on incinerator operation and maintenance for incinerator operators to improve their capacity						X	X	X	X	X	X	X	X		
Policy Environment	State IPC/HCWM stakeholders meeting				X	X	X			X			X			
	Collaborate with GON and other USG health programs to promote bundling policy. (Periodic meetings with stakeholders and key into IPC activities)				X		X		X		X					
	Advocacy with states/support to adopt state-			X	X	X		X		X						

	level HCWM policy and other relevant policies/laws to regulate/institutionalize HCWM														
Pre-Service Education/CME	Identify two health manpower training institutions in target states to update IPC issues in curricula				X	X	X								
	Incorporate revised IPC and HCWM modules into pre-service curricula in these institutions				X	X	X								
	Development of short certificate course for HCWM				X	X	X	X							
	Work with the relevant regulatory bodies to get IPC and HCWM modules accredited for CME						X	X	X						
M&E	Conduct quarterly supportive supervision			X			X			X			X		
	Collect data on all technical activities for the reporting period, develop reports			X			X			X			X		X
	Rapid assessments in Akwa Ibom, Cross River, Kaduna, Nasarawa, and Rivers States			X	X	X	X	X	X						

ANNEX 2. SUMMARY BUDGET

AIDSFree Project Line Item Budget Summary Nigeria Health Care Waste Management August 1, 2015 - July 31, 2016			
Line Item		Total Budget	Notes
Cooperating National Salaries	LOE Days		
COUNTRY DIRECTOR	255.0		Consists of salary and benefits allocations for all field-based staff in Abuja and a small regional office.
DIRECTOR FOR FINANCE AND ADMINISTRATION	255.0		
SBCC/IPC TRAINING ADVISOR	238.3		
HEALTH CARE WASTE MANAGEMENT ADVISOR	220.0		
LOGISTICS ADVISOR	216.6		
REGIONAL PROGRAM OFFICER	220.0		
M&E ADVISOR	216.6		
HCWM PROGRAM ASSISTANT	216.6		
FINANCE OFFICER	216.6		
ADMIN OFFICER	216.6		
OFFICE MANAGER	75.0		
FRONT OFFICE/RECEPTION	30.0		
DRIVER #1	238.3		
DRIVER #2	216.6		
Total Cooperating National Salaries	2831.3	410,123	
Total Cooperating National Benefits		143,543	
Direct Labor (Home Office)			Includes LOE for the Technical Advisor, Country Program Manager, as well as M&E, communications, and finance and admin support.
Total Direct Labor	182.0	73,465	

TOTAL SALARIES	3,013.3	627,131	
II. INDIRECT COSTS (OVERHEAD)			
TOTAL INDIRECT COSTS		57,303	Represents JSI's indirect costs based on its approved NICRA.
III. CONSULTANTS			
Local Consultants	LOE Days		
Non-US Consultant 1 (Training Consultant)	210.0		Includes 5 long-term consultants (4 Training Consultants and 1 F&A Consultant to support the regional office).
Non-US Consultant 2 (Training Consultant)	210.0		
Non-US Consultant 3 (Training Consultant)	210.0		
Non-US Consultant 4 (Training Consultant)	210.0		
Non-US Consultant 5 (F&A Consultant)	210.0		
TOTAL CONSULTANTS COSTS	1,050.0	78,750	
IV. TRAVEL, TRANSPORT & PER DIEM			
In-Country Travel (Local Staff/Partners)			
Total In-Country Travel		72,450	Includes travel costs associated with in-country site visits and home office management/STTA visits.
International Travel			
Total International Travel		31,022	
TOTAL TRAVEL & PER DIEM COSTS		103,472	

V. PROGRAM ACTIVIES AND TRAINING		
Waste Management Activity - Health Care Waste Mgt 1.3		67,964
Waste Management Activity - Health Care Waste Mgt 1.4		6,981
IPC & SUP Activity - IPC & SUP 2.2		41,497
Logistics Activities - Needs Assesment 3.1		6,981
Logistics Activities - Logisitics Training 3.2		28,863
Logistics Activities - Procure Seed Stock		115,517
Training and Capacity Building - Revised Training Curriculum		1,117
Training and Capacity Building - TOT - 4.2		58,298
Training and Capacity Building - HWs Training - 4.4		243,114
Training and Capacity Building - Incinerator Ops Training		1,616
Policy Environment - IPC S-Committee		5,302
Policy Environment - State IPC S-Meeting		24,106
Pre-Service Education - Identify Health Institution		1,521
Pre-Service Educatuion - Develop Certificate Course		1,521
Pre-Service Education - Accredit IPC Modules		2,282
M&E- Conduct supportive supervision		17,351
TOTAL PROGRAM ACTIVIES AND TRAINING COSTS		624,030
VI. EQUIPMENT, MATERIALS, SUPPLIES		
TOTAL EQUIPMENT, MATERIALS, SUPPLIES COSTS		74,510
VII. OTHER DIRECT COSTS		

Includes costs of program activities and training in Waste Management, IPC and SUP, Logistics, Capacity Building, Policy Environment and National IPC, Pre-Service Education, and M&E as detailed in the workplan. In addition, includes approximately \$115k for procurement of seed PPE stock.

Includes costs associated with the procurement of office supplies and materials, computer equipment, and 1 vehicle and related supplies.

			Includes costs associated with operational expenses such as office rent and utilities (Abuja and small regional presence), insurance, shipping, and bank fees.
TOTAL OTHER DIRECT COSTS		115,424	
VIII. SUBCONTRACTS			
			Represents estimated costs to contract a firm and/or individuals to conduct a baseline assessment in five states.
TOTAL SUBCONTRACTS COSTS		79,380	
IX. Program Management			
			Represents non country specific AIDSFree management costs to support AIDSFree Operations, Knowledge Management, Program Management, and Strategic Information.
TOTAL PROJECT MANAGEMENT COSTS		240,000	
TOTAL		2,000,000	



AIDSFree Nigeria

JSI Research & Training Institute, Inc.

Health Care Waste Management Project

Gwandal Center - Plot 1015 Fria Close off Coree Bay Crescent - Wuse II

Abuja, FCT