

Framework for Conducting a Self-Assessment of National Progress In Injection Waste Management

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Version 1

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Background and Purpose

In order to effectively protect health workers and the communities they serve from medical transmission of diseases such as HIV/AIDS and hepatitis, a country must have a strong injection waste management system in place. Without such a system, or when that system is flawed, injection waste becomes a vector for transmitting deadly disease. The Framework for Conducting a Self-Assessment of National Progress in Injection Waste Management (the Framework) has two primary purposes. It was developed to be used by the GAVI-funded countries to provide a set of simple, effective review tools to measure the status of health care waste management (HCWM) with a focus on injection waste disposal, and to provide a clear outline of gaps, priorities, and next steps to facilitate national and regional planning.

Instructions for Conducting the Self-Assessment

There are four steps to conducting the Self-Assessment of National Progress in Injection Waste Management planning:

1. Identify assessment coordinator
2. Collect and summarize data (Appendix B)
3. Conduct national self-assessment workshop (Appendix C)
4. Report on the self assessment process and findings

1. Identify Assessment Coordinator

This self-assessment will require intensive preparation and coordination. It is therefore recommended that an assessment coordinator be contracted to implement the self-assessment. This individual will serve as the primary contact for all assessment activities and will conduct the research, preparation of questionnaires, data collection and aggregation, workshop preparation and facilitation, and final reporting. The assessment coordinator should be an experienced individual with knowledge of the country's HCWM system and key stakeholders so that he or she will be able to quickly identify and access the resources necessary to conduct the self-assessment. An Assessment Coordinator's Guide is included as Appendix A.

2. Collect and Summarize Data

Included as part of this Framework are two questionnaires designed to help the assessment coordinator collect information about injection waste practices. These questionnaires are intended to provide a nonstatistically significant "snapshot" of progress toward implementing safe injection waste management standards and to help the assessment coordinator summarize current practices and gaps during the National Self-Assessment Workshop. Because the data collected is to be used for informing discussion at the National Self-Assessment Workshop, the questionnaires are aimed at qualitatively understanding current knowledge, attitudes, and practices at a range of facilities. They are intended to be modified to be country specific, so the assessment coordinator will need to make the necessary modifications to the questionnaires to reflect current practices and policies within the country.

Regional Questionnaire

In countries with a regional system for coordinating medical waste management and supplies procurement, the regional-level questionnaire will enable the assessment coordinator to efficiently collect information about regional- and facility-level waste management practices. The regional questionnaire can be distributed in paper copy or via email. Encouraging district or regional HCWM coordinators with internet access to complete and submit questionnaires

via email is expected to reduce time lags in data collection and will allow the assessment coordinator to immediately begin aggregating data. However, due to the uncertain availability of computers at the district or regional level and the unreliable connectivity in many countries, it may be necessary to mail paper copies to the regional or district representatives. The assessment coordinator will be responsible for distributing the regional questionnaire in email or paper-based format, then collecting and summarizing the results in advance of the National Self-Assessment Workshop.

Facility Questionnaire

In countries without a regional system for coordinating medical waste management and supplies procurement, the assessment coordinator will need to collect information about injection waste management practices directly from a small sample of facilities. The facility questionnaire will provide a picture of injection waste management practices at the facility level and should be conducted in a small set of facilities. This questionnaire is not intended to provide an in-depth assessment of facility-based practices and is not intended as a stand-alone evaluation tool. Instead, the qualitative data collected will be supplemented by an observer's checklist at the end of the questionnaire to quantify some of the answers collected and to help document actual practices at the facility level. It is recommended that a minimum set of facilities include two small- and two medium-size facilities and two hospitals with a convenience sample of urban and rural sites.

If it is necessary to collect data from the facility level using the facility questionnaire, the assessment coordinator should identify a team of researchers to assist with the data collection and aggregation.

3. Conduct National Self-Assessment Workshop

The primary component of the Framework is a national-level workshop to review current practices, gauge progress, and devise strategies to address gaps in implementation of the national injection waste management plan. The purpose of the workshop will be to:

- Assess the implementation status of plans and policies for HCWM.
- Seek evidence of the impact of improvements, both achieved and anticipated.
- Identify any barriers that may hinder future progress and ways to manage them.
- Outline plans for action in the coming year.

By generating data on injection waste management knowledge and practices in two tiers—at the regional or facility level through data collection and at the national level through the Self Assessment Workshop—the Framework enables the assessment coordinator to quickly summarize data and highlight trends and gaps to be addressed. The assessment coordinator can then outline next steps and responsible parties for moving the revised HCWM planning agenda forward. This approach ensures that national-level changes have innate support and immediate momentum at all levels of the health system.

The Self-Assessment Workshop Agenda and Matrix are included as Appendix C. Detailed instructions for modifying the questionnaires and matrix are included in the Assessment Coordinator's Guide (Appendix A).

4. Report on Self-Assessment

Upon completion of the Self-Assessment of National Progress in Injection Waste Management, the assessment coordinator will be responsible for presenting the findings of the self-assessment to the relevant stakeholders. It is recommended that the findings outlined in the workshop matrix be summarized in report form and that this report be circulated to workshop participants for their review prior to finalization. Once finalized, the assessment coordinator will be responsible for distributing the report to the MOH, the funder of the assessment (if applicable), and to the participants in the assessment process, as well as to the relevant committees in charge of implementing the next steps for improving injection waste management planning that were identified during the Self-Assessment Workshop.

Framework Components

The following appendices provide the necessary detail and formats for collecting, aggregating, and presenting the data gathered during the self-assessment process:

- Appendix A: Assessment Coordinator's Guide
- Appendix B: Data Collection Questionnaires
- Appendix C: Workshop Materials

Step-by-step instructions on carrying out the Self-Assessment of National Progress in Injection Waste Management Planning are included in the Assessment Coordinator's Guide.

Appendix A—Assessment Coordinator’s Guide

Introduction

A strong injection waste management system is essential to protecting health workers and the communities they serve from medical transmission of diseases such as HIV/AIDS and hepatitis B and C. Without such a system, or when that system is flawed, injection waste becomes a vector for transmitting deadly disease. You have been selected to coordinate a self-assessment of your country’s planning for injection waste management in order to identify trends and gaps that should be addressed. Your role as assessment coordinator is essential to the success of the process and, therefore, you are a key element of the system to protect health workers and communities from medical transmission of disease.

The Framework for Conducting a Self-Assessment of National Progress in Injection Waste Management has two primary purposes. It was developed to be used by countries to provide a set of simple, effective review tools to measure the status of health care waste management (HCWM) with a focus on injection waste disposal, and to provide a clear outline of gaps, priorities, and next steps to facilitate national and regional planning. There are two phases of this self-assessment process. The data collection (Appendix B) process will help you gather information about your country’s planning and practices regarding injection waste management and will inform the agenda and direction of the main component, the National Self-Assessment Workshop (Appendix C).

This self-assessment will require preparation and coordination. You will be responsible for coordinating all aspects of the process including research, preparation of questionnaires, data collection and aggregation, workshop preparation and facilitation, and final reporting. Because of the amount and level of detail of this work, it is a good idea to map out a timeline in advance, as well as identify parties who will assist with the implementation of this work.

The primary responsibilities of the assessment coordinator are:

1. **Review literature and interview key stakeholders.** Conduct a literature review of key national, district, and facility documents on HCWM focusing on injection waste and meet with key national stakeholders on HCWM to engage them early on in the self-assessment process.
2. **Review and adapt workshop matrix and data collection questionnaires.** Review the workshop matrix and data collection questionnaires and, if necessary, adapt them for your country’s situation.
3. **Conduct data collection and analysis.** Collect information on trends and gaps in injection waste management practices at the regional/district or facility level. Summarize data collection findings in the workshop matrix.
4. **Organize Self-Assessment Workshop.** Identify a workshop facilitator and secretary to assist with running the workshop smoothly. Present a summary of the district questionnaire results, using columns 1–3 of the workshop matrix. Adjust the notes in columns 2 and 3 as indicated by workshop participants.
5. **Report on self-assessment process.** Finalize the workshop matrix with input from participants. Submit final report on self-assessment outcomes to key stakeholders.

Instructions

Prior to the National HCWM Self-Assessment Workshop, you will need to summarize your country's progress in injection waste planning using a ranking system and set of key elements outlined in the workshop matrix. To do this, collect the information on each key element using the evaluation criteria listed in the Coordinator's Key to Workshop Matrix below. A blank matrix is included in Appendix C for you to enter your findings prior to the workshop and for completing with the participants during the workshop.

1. Review literature and interview key stakeholders

In order to obtain documentation of evidence to complete column 3 of the workshop matrix you will need to conduct a thorough review of key country documents on HCWM assessments, policies, and planning and meet with national stakeholders involved in HCWM. Rank progress in each of these key elements based on your findings and input from the stakeholders. A key to assigning numerical ranks is included next to each key element.

2. Review and adapt workshop matrix and data collection questionnaires

Based on your literature review and interviews, you may need to refine and adapt the matrix and questionnaire, if required, to more accurately reflect that country's situation. For example, on the workshop matrix (Appendix C) there may be some additional key elements which stakeholders feel are important to include in column 1. There also may be some key questions relevant to the country that should be added to or omitted from the regional or facility questionnaire (see Appendix 2 and 3).

3. Conduct data collection and analysis

Identify regional- and/or district-level HCWM coordinators who will complete the regional questionnaire, or identify a team of researchers and a sample of facilities in which to conduct the facility-level questionnaire. As part of this process, you will need to establish a timeline for disseminating and returning the questionnaires, factoring in time for the respondents to complete the questionnaires and return them to you, as well as time for you to look for trends and gaps and summarize the data prior to the workshop.

Data collection questionnaires

These questionnaires are intended to provide an effective, semi-quantitative review of progress and not replace the comprehensive WHO Rapid Assessment Tool for HCWM. Neither questionnaire is intended to be distributed to large sample sizes. It is expected that, depending on the number of regions and/or districts, up to 20 regional questionnaires or between 30-60 facility questionnaires would be distributed or administered.

If your country has a regional or district coordinator for HCWM, it is recommended that you use the regional questionnaire to collect information about injection waste management practices and not the facility questionnaire. Regional coordinators will be familiar with issues at the facility level. The regional questionnaire identifies overarching trends and general practices on a broader level than the facility questionnaire, allowing for a smaller sample of respondents and therefore more rapid aggregation, analysis, and summary of the findings of the data collection process. Because regional representatives will attend the National Self-Assessment Workshop, completion of the regional questionnaire ensures that they will have an opportunity to address any concerns they have and any concerns reported to them by the facilities in their region.

However, if your country does not have a regional HCWM coordinator, you will need to use the facility-level questionnaire. In this case, you may need to hire a small team of researchers to assist you with collecting the information from the sample facilities. Identify four or five regions that represent differences in population size, urban or rural infrastructure, and geographic variation, such as regions with high water tables. The research team should spend one week traveling in pairs to approximately 30-60 facilities. It is recommended the facility questionnaire be conducted across major regions in at least one national hospital and a convenience sample of referral hospitals, district hospitals, large health centers, medium health centers, small health centers, and private-sector facilities per region.

The results from the questionnaires will be one of the reference documents you may use to demonstrate how you ranked the various key elements in the workshop matrix.

4. Organize Self-Assessment Workshop

As the assessment coordinator, you will be responsible for planning, organizing logistics, inviting attendees, and running the National Self-Assessment Workshop. This three-day workshop should include participants from the national, regional, and district levels. The workshop should be composed of about 2/3 national-level participants and 1/3 regional- or district-level participants. The list of participants should not exceed 25 participants with the emphasis on active national stakeholders representative of the many sectors who have a role in HCWM. Participants should include actively engaged representatives from:

- Ministry of Health: Departments of clinical services, infrastructure, Expanded Program on Immunization (EPI), and training.
- Ministry of Environment
- National Environmental Authority
- National Pharmaceutical Authority
- National Medical Stores
- Medical and Nursing Schools
- Professional councils for physicians, nurses, and pharmacists
- Private-sector health facilities
- Private waste collectors
- WHO
- International and national nongovernmental organizations (NGOs) particularly those involved in HIV/AIDS programs or others that generate infectious waste
- Regional HCWM coordinators

Two weeks prior to the national review workshop, you should distribute a packet of information containing the workshop agenda, the workshop matrix with your ranking of the key elements completed, the key national guidance documents you identified during your review of literature and interviews of key stakeholders, and blank copies of the data collection questionnaire used (regional or facility). Request that the workshop participants review these documents prior to the workshop and be prepared to actively contribute to discussions about your ranking of the key elements, identify gaps in national injection waste management planning, and prioritize the next steps for addressing those gaps.

Select facilitators who know the issues, who are good at drawing people out and at synthesizing ideas. It is good to have an overall facilitator for each day or for the whole workshop, though you may want to select facilitators for specific sessions from among the participants. It is essential that you, as the coordinator, present the background and purpose

of the workshop, to ensure everyone has a clear understanding of objectives and expected outcomes.

At the workshop, review your rankings of key elements with the participants and ask for overall feedback, assuring them there will be an opportunity to explore these issues in depth in their small groups. Then ask the participants to break into four working groups (national and regional participants evenly distributed among groups), one for each matrix heading: Planning, Guidance, and Policy; Strategies for Managing Waste; Training; and Cost, Budget, Financial Sustainability. Each group will review and comment on the accuracy of the rankings for each of the HCWM key elements listed under their group's heading. Then, each group should complete columns 4–7: Identify Gaps, Propose Solutions, Priorities, and Next Steps. Further details on each of these activities are included in the Coordinator's Key to Workshop Matrix. If possible, organize for each group to have access to a laptop to facilitate efficient sharing of results when the large group gets back together.

Once each working group has completed their own version of the workshop matrix, you and the workshop facilitator will direct a discussion among all workshop participants during which you will merge the findings of the working groups into one master workshop matrix. This master document will then provide you with a comprehensive overview of your country's progress in the key HCWM elements listed, as well as what gaps should be addressed, next steps for addressing those gaps, and the priority each of those activities should take within your overall national plan for HCWM.

5. Report on self-assessment process

After the workshop, finalize the workshop matrix, then send it out to participants for their final review and ratification. You should also use the findings outlined in the workshop matrix to generate a final report of next steps and priorities for refining your country's national action plans for HCWM including a timeline for implementing the next steps identified at the workshop. This report should be sent to all workshop participants and key HCWM stakeholders in your country including WHO, HCWM representatives at the Ministry of Health, and any HCWM and injection safety committees.

Coordinator's Key to Workshop Matrix

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
Planning, Guidance, and Policy						
National health care waste committee	<p>a. Committee established? (indicate year)</p> <p>b. Membership includes representatives from all major health & environmental sectors (including private non-governmental for profit and non-profit)</p> <p>c. Meets regularly?</p>	<p>a. Yes= 2 points</p> <p>b. 1 point if membership includes some key representatives OR 2 points if membership includes all key representatives.</p> <p>c. Yes= 1 point</p> <p>Total: ____</p>	<p>List any unmet criteria from column 2.</p> <p>Other suggested topics for discussion:</p> <p>Is there a HCWM committee or injection safety committee that reports to the MOH?</p> <p>Include list of names and positions of all committee members—is each of the key health and environmental sectors represented? Are there any sectors not represented that workshop participants</p>	<p>Ask participants what actions would meet the needs identified in columns 3 and 4.</p>	<p>Ask participants to rank the priority of this work, 1=high priority, 5=low priority.</p>	<p>What actions must be taken to achieve the proposed solutions from column 5? Who will be responsible for each of those actions and by what due date will the action be completed?</p> <p>Use the template below to complete this column:</p> <p>Action:</p> <p>Due:</p> <p>Person responsible:</p> <p>Collaborators:</p>

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
			<p>feel should be included?</p> <p>How often does the committee meet? Is this often enough?</p> <p>How often do workshop participants feel the committee should meet?</p> <p>Summarize the scope of work of the committee—are there any areas the workshop participants do not feel are adequately addressed by the committee?</p>			
HCWM assessment	Conducted in past 3 years?	Yes=5 points; No=0 points Total: ____	<p>If an assessment has been conducted, include summary of assessment results in workshop materials packet.</p> <p>Were there any areas for improvement identified in the previous assessment that have</p>	What actions would help to address weaknesses identified in prior assessment, if one was conducted?		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
			not been addressed?			
National guidelines	Specific guidelines on minimum standards, procedures, systems, and supplies developed?	Yes=5 points; No=0 points Total: ____	List any unmet criteria from column 2 or list the titles of any applicable guidelines. Ask the participants by survey or show of hands how many have received copies of these guidelines.	If guidelines have been developed but participants have not received copies, devise strategy for dissemination.		
National HCWM stakeholders meeting (indicate date)	a. Has one been conducted? b. Was there a resulting document (policy document, recommendation, etc)?	a. Yes=3 points b. Yes=2 points (No=0 points) Total: ____	If a stakeholder meeting has been conducted, include the meeting recommendations or other outcome of the meeting in the workshop materials package. Were there any actions or areas for improvement identified at the meeting?	Ask participants what actions would meet the needs identified in columns 3 and 4.		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
HCWM policy	a. Developed? b. Distributed to all national stakeholders? c. Distributed to all districts?	a. Yes=3 points b. Yes=1 points c. Yes=1 point (No=0 points) Total: ____	List any unmet criteria from column 2 or list titles of all relevant policy documents in the workshop materials package. Do the participants feel the policy sufficiently addresses issues of injection safety and injection waste management? If no, why not?	Ask participants what should be done to strengthen the existing HCWM policy. Or, if no policy exists, ask participants what immediate steps should be taken toward developing a policy.		
National action plan (date)	a. Developed? b. Distributed to all national stakeholders?	a. Yes=3 points b. Yes= 2 points (No=0 points) Total: ____	If a plan has been developed but has not been distributed to all stakeholders, which stakeholders have not received it?	If a plan has been developed but stakeholders have not received copies, devise strategy for dissemination.		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
Legal and regulatory framework	Have laws been developed that define HCWM obligations, responsibilities, and enforcement?	Yes=5 points (No=0 points) Total: ____	If laws have been passed, do the participants feel they cover all aspects of injection safety and injection waste management? Are there any areas not covered under the current laws?	Ask participants to suggest modifications to current laws to address any gaps identified. List which committee or legislative representative would be responsible for introducing changes to legislation.		
Treatment and final disposal options	Guidelines developed on treatment approaches for infectious waste?	Yes=5 points (No=0 points) Total: ____	If there are guidelines, are they adequate? Is there any information missing that would be helpful at the facility or district level?	If gaps are identified in column 4, discuss how to incorporate updates into the national guidelines or develop a plan for creating new or updated guidelines.		
Waste minimization	Essential drug policy specifies oral medication as first-	Yes=5 points (No=0 points)	Is use of oral medications consistently promoted	Discuss what other ways oral drugs can be promoted at the		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
	line drugs?	Total: ____	over injections? Are there communication materials available at the facility level directed at promoting use of oral medication? How else might oral medications be promoted over injections?	facility and community level. Devise strategy for promoting oral medication over injections.		
Strategies for Managing Waste						
Segregation	a. Guidelines on segregation developed? b. Sharps segregation guidelines disseminated to regional and facility levels?	a. Yes=2 points b. Yes= 3 points (No=0 points) Total: ____	List any unmet criteria from column 2. Are staff at the regional and facility level knowledgeable about segregation? Did facility- or regional-level data collection highlight any gaps in segregation practices?	Discuss guideline dissemination strategy and training or communication strategy for promoting proper segregation.		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
Storage	Secure storage areas for infectious waste available in health facilities?	a. >80% of facilities have secure storage=5 points b. >40% of facilities have secure storage=3 points c. <30% of facilities have secure storage=1 points d. <10% of facilities have secure storage=0 points Total: ____	Ask regional representatives what percentage of facilities in their regions have secure storage areas.	Discuss strategies for encouraging facilities to allocate dedicated secure storage for HCW.		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
Occupational health and safety	Hepatitis B (HB) vaccine required for all health workers (HW) and waste handlers (WH)?	a. >80% of HWs and WHs receive vaccine=5 points b. >40% of HWs and WHs receive vaccine =3 points c. <30% of HWs and WHs receive vaccine =1 points d. <10% of HWs and WHs receive vaccine =0 points Total: ____	If HB vaccine is required, what is the protocol for HW and WH vaccination? Ask participants what percentage of HW and WH they think are not vaccinated. Why is this so?	Discuss strategies for promoting vaccination of all HW and WH. Communication strategies should target facility managers, regional coordinators, and individual HW and WH.		
Personal protective equipment (PPE)	Supplied to health workers (specify gloves, aprons, boots, masks,	a. >80% of facilities have proper PPE=5 points	Based on data collection from the regional or facility level, what percentage of facilities	Discuss strategies for allocating sufficient PPE for each HW and WH at each		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
	goggles)?	b. >40% of facilities have proper PPE =3 points c. <30% of facilities have proper PPE =1 points d. <10% of facilities have proper PPE =0 points Total: ____	have at least the minimum PPE? What types of PPE are most commonly missing from facilities? For which positions? Do WHs receive PPE appropriate to their work?	facility. How will supplies be made available? What budgeting process should be undertaken to ensure that supplies are restocked and replaced as needed?		
Needlestick injury (NSI) report form	a. Developed? b. Available at facilities? c. Utilized at facilities? d. Included in health management information systems (HMIS)	a. Yes=1 point b. Yes=1 point c. Yes=2 points d. Yes=1 point (No=0 points) Total: ____	List any unmet criteria from column 2. If there are national data on needlestick injuries available, present this data at the workshop. Ask participants how accurate they believe this information to be. Do they feel NSIs are	Discuss strategies for encouraging NSI reporting. Include strategies for raising awareness about the dangers associated with NSI and communicating strategies for mitigating stigma		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
	reporting?		always reported? If not, what do they estimate as the actual average number of NSI per HW or WH?	associated with NSI.		
Post-exposure Prophylaxis (PEP)	a. Developed and available at facilities? b. Available at the time of injury at all facilities?	a. Yes= 2 points b. Yes= 3 points (No=0 points) Total: ____	List any unmet criteria from column 2.	If PEP is not always available, why not? What steps can be taken to ensure HW and WH have access to PEP at time of injury?		
Training						
HCWM raining strategy integrated into pre-service and in-service training?	Does each of the following positions receive formal HCWM training? a. Health workers b. Waste handlers c. Middle managers	a. Yes= 2 points b. Yes= 2 points c. Yes=1 point (No=0 points) Total: ____	List any unmet criteria from column 2.	If HCWM is not included in training schedule for each type of health worker, identify opportunities for incorporating HCWM into trainings.		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
Costs / Budget / Financial Sustainability Plan						
Budget lines for HCWM	<p>Does each of the following levels of the health system have HCWM included as a budget line-item?</p> <p>a. National b. District c. Facility</p>	<p>a. Yes=2 points b. Yes=2 points c. Yes=1 point (No=0 points) Total: ____</p>	<p>What is included in each level's HCWM budget? Consider the following key components of a HCWM budget:</p> <ul style="list-style-type: none"> ➔ Capital equipment (incinerators, autoclaves, shredders, clinical waste vehicles, waste pits, fences, etc.) ➔ Recurrent supply costs (safety boxes, PPE, fuel, transport fees, bins & bin liners, etc) ➔ Recurrent maintenance & repair costs ➔ Training & 	<p>Devise a strategy for including all key components of HCWM in each level's budget.</p>		

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority (Rank 1–5)	Next steps to refine plan and fill gaps
			supervision ➔ Personnel			
Financial sustainability strategies	a. “Polluter Pays” principle enforced? b. Funders identified? c. Service charges for treatment and disposal?	a. Yes=2 points b. Yes=2 points c. Yes=1 point (No=0 points) Total: ____	Are there any measures for ensuring continued and sufficient funding of HCWM? What other measures might ensure sustainable resource allocation?	Discuss strategies for incorporating sustainability measures into national policy.		

Appendix B—Data Collection Tools

NOTES

Facility Questionnaire

Instructions to the researcher

This questionnaire is intended to gather information on how well national-level policy and guidelines regarding injection waste management have been implemented at the facility level and to gather basic injection waste management metrics for use in addressing gaps at the national level.

The data collected in this questionnaire will provide a “snapshot” of injection waste management practices at the facility level in order to inform the direction and content of national planning for waste management and can be conducted in a small set of facilities. It is recommended that a minimum set of facilities include two small- and two medium-size facilities, and two hospitals, with a sampling of urban and rural sites.

This is not an in-depth assessment and is not intended as a stand-alone evaluation tool. Instead, the qualitative data collected will be supplemented by an observer’s checklist at the end of the questionnaire. This will help to quantify some of the answers collected and will help to document actual practices.

It is anticipated that at many facilities the questions in this document may apply to several personnel. To facilitate implementation, the questions have been grouped according to the role or position most likely responsible for the area being addressed.

Mobilization is a key part of this piloting process. Prior to your visit to each facility, your coordinator will have informed them of your arrival time and will make the necessary schedule adjustments to ensure that the appropriate staff are available.

Date:_____

Name of researcher:_____

Health Care Waste Management Guidance

NOTES

(Interviewee: Facility manager or equivalent position)

Thank you for taking the time to discuss injection waste management practices at your facility. Your responses will be kept confidential, and you do not have to answer any questions you do not wish to answer. For the purposes of this questionnaire, you will only be asked about your injection waste management practices, not about all waste at your facility. Your input will help us understand the best ways to support good practices for injection waste management in facilities like yours.

6. Province and district facility is located in: _____

7. Location type: ☐ Urban ☐ Peri-urban ☐ Rural

8. Quadrant: ☐ North ☐ South ☐ East ☐ West ☐ Central

9. Facility size: ☐ Small ☐ Medium ☐ Large ☐ Hospital

10. Type of facility:

- ☐ Private for-profit
- ☐ Private not-for-profit
- ☐ Public/government

11. Please describe how injection waste is managed at your facility: _____

12. How well do you think injection waste is managed at your facility? Please describe.

☐ Well _____

☐ Satisfactory_____

☐ Not well_____

NOTES

13. Have you received any guiding documents (policies, guidelines, plans, etc.) for injection waste management? **Y / N**

a. Please check which documents you have received:

COUNTRY Specific to be Filled in by Coordinator

14. Has anyone at your facility received training in injection waste management in the past year? **Y / N**

a. If YES, what positions?

15. What additional HCWM training would be beneficial for the facility staff?

16. Do you have a line item for HCWM supplies in your facility budget? **Y / N**

a. If YES, what is your total budget for HCWM? _____ / _____ months

17. Do you have a facility plan for injection waste disposal? **Y / N**

a. Do you have a written copy of the plan available at your facility?

18. Are there any important issues or problems you are facing with HCWM that you need assistance with? Please number them by priority:

Priority	Issue	Please describe
	<input type="checkbox"/> Supplies (safety boxes, needles/syringes, Personal Protective Equipment, etc):	

Priority	Issue	Please describe
	<input type="checkbox"/> Equipment maintenance or repair	
	<input type="checkbox"/> Training	
	<input type="checkbox"/> Staffing	
	<input type="checkbox"/> Budget	
	<input type="checkbox"/> Final disposal solution	
	<input type="checkbox"/> Other	

NOTES

Injection Waste Management Practices

NOTES

(Interviewee: Head nurse or equivalent position)

Thank you for taking the time to discuss how you handle injection waste at your facility. Your responses will be kept confidential, and you do not have to answer any questions you do not wish to answer. For the purposes of this questionnaire, you will only be asked about your injection waste management practices, not about all waste at your facility. Your input will help us understand the best ways to support good practices for injection waste management in facilities like yours.

19. Please describe how your facility handles injection waste.

COUNTRY SPECIFIC TO BE MODIFIED BY COORDINATOR

<p>A. Sharps Waste (check all that apply):</p> <p><u>Segregation</u></p> <p><input type="checkbox"/> Placed in safety box/sharps container.</p> <p><input type="checkbox"/> Placed in other designated container. Please specify: _____</p> <p><input type="checkbox"/> Use needle cutter to separate needle from syringe.</p> <p><input type="checkbox"/> Needles disposed in needle pit/barrel.</p> <p><input type="checkbox"/> Needles disposed in waste pit with other waste.</p>	<p>B. Infectious Waste (check all that apply):</p> <p><u>Segregation</u></p> <p><input type="checkbox"/> Placed in bin with liner. <input type="checkbox"/> Color of bin: _____ <input type="checkbox"/> Color of liner: _____</p> <p><input type="checkbox"/> Placed in bin without liner. <input type="checkbox"/> Color of bin: _____</p> <p><input type="checkbox"/> Placed in other container: Describe: _____</p> <p><u>Storage</u></p> <p><input type="checkbox"/> Stored in locked area.</p> <p><input type="checkbox"/> Stored in unlocked area.</p>
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NOTES

<input type="checkbox"/> Syringe barrels disposed in safety box/sharps container. <input type="checkbox"/> Syringe barrels disposed with non-sharp infectious waste. <input type="checkbox"/> Syringe barrels disposed with general waste. <input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____ <u>Treatment/Final Disposal</u> <input type="checkbox"/> Transported to municipal dump or central disposal facility. <input type="checkbox"/> Burned in incinerator. <input type="checkbox"/> Burned in pit. <input type="checkbox"/> Dumped in fenced waste area. <input type="checkbox"/> Dumped in unfenced waste area. <input type="checkbox"/> Buried in protected pit. <input type="checkbox"/> Buried in open pit. <input type="checkbox"/> Other: _____
<u>Storage</u> <input type="checkbox"/> Stored in locked area. <input type="checkbox"/> Stored in unlocked area. <input type="checkbox"/> Other: _____ <u>Treatment/Final Disposal</u> <input type="checkbox"/> Safety box/sharps containers burned in incinerator on site. <input type="checkbox"/> Safety box/sharps containers transported to district incinerator. <input type="checkbox"/> Safety box/sharps containers buried on site. <input type="checkbox"/> Safety box/sharps containers burned in pit on site. <input type="checkbox"/> Needles emptied into protected pit. <input type="checkbox"/> Other: _____	

20. What personal protective equipment is provided to health workers and waste handlers at your facility?

Health Worker	Waste Handler
<input type="checkbox"/> None <input type="checkbox"/> Latex gloves <input type="checkbox"/> Masks <input type="checkbox"/> Eye protection <input type="checkbox"/> Other: _____	<input type="checkbox"/> None <input type="checkbox"/> Heavy duty gloves <input type="checkbox"/> Latex gloves <input type="checkbox"/> Boots <input type="checkbox"/> Goggles <input type="checkbox"/> Masks <input type="checkbox"/> Apron <input type="checkbox"/> Other: _____

NOTES

21. Is there one person at your facility who is responsible for overseeing your facility's waste management practices? **Y / N**

a. If YES, what is the title of this position? _____

22. What would you recommend to the national planners to improve injection waste disposal at your facility? _____

Injection Waste Disposal Practices

(Interviewee: Waste handler or equivalent position)

Thank you for taking the time to tell us how you handle injection waste at your facility. Your responses will be kept confidential, and you do not have to answer any questions you do not wish to answer. For the purposes of this questionnaire, you will only be asked about your injection waste management practices, not about all waste handling at your facility. Your input will help us understand the best ways to support good practices for injection waste management in facilities like yours.

NOTES

23. Are sharps (needles, syringes, IV tubes, blood collection devices, etc) put into a specific container after they are used? **Y / N**

a. If YES, what are they contained in?

- ☐ Safety box
- ☐ Plastic sharps container
- ☐ Waste bin
- ☐ Open cardboard box (not safety boxes)
- ☐ Jerry can
- ☐ Other: _____

24. What is done with the safety boxes/sharps containers collected for disposal?

- ☐ Stored in locked area (incinerator cage, fenced area, locked closet).
- ☐ Stored in unlocked area (office, restroom, outside).
- ☐ Emptied and reused.
- ☐ Transported to district incinerator.
- ☐ Burned in incinerator on site.
- ☐ Burned in pit on site.
- ☐ Buried in protected pit on site.
- ☐ Buried in open pit on site.
- ☐ Needle cutter container emptied into protected pit.
- ☐ Other: _____

25. Is there a system for identifying and separating sharps waste, non-sharp infectious waste, and general waste? **Y / N**

a. Please describe: _____

NOTES

26. Do you ever find needles and syringes or other sharps waste:

- ☐ Mixed with infectious or general waste?
- ☐ Lying on open surfaces or in bed linens?
- ☐ Placed in undesignated containers (kidney pans, trays, jars, etc.)?

27. Is sharps waste stored before it is disposed?

- ☐ Stored in locked area (incinerator cage, fenced area, locked closet).
- ☐ Stored in unlocked area (office, restroom, outside).
- ☐ Not stored, immediately disposed.

28. How is sharps waste disposed?

- ☐ Transported to municipal dump or central disposal facility.
- ☐ Burned in incinerator.
- ☐ Burned in pit.
- ☐ Dumped in fenced waste area.
- ☐ Dumped in unfenced waste area.
- ☐ Buried in protected pit.
- ☐ Buried in open pit.
- ☐ Other: _____

29. What personal protective equipment do you use when handling waste?

- ☐ None
- ☐ Heavy duty gloves
- ☐ Latex gloves
- ☐ Boots
- ☐ Goggles
- ☐ Masks
- ☐ Apron
- ☐ Other: _____

30. Have you received training in the past year on handling sharps waste? **Y / N**

31. If you had the resources, what would you do to improve injection waste disposal at your facility? _____

NOTES

Observer's Checklist for Injection Waste Management

32. Is there a system for segregation of sharps waste?

33. Is non-sharp infectious waste segregated from noninfectious waste?

a. If YES, is there a color-coded system in place? **Y / N**

34. Are safety or sharps boxes present at each injection station?

☐ Yes (all areas) ☐ No (not all areas)

35. If needle removers are used, is there one by each injection station?

☐ Yes (all areas) ☐ No (not all areas)

36. Are other containers not designed for sharps disposal being used for holding used needles or other sharps waste? **Y / N**

If so, describe the containers being used: _____

37. Are there overflowing or damaged (water, impact, puncture) sharps containers in either the storage area or injection areas? **Y / N**

38. Do the sharps containers show any signs of being emptied and reused? **Y / N**

39. Are there sharps in the infectious or general waste containers? **Y / N**

40. Are there any sharps present in open containers or otherwise improperly disposed of inside the health center? **Y / N**

41. Are the sharps boxes waiting for disposal/incineration stored in a secure or nonsecure location? ☐ Secure ☐ Nonsecure

NOTES

42. Is there evidence of used, uncontained sharps outside the health center and/or around the waste disposal site? **Y / N**

43. Are color-coded waste bins present in all areas? **Y / N**

44. Did all waste bins have appropriately colored bin liners? **Y / N**

45. By looking in waste bins, does it appear that people are segregating properly (no sharps in other waste containers)? **Y / N**

46. Is the waste awaiting final treatment and disposal properly segregated within the storage location? **Y / N**

a. Is it protected from the weather? **Y / N**

47. What waste disposal methods do you see evidence of at this facility? (*check all that apply*)

- ☐ Open burning on the ground.
- ☐ Burning in a hole or in an enclosure.
- ☐ Incineration.
- ☐ Burial.
- ☐ Dumping in a pit latrine or other secure hole (pit).
- ☐ Dumping in an unsupervised area.
- ☐ Transportation for off-site treatment.
- ☐ Other: _____

48. Are there maintenance problems with any of the equipment used for treatment or disposal? **Y / N**

a. Please describe: _____

49.Are there written guidelines or a written facility plan on HCWM

Y / N

NOTES

50.Ask the waste handler to show you the personal protective equipment she or he has available.

Waste Handler
<input type="checkbox"/> None
<input type="checkbox"/> Heavy duty gloves
<input type="checkbox"/> Latex gloves
<input type="checkbox"/> Boots
<input type="checkbox"/> Goggles
<input type="checkbox"/> Mask
<input type="checkbox"/> Apron
<input type="checkbox"/> Other:_____

51.Other comments:

Regional Questionnaire

Instructions to the respondent

This short questionnaire is intended to gather information on how well national-level policy and guidelines regarding injection waste management have been implemented at the district and facility level and to gather basic metrics on injection waste management for use in addressing gaps at the national level.

This is not an in-depth assessment and is not intended as a stand-alone evaluation tool. Instead, the data collected in this questionnaire will provide a “snapshot” of practices of injection waste management in order to inform national planning for waste management.

Your responses will be confidential. Individual responses will be combined to draw broad conclusions about injection waste management and inform planning at the national level.

Thank you for taking the time to complete this short questionnaire.

Current Practices

1. How many health facilities are in your district?
 - ☐ Government facilities: _____
 - ☐ Private not for profit: _____
 - ☐ Private for profit: _____
2. Is there a district HCWM committee?
3. Does the committee include representatives from:
 - ☐ Private for-profit health facility
 - ☐ Private non-profit (non-governmental or faith-based organization) health facility
 - ☐ Government-run health facility
 - ☐ Hospital
 - ☐ Large health facility
 - ☐ Medical health facility
 - ☐ Small health facility

4. What are the current practices for syringe waste for facilities in your district:

Hospital	Large Facility	Medium Facility	Small Facility
<u>Segregation</u> <input type="checkbox"/> Placed in safety box/sharps container <input type="checkbox"/> Placed in other designated container. Please specify: <input type="checkbox"/> Use needle cutter to separate needle from syringe.	<u>Segregation</u> <input type="checkbox"/> Placed in safety box/sharps container <input type="checkbox"/> Placed in other designated container. Please specify: <input type="checkbox"/> Use needle cutter to separate needle from syringe.	<u>Segregation</u> <input type="checkbox"/> Placed in safety box/sharps container <input type="checkbox"/> Placed in other designated container. Please specify: <input type="checkbox"/> Use needle cutter to separate needle from syringe.	<u>Segregation</u> <input type="checkbox"/> Placed in safety box/sharps container <input type="checkbox"/> Placed in other designated container. Please specify: <input type="checkbox"/> Use needle cutter to separate needle from syringe.

Hospital	Large Facility	Medium Facility	Small Facility
<input type="checkbox"/> Syringe barrels disposed in safety box/sharps container. <input type="checkbox"/> Syringe barrels disposed with non-sharp infectious waste. <input type="checkbox"/> Syringe barrels disposed with general waste. <input type="checkbox"/> Other: _____	<input type="checkbox"/> Syringe barrels disposed in safety box/sharps container. <input type="checkbox"/> Syringe barrels disposed with non-sharp infectious waste. <input type="checkbox"/> Syringe barrels disposed with general waste. <input type="checkbox"/> Other: _____	<input type="checkbox"/> Syringe barrels disposed in safety box/sharps container. <input type="checkbox"/> Syringe barrels disposed with non-sharp infectious waste. <input type="checkbox"/> Syringe barrels disposed with general waste. <input type="checkbox"/> Other: _____	<input type="checkbox"/> Syringe barrels disposed in safety box/sharps container. <input type="checkbox"/> Syringe barrels disposed with non-sharp infectious waste. <input type="checkbox"/> Syringe barrels disposed with general waste. <input type="checkbox"/> Other: _____
<u>Storage</u> <input type="checkbox"/> Stored in locked area. <input type="checkbox"/> Stored in unlocked area. <input type="checkbox"/> Other: _____	<u>Storage</u> <input type="checkbox"/> Stored in locked area. <input type="checkbox"/> Stored in unlocked area. <input type="checkbox"/> Other: _____	<u>Storage</u> <input type="checkbox"/> Stored in locked area. <input type="checkbox"/> Stored in unlocked area. <input type="checkbox"/> Other: _____	<u>Storage</u> <input type="checkbox"/> Stored in locked area. <input type="checkbox"/> Stored in unlocked area. <input type="checkbox"/> Other: _____
<u>Treatment/Final Disposal</u> <input type="checkbox"/> Safety box/sharps containers burned in incinerator on site. <input type="checkbox"/> Safety box/sharps containers transported to district incinerator. <input type="checkbox"/> Safety box/sharps containers buried on site. <input type="checkbox"/> Safety box/sharps containers burned in pit on site. <input type="checkbox"/> Needles emptied into protected pit. <input type="checkbox"/> Other: _____	<u>Treatment/Final Disposal</u> <input type="checkbox"/> Safety box/sharps containers burned in incinerator on site. <input type="checkbox"/> Safety box/sharps containers transported to district incinerator. <input type="checkbox"/> Safety box/sharps containers buried on site. <input type="checkbox"/> Safety box/sharps containers burned in pit on site. <input type="checkbox"/> Needles emptied into protected pit. <input type="checkbox"/> Other: _____	<u>Treatment/Final Disposal</u> <input type="checkbox"/> Safety box/sharps containers burned in incinerator on site. <input type="checkbox"/> Safety box/sharps containers transported to district incinerator. <input type="checkbox"/> Safety box/sharps containers buried on site. <input type="checkbox"/> Safety box/sharps containers burned in pit on site. <input type="checkbox"/> Needles emptied into protected pit. <input type="checkbox"/> Other: _____	<u>Treatment/Final Disposal</u> <input type="checkbox"/> Safety box/sharps containers burned in incinerator on site. <input type="checkbox"/> Safety box/sharps containers transported to district incinerator. <input type="checkbox"/> Safety box/sharps containers buried on site. <input type="checkbox"/> Safety box/sharps containers burned in pit on site. <input type="checkbox"/> Needles emptied into protected pit. <input type="checkbox"/> Other: _____

5. Does your district have a written HCWM plan or set of guidelines? **Y / N**

Guidance

6. What portion of the facilities in your district have received guidance on HCWM planning (e.g., training, copy of guidelines, visit from coordinator, etc)?

- ☐ >90%
- ☐ >50%
- ☐ >20%
- ☐ <20%

Please specify what type of guidance they have received:

7. What portion of the health workers and waste handlers in your district have received training/refresher training on proper health care waste management practices in the past year?

- ☐ >90%
- ☐ >50%
- ☐ >20%
- ☐ <20%

8. Have you received training or refresher training in HCWM in the past year? **Y / N**

9. What additional HCWM training would be beneficial for you?

10. What additional HCWM training would be beneficial for the staff in your district?

11. Were you given guidance on developing a district plan? **Y / N**

- ☐ No guidance
- ☐ Some but not enough guidance
- ☐ Enough guidance

12. Please describe the guidance you were given on developing a plan for management of sharps waste:

13. Do you feel this guidance is practical in your district? **Y / N**

Why or why not? _____

Needs

14. Have you received a copy of the national policy/guidelines for HCWM? **Y / N**

15. Have you received any other documents on national policy for HCWM? **Y / N**

16. Please check which documents you have received:

COUNTRY SPECIFIC TO BE ADAPTED BY COORDINATOR

17. Do you feel the national policy/guidelines on HCWM are practical for your district? Why or why not?

18. Do you feel the guidance outlined in the national policy/guidelines is sufficient to develop district and facility plans?

19. Do facilities in your district have sufficient budget to address the key components outlined in the national policy/guidelines? **Y/N**

If no, what things are not funded that would help address proper HCWM?

20. What are the important issues or problems you are facing with HCWM that you need assistance with? Please number them by priority.

Priority	Issue	Please describe
	<input type="checkbox"/> Supplies (safety boxes, needles/syringes, personal protective equipment, etc):	
	<input type="checkbox"/> Equipment maintenance or repair	
	<input type="checkbox"/> Training	
	<input type="checkbox"/> Staffing	
	<input type="checkbox"/> Budget	
	<input type="checkbox"/> Final disposal solution	
	<input type="checkbox"/> Other	

Appendix C—National Self-Assessment Workshop Materials

National Self-Assessment Workshop Agenda

Day 1	Chairperson:	
	Registration	Coordinator
1.5 hours	Welcome, introductory remarks, and introduction of participants	Facilitator
	ICEBREAKER	
	<ul style="list-style-type: none"> Medical waste risks and priorities. Workshop objectives 	
1.5 hours	Overview of National Self-Assessment Process <ul style="list-style-type: none"> Introduce Workshop matrix Review Workshop Matrix Columns 2 and 3 (Coordinator's summary of findings) Successes & challenges at facility or district level (questionnaire results). 	Coordinator
1 hour	LUNCH	
3.5 hours (including break)	Group work—Groups break out by Matrix heading: <ul style="list-style-type: none"> Group 1: Planning, Guidance, and Policy Group 2: Strategies for Managing Waste Group 3: Training Group 4: Cost, Budget, Financial Sustainability. <ul style="list-style-type: none"> Each group should select a leader and secretary. Begin filling out Columns 4–7: Identify Gaps, Propose Solutions, Priorities, and Next Steps 	Group
30 mins	Close: Review Day 1, Overview of Day 2 Agenda.	Facilitator
Day 2	Chairperson:	
1 hour	Opening remarks, review agenda for Day 2	Facilitator
	ICEBREAKER	
2 hours	Group work (continued)—Complete filling out Column 4–7 in groups from Day 1.	Group
1 hour	LUNCH	
3.5 hours (including break)	Synthesis of Group Findings & Prioritization <ul style="list-style-type: none"> Representatives from Groups 1 and 2 present findings from their group work, as recorded in Column 7—Next Steps to Refine Plan and Fill Gaps Workshop participants provide feedback on groups findings Coordinator compiles into Master Workshop Matrix 	Facilitator
30 mins	Close: Review Day 2, Overview of Day 3 Agenda.	Facilitator

Day 3	Chairperson:	
1 hour	Opening remarks, review agenda for Day 3	Facilitator
	ICEBREAKER	
3 hours	Synthesis of Group Findings & Prioritization (continued) <ul style="list-style-type: none"> Representatives from Groups 3 and 4 present findings from their group work, as recorded in Column 7—Next Steps to Refine Plan and Fill Gaps Workshop participants provide feedback on groups findings and prioritization Coordinator compiles into Master Workshop Matrix 	Group
1 hour	LUNCH	
2 hours	Summarize Workshop Findings <ul style="list-style-type: none"> Assign action items from Column 7 and propose timeline for completion of actions Create summary document of key findings for distribution to participants 	Facilitator
30 mins	Close	Facilitator

National Self-Assessment Workshop Matrix

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
Planning, Guidance, and Policy						
National health care waste committee	a. Committee established? (indicate year) b. Membership includes representatives from all major health & environmental sectors (including private non-governmental for profit and non-profit? c. Meets regularly?					
HCWM assessment	Conducted in past 3 years?					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
National guidelines	Specific guidelines on minimum standards, procedures, systems, and supplies developed?					
National HCWM stakeholders meeting (indicate date)	a. Has one been conducted? b. Was there a resulting document (policy document, recommendation, etc)?					
HCWM policy	a. Developed? b. Distributed to all national stakeholders? c. Distributed to all districts?					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
National action plan (date)	a. Developed? b. Distributed to all national stakeholders?					
Legal and regulatory framework	Have laws been developed that define HCWM obligations, responsibilities, and enforcement?					
Treatment and final disposal options	Guidelines developed on treatment approaches for infectious waste?					
Waste minimization	Essential drug policy specifies oral medication as first-line drugs?					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
Strategies for Managing Waste						
Segregation	a. Guidelines on segregation developed? b. Sharps segregation guidelines disseminated to regional and facility levels?					
Storage	Secure storage areas for infectious waste available in health facilities?					
Occupational health and safety	Hepatitis B (HB) vaccine required for all health workers (HW) and waste handlers (WH)?					
Personal protective	Supplied to health workers (specify					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
equipment (PPE)	gloves, aprons, boots, masks, goggles)?					
Needlestick injury (NSI) report form	a. Developed? b. Available at facilities? c. Utilized at facilities? d. Included in health management information systems (HMIS) reporting?					
Post-exposure Prophylaxis (PEP)	a. Developed and available at facilities? b. Available at the time of injury at all facilities?					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
Training						
HCWM raining strategy integrated into pre-service and in-service training?	Does each of the following positions receive formal HCWM training? a. Health workers b. Waste handlers c. Middle managers					
Costs / Budget / Financial Sustainability Plan						
Budget lines for HCWM	Does each of the following levels of the health system have HCWM included as a budget line-item? a. National b. District c. Facility					

1	2	3	4	5	6	7
Key elements	Evaluation criteria	Progress (Rank 1–5)	Identify gaps	Proposed solutions	Priority 1=high 5=low	Next steps to refine plan and fill gaps
Financial sustainability strategies	a. “Polluter Pays” principle enforced? b. Funders identified? c. Service charges for treatment and disposal?					