Rapid Response Fund (RRF)



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OVERVIEW

Timely CCE maintenance depends not only on technical expertise, but also on access to the resources needed to complete repairs. Transportation, spare parts, fuel, technician support and operational funding all influence how quickly equipment can be returned to service. Even when maintenance processes, technicians and monitoring systems are in place, delays in mobilizing these resources can prolong equipment downtime.

Ensuring that maintenance resources are available when needed is therefore a critical component of effective cold chain management. The RRF was developed to address this challenge by providing a structured mechanism for mobilizing resources for urgent CCE maintenance and repair needs. The prototype tested a structured process for requisitioning, approving, disbursing and reconciling resources needed to address urgent maintenance issues.

During implementation in Malawi, the RRF used project-supported funding from Gavi to test the feasibility of a structured maintenance financing mechanism. The longer-term vision is that similar approaches could be supported through government financing, pooled partner funding mechanisms or other sustainable maintenance financing arrangements.

Effective cold chain equipment (CCE) maintenance depends not only on technical expertise, but also on data use and timely access to the resources required to complete repairs. This technical brief describes the Rapid Response and Repair (R3) Rapid Response Fund (RRF) prototype developed and tested in Malawi to strengthen the mobilization of resources for urgent maintenance and repair needs. It outlines the approach, implementation experience and lessons learned from establishing a structured process for resource requisition, approval, disbursement and reconciliation and offers considerations for adaptation in other settings.

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RATIONALE FOR THE RRF

Stakeholder consultations revealed that maintenance issues often remained unresolved not because they were unidentified, but because transportation, spare parts, fuel and operational funding could not be mobilized quickly enough to support repairs. Requests frequently moved through multiple approval processes, resulting in prolonged equipment downtime. To address this challenge, the RRF tested a structured financing workflow that established clear procedures for issue identification, resource requisition, approval, disbursement, repair execution and reconciliation.

The RRF establishes procedures for issue identification, technical assessment, resource requisition, approval, disbursement, repair execution and reconciliation.

APPROACH

How it Works

The RRF establishes a structured workflow that guides maintenance issues from identification through financing, repair and reconciliation. Maintenance needs identified at health facility level are assessed, escalated when necessary, funded through an established approval process and tracked through completion and reconciliation. The workflow is illustrated below.

The RRF establishes a structured workflow that guides maintenance issues from identification through resolution.

Issue detection and initial assessment

The process begins when a maintenance issue is identified at a health facility or through a RTM alert. Facility staff conduct basic troubleshooting and, if the issue cannot be resolved locally, escalate it to the district cold chain technician for assessment.

Validation and resource request

The cold chain technician assesses the issue and determines whether additional action is required. If district resources are insufficient, the District EPI Coordinator submits a requisition to the national cold chain team for approval. Requests may include transportation, spare parts, technical services or other inputs needed to complete repairs. The Fund Manager is copied on the request to facilitate rapid action if approval is granted.

Resource mobilization and repair

Following approval, existing EPI inventory is reviewed and RRF support is provided only for resources not already available. Approved funds are disbursed to suppliers and personnel responsible for completing repairs. The process includes defined timelines for approval, disbursement, repair and reporting.

Accountability and reconciliation

After repairs are completed, expenditures and supporting documentation are reviewed to confirm that approved resources were used appropriately and that equipment functionality has been restored. RTM data and other verification mechanisms support oversight, accountability and reporting.

Audience

EPI focal persons, cold chain technicians, district leadership, national EPI managers and designated fund managers.

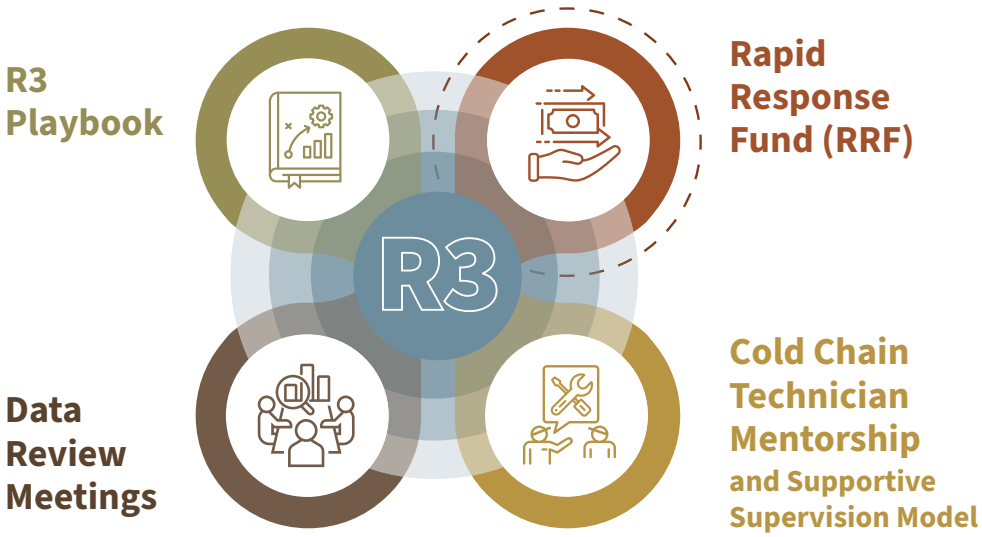
How it Can Be Used and Sustained

The RRF is intended to complement existing maintenance financing mechanisms by providing a structured pathway for addressing urgent maintenance needs that cannot be resolved through routine district resources. Future sustainability will depend on integration within government financing mechanisms, pooled partner funding or other long-term funding arrangements.

Long-term sustainability depends on integration into government and pooled funding mechanisms.

Relationship to Other R3 Components

The RRF functions as part of the broader R3 approach. Maintenance issues identified through Data Review meetings or mentorship activities may trigger RRF requests, while the Playbook documents the workflows, roles and tools that support implementation.



"RRF has been helpful in our district. Most issues pertaining to CCE repairs have now been conducted. We have also seen a heightened conduct of preventive maintenance in our district which was very unusual in the past. RRF has enhanced the proactivity and response time to CCE issues as we were assured of readily available resources to address any issues that come up with certainty."

- District Cold Chain Technician

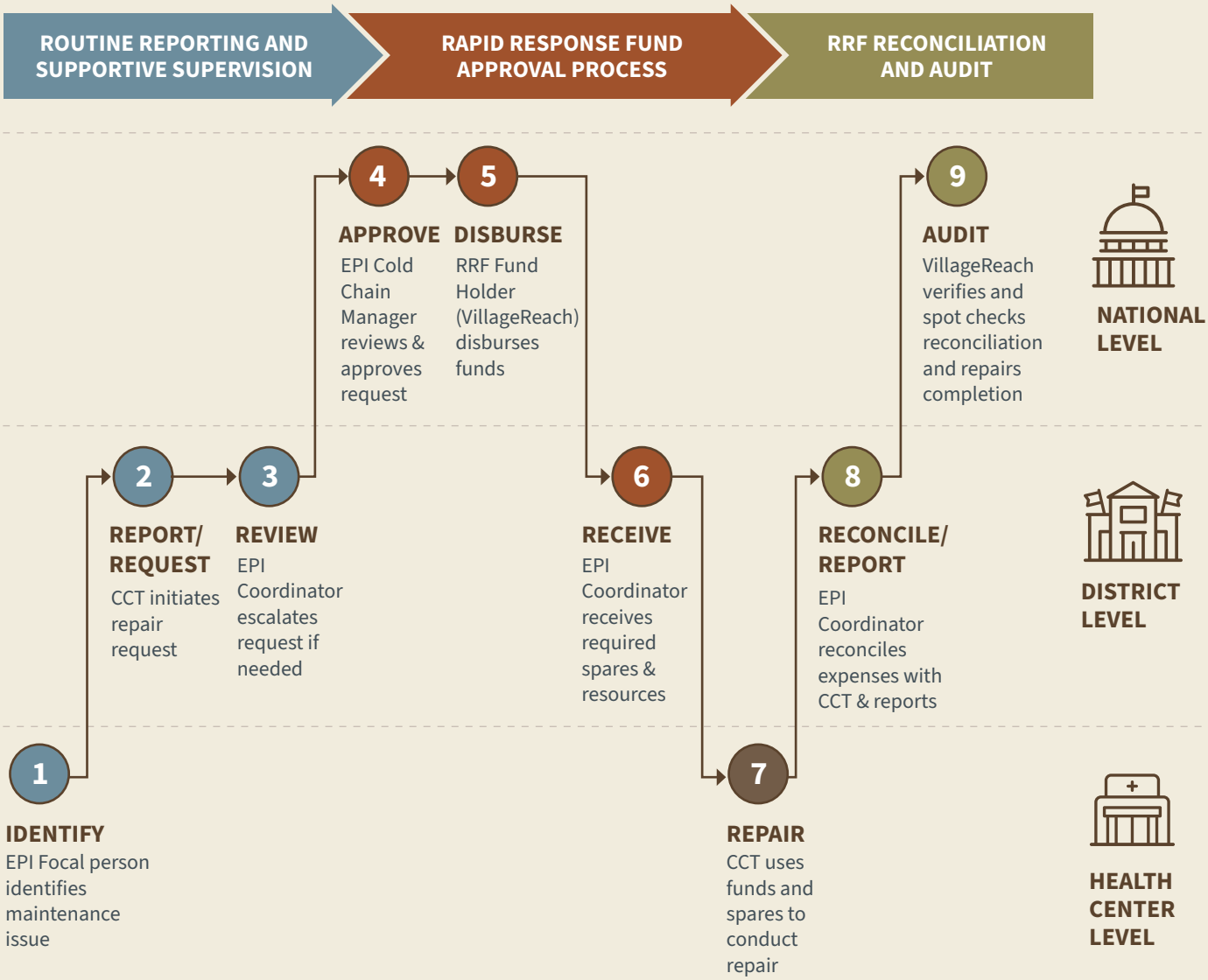

Photo credit: Homeline Media

EXPECTED OUTPUTS AND RESULTS

The RRF prototype developed and tested pathways for requisition, approval, disbursement, repair execution and reconciliation, strengthening the connection between maintenance issue identification and maintenance response. The prototype also generated information on maintenance financing needs, repair costs and resource utilization that can support future planning, budgeting and resource allocation.

To maximize accessibility in a low-digital infrastructure environment, the prototype relied primarily on simple Excel-based tools that were shared electronically for review and approval across different levels of the system. This approach enabled implementation using commonly available software while maintaining required documentation and oversight processes.

The workflow illustrates the full escalation pathway for a CCE issue, from identification through resolution and reporting. In practice, however, many issues are resolved at the health center, district, or national level and do not require escalation through every step. Escalation to the Rapid Response Fund is only necessary when the required spare parts, technical support, or maintenance funds cannot be sourced at the current level.



LESSONS FROM MALAWI

Implementation of the RRF generated several lessons that may be useful for countries seeking to strengthen maintenance financing systems. These lessons reflect practical experiences from implementation in Malawi and highlight important considerations for adaptation, sustainability and scale-up.

KEY LESSON 1

Maintenance financing challenges are often management challenges.

The pilot demonstrated that maintenance delays were frequently driven by unclear responsibilities, approval pathways and accountability mechanisms rather than a lack of awareness of maintenance needs. Countries considering similar approaches should review governance, decision-making authority and coordination structures alongside maintenance financing systems.

KEY LESSON 2

Clearly documented financing workflows reduce uncertainty and improve responsiveness.

Establishing defined processes for resource requests, approvals, disbursement and reconciliation helped stakeholders understand how urgent maintenance needs should be managed. Clear documentation of roles, responsibilities and timelines reduces confusion and strengthens accountability.

KEY LESSON 3

Balancing flexibility with accountability is essential.

Maintenance financing mechanisms must be able to respond quickly while maintaining appropriate financial oversight. During implementation, administrative and procurement requirements occasionally slowed response times, demonstrating the importance of designing systems that support both efficiency and accountability.

KEY LESSON 4

Visibility into spare parts inventories is critical for rapid maintenance response.

Even when maintenance requests and funding approvals moved quickly, repair timelines could still be affected by spare-part availability. Countries implementing similar approaches should strengthen inventory visibility and forecasting processes to minimize avoidable delays and support more efficient repairs.

KEY LESSON 5

Maintenance financing is most effective when linked to maintenance data and routine review processes.

Resource allocation discussions were most effective when informed by equipment performance data, maintenance priorities and unresolved issues. Connecting financing mechanisms to broader maintenance management and review processes can improve prioritization, planning and decision-making.

ASSOCIATED TOOLS AND TEMPLATES

The tools listed below were developed or adapted to support implementation in Malawi. While some are specific to Malawi's context, they illustrate the types of resources countries may consider when adapting a similar approach.

Tool	Purpose
Resource Requisition Form	Documents maintenance resource requests
Resource Reconciliation Form	Supports financial accountability and reporting
RRF Workflow Diagram	Clarifies approval and escalation pathways
Maintenance Issue Assessment Template	Supports validation of maintenance needs
Expenditure Tracking Tool	Tracks resource utilization
Maintenance Cost Monitoring Tool	Supports maintenance planning and forecasting
Approval and Authorization Templates	Documents decision-making processes
Financial Reconciliation Checklist	Supports accountability and audit readiness

During implementation, RRF resources supported procurement of spare parts, RTM accessories and maintenance supplies needed to address identified repair needs.

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