

Evaluations of Healthcare Waste Management Systems Performance in Kenya

Mercy Njeru

Daniel Kimani, Jane Mwangi, Fred Okuku, David Ausdemore

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Introduction

- ❑ Poor management and disposal of medical waste poses major risk to health care workers, patients and the community.**
- ❑ Health care facilities in developing countries often process specimens that are infected with harmful pathogens such as HIV, tuberculosis, and hepatitis.**
- ❑ Hazardous waste generated in such facilities raise concerns of causing potential harm to health workers, the environment and the community.**
- ❑ There are also biosecurity concerns of non-secured waste from biological specimens and agents from these facilities.**

Introduction

- ❑ An effective Health Care Waste Management (HCWM) program requires financial capital and human resource contributions from across the health sector**
- ❑ This should be monitored and evaluated on a continuous basis**
- ❑ To improve waste management, CDC through PATH is supporting the MOH to develop model waste management systems in each of the 47 counties in the country**

Methods

- ❑ To assess the effectiveness of the HCWM systems in Kenya, a two-part facility performance evaluation tool was developed**
- ❑ The evaluation tool was piloted in three regions of Kenya (Western region, Coast region, Central region) in 5 facilities between 11th and 18th October 2012**
- ❑ Each facility was assessed on five programmatic elements**

Methods cont.....

- ❑ **Programmatic elements evaluated:**
 - **Policy and Procedures**
 - **Management and Oversight**
 - **logistics and budget**
 - **Training and occupational health**
 - **Waste treatment and infrastructure.**

Facility assessment tool

Facility Assessment Score Sheet

<i>Section</i>	<i>Total Points</i>	<i>Assessment Score</i>
Section 1: Policies and Procedures	20	
Section 2: Management and Oversight	15	
Section 3: Logistics and Budget	20	
Section 4: Training and Occupational Health	22	
Section 5: Treatment and Infrastructure	23	
TOTAL SCORE	100	

Elements captured in each of the section

Policies and Procedures	Management and Oversight	Logistics and Budget	Training and Occupational Health	Treatment and Infrastructure
<ul style="list-style-type: none"> • Key documents -HCWM plan, -IPC guidelines, -Facility HCWM plan, -SOPs, 	<ul style="list-style-type: none"> • HCWM activities -Infection prevention and control (IPC) committee -Person responsible for HCWM -Supervisor for HCWM/IPC in departments 	<ul style="list-style-type: none"> -Waste segregation -HCWM commodity (bin liners, safety boxes, PPE, incinerator fuel). -Waste transfer systems -Budget for HCWM commodities and supplies 	<ul style="list-style-type: none"> -PPE for Incinerator operators, Waste handlers -Training on IPC, HCWM -Availability of sharps injury surveillance system (PEP, SOPs) -HBV Vaccination 	<ul style="list-style-type: none"> -Waste and treatment and disposal facilities -Equipment maintenance -SOPs -Pollution control devices/ compliance -Waste pooling, NEMA approvals

Scoring of the programmatic elements

- A four color-code rating system based on facility performance was used to summarize findings and provide feedback to facilities as follows:

Scoring Key:

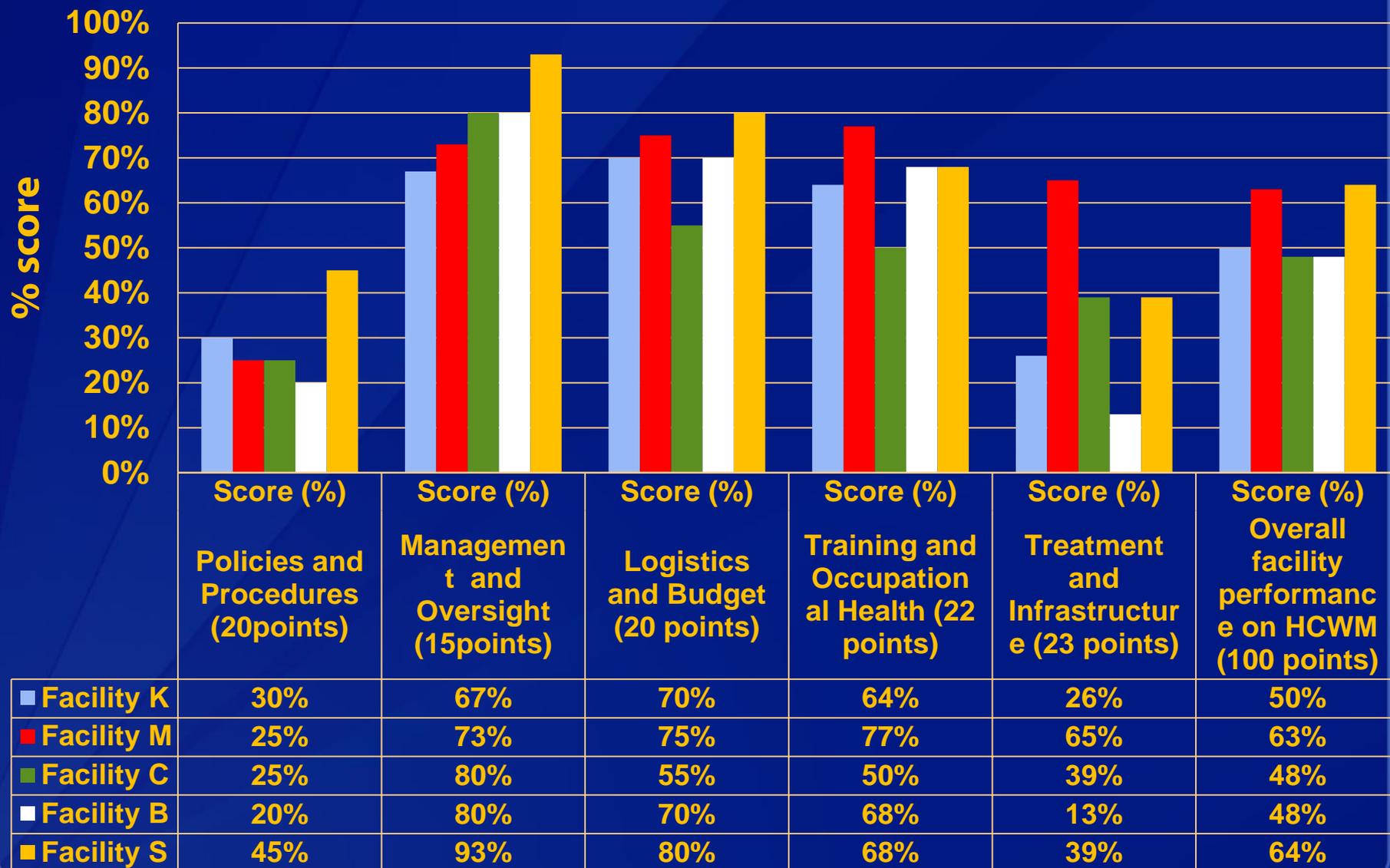
Dark Green (DG) ($\geq 80\%$)- - Surpasses basic expectations

Green (G) (65-79%)-Meets standard

Yellow(Y) (51-64%)-Needs Improvement

Red (R) ($\leq 50\%$)-Needs urgent remediation

Performance of the 5 facilities in the pilot exercise on the 5 programmatic elements



Results...cont'd

- ❑ **Overall, 60% of the facilities (3/5) scored ≤ 50 % while two scored 63% and 64% respectively**
- ❑ **All five facilities performed well on**
 - Management and oversight (mean score=70%)
 - Logistics and budget element (mean score=79%)
- ❑ **Poor performance was observed on**
 - Policies and procedure (mean score= 29%)
 - Waste treatment and infrastructure elements (mean score=38%)

Conclusion

- ❑ **Policies and procedure, waste treatment and infrastructure were identified as the weakest program elements in all five facilities' HCWM systems**
- ❑ **The assessment tool provide an opportunity**
 - To rapidly identify priorities within facilities' HCWM systems
 - Produce recommendations for immediate remediation action
- ❑ **Current effort to address the weak areas**
 - Dissemination of policies , guidelines, IEC materials,
 - Training and support on facility plan, SOPS development
 - Repairs of existing waste treatment equipment
 - Procurement of waste treatment and disposal equipment (Waste transfer trolleys, Macerators, incinerators, autoclaves and shredders)

Thank you.

For more information please contact CDC-Kenya

E-mail: info@ke.cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Center for Global Health
CDC in Kenya

