PATHS

Nigeria Partnership for Transforming Health Systems

Technical Brief

Strengthening Sustainable Drug Supply Systems

DFID Department for International Development

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PATHS

Nigeria Partnership for Transforming Health Systems

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Strengthening Sustainable Drug Supply Systems

Summary

Acute shortages of drugs and medical supplies in public health facilities were endemic in most states in Nigeria, and undermined efforts to improve health care delivery. Early on in the Partnerships for Transforming Health Systems (PATHS) Programme, participating states established Drug Revolving Funds (DRF) for secondary and primary health care levels. In order for these to be robust, the drug supply systems required an underpinning financial management system and an assured source of drug supply. It was also necessary to introduce a 'safety net' to ensure that the very poor and vulnerable could access quality drugs through the system.

Drug revolving fund models, developed earlier in Nigeria, were reviewed and a new model was designed. This captured the best elements of previous models and took into account lessons learned from previous implementation experiences. All PATHS supported states rolled out a sustainable drug supply system across the state. A key component was the development of in-state teams of facilitators thus ensuring sustainability and local ownership. Strong community representation on DRF and facility health committees improved relationships between facilities and their communities. Drug availability

increased community confidence in their facilities and, in turn, made communities stronger advocates for their local health facilities. With evidence of increased patronage of facilities, government support for the DRF and for strengthening of financial management systems increased over time, albeit to varying degrees.

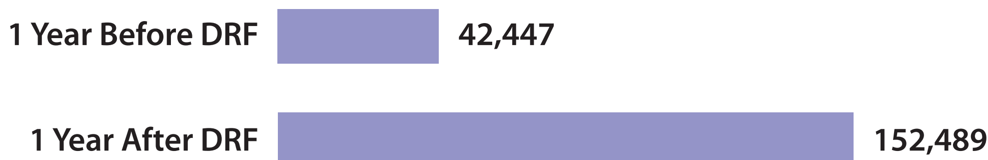
"There are many benefits to having community members involved in the DRF committee. They can explain to the community about the DRF and help manage any problems that arise, including any community misconceptions about the scheme."

Members of DRF Committee, Kudai Village, Dutse, Jigawa

Key lessons learnt include:

- The need to implement DRF in a holistic manner (i.e. addressing the total environment within which it will operate);
- The value of strong and continuing advocacy in support of the scheme at all levels;
- Identifying and applying an appropriate personnel mix;
- The importance of state-wide rollout resulting in 100 percent population coverage;
- The fact that sustainability is dependent on the presence of a robust monitoring and evaluation system, strong community participation, and the introduction of performance based incentives to operators.

Patients (under 5 Years) Attendance in PHC Clinics in Benue



Introduction

Right from the beginning of the PATHS programme, it was apparent that the supply of essential drugs would be fundamental to the success of other initiatives to strengthen the health delivery system in Nigeria. This became a key entry strategy for the PATHS programme.

The Drug Revolving Fund system was not a new concept in Nigeria. Nigerian states had tried different DRF systems including centralised state controlled schemes, the Petroleum Trust Fund and 50% Cost Recovery DRF systems. None of these was particularly successful for a variety of reasons including:

- Insufficient financial resources
- Undue political interference in the functioning of the schemes
- Inadequate managerial and financial autonomy
- Barriers to access for the very poor and vulnerable, because of user fees
- Poor capacity of facility staff
- Operation guidelines not sensitive to local environment
- Lack of a culture of transparency and accountability within the health system and to the community
- Limited capacity for rolling out the schemes statewide.

A review of the previous Nigerian experience with DRFs undertaken in 2003 showed that four interventions were required for a successful and sustainable DRF scheme:

1. Establishment of facility-based DRF systems;
2. Strengthening financial management systems;
3. Creation of a safety net for the very poor;
4. Establishment of an assured source of drugs.

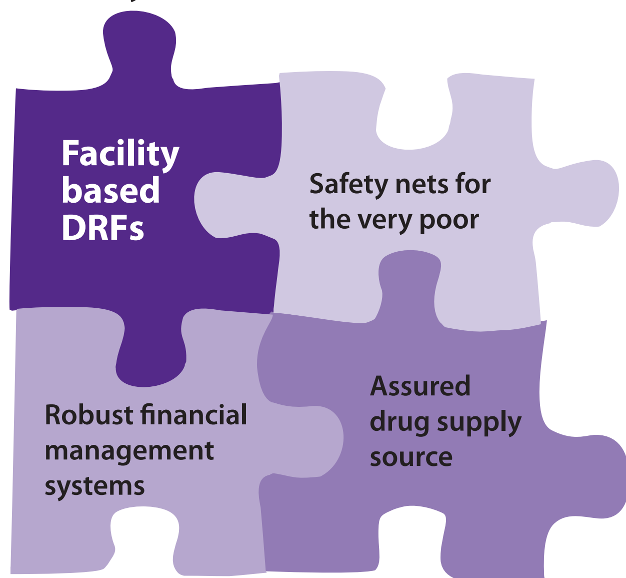
Initially, the focus was on establishing the DRF and financial management systems. Then, in some states, safety nets for the very poor were introduced. Finally, establishing, or strengthening existing state Medical Stores, as an assured source of drugs and medical supplies for health facilities, was addressed. In addition, all stakeholders recognised the importance of involving a critical mass of health facilities in the sustainable drug supply initiative in order to have a measurable impact. Thus, state-wide roll-out took place once the DRF model was tried and tested in a few facilities.

The DRF and financial management systems were established against a backdrop of acute shortages of drugs/consumables and a poor culture of financial transparency and accountability. Both these factors had resulted in the emergence of many variants of unofficial (parallel) DRFs and the entrenchment of bad practices across facilities.

Community witnessing seeds stock at DRF inauguration in Otun Ekiti in 2005

The Response

Four key elements for SDSS success:



Establishing Facility-based DRFs

Unlike centralised DRFs, facility-based DRFs empowered facility staff to manage and operate the DRF independent of the oversight agency, such as the State Health Management Board (SHMB), State Ministry of Health (SMoH) or the Local Government Authorities (LGAs). As with any other purchase, facilities procured drugs from the Central Medical Store (CMS) on a cash and carry basis. The stock was therefore not a mere extension of the CMS, as was the case with a centralised DRF. A key feature of the facility-based DRF was that the pharmacy and service points were capitalised with seed stock. This enabled the service points to replenish stock on a cash and carry basis. The PHC facility also replenished its stock from the LGA DRF Store or the CMS on a cash and carry basis. Oversight of these activities was key. At primary level, Facility Health Committees with substantial community representation played a key role in the governance of the PHC facility. At the secondary level the equivalent body was the Hospital Management Committee.

Four levels of the DRF were therefore established: the CMS, LGAs, hospitals and PHC facilities.[1] The different levels and the fact that transactions were conducted at arm's length, and on a cash and carry basis, increased the chances of survival of the scheme.

1 In states that have adopted the district health system, other oversight agencies will operate.

DRFs were introduced in Ekiti from late 2004

The diagram below shows that in Ekiti over the period 2004-2007 internally generated revenue in secondary health care facilities increased from under 5 million naira (£20,000) to over 80 million naira (£320,000), largely because of the DRF. Internally generated revenue is in Naira.

Internally Generated Revenue in SHC Facilities 2004-2007 Ekiti

** Extrapolated from Jan-June 2007 actual data*

DRFs are based on the principle of cost recovery. This meant that facility users pay a fee which covered the costs of drugs and supplies. This guaranteed continuous availability of drugs as this money is used to replenish stocks. The DRF store operates as a One-Stop-Shop for all medical supplies required in the facility. Pharmacy staff sold drugs to patients in the normal course of consultation and treatment. To measure the health of the fund, two reports were produced periodically (usually monthly): stock movement/valuation report; and fund valuation statement.

KEY STEPS:
Establishing facility-based DRFs:

- Engagement process
- Systems review
- Facility selection and refurbishment
- Drug selection and quantification
- Development of operational guidelines
- Supply of baseline books
- Procurement for capitalisation
- Formation of in-state teams to roll out DRF
- Creating community awareness, mobilisation and ownership
- Monitoring and supervision

Engagement Process

Establishing a drug revolving fund required sustained engagement at all levels; with the Governor, the State Ministry of Health, State Hospital Management Board, the Ministry of Local Government (MoLG), Local Government Service Commission (LGSC), Local Government Councils (LGCs) and the State (Health) Reform Team[2]. Engagement was vital to elicit "buy-in" of the political leadership, to ensure adequate resource allocation, and to prevent decapitalisation. Decentralisation of Internally Generated Revenue (IGR) management to facility level was extensively advocated for during the engagement process.

Systems Review

In each state a mixed team of consultants and local stakeholders conducted reviews of existing drug supply and management systems as well as cross cutting systems that impacted on drug availability (e.g. personnel, infrastructure); and assessed the general readiness of the state facilities to implement the DRF. The review team discussed the findings with a wide range of stakeholders in de-briefing sessions. This ensured:

1. stakeholder buy-in and ownership of the entire process and;
2. stakeholder participation in developing work plans to implement the DRF.

Facility Selection and Refurbishment

Following the initial reviews, the review team selected the facilities for the first phase DRF implementation using pre-agreed criteria. Service-based criteria were used, and these were combined with "political balancing" criteria to ensure even distribution of selected facilities in senatorial districts and wards.[3] In addition, the ease or time within which the facilities would be ready for DRF implementation was considered. The selection process heralded a flurry of activity at facility level to meet the criteria. In many cases, communities mobilised to refurbish facilities to meet the criteria for delivering basic health services.

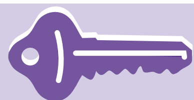
Drug Selection and Quantification

Based on an Essential Drug List (EDL) the review team selected drugs and medical consumables for the DRF. Following this, the team conducted a quantification exercise. In most states, given the paucity of HMIS data, quantification was based

2 These were established in all the PATHS states.

3 Trade-offs between these two sets of criteria were therefore necessary. Note that these criteria were used in most but not all states.

on a combination of facilities' data, bed numbers and population coverage. However, in Enugu, the team used the Minimum Service Package (MSP)[4] as the basis of determining the requirements of the facilities. The teams carried out all these activities with technical support to assure quality.



KEY FACTS

Selection criteria utilised

At the secondary level, facilities needed to be capable of providing basic health care services, which included:

- x-ray services
- laboratory investigations
- surgery
- minimum number of beds (40-50)
- availability of clinical equipment
- availability of basic hospital equipment and adequate infrastructure

At the primary level, facilities needed the following:

- laboratory services
- minor surgery
- maternity services
- facility to admit patient for observation
- minimum bed numbers (5-10)
- clinical equipment and infrastructure

Service criteria were combined with 'political balancing' criteria in some states.

Development of Operational Guidelines

Guidelines for the DRF were developed with large-scale stakeholder participation. Although the high degree of participation slowed down the process of devising an acceptable DRF model, it helped ensure wide-scale ownership of the model and of the implementation process. In the guidelines a number of operational issues were agreed and codified, including:

- Pricing policy (and responsibility for pricing);
- Formation of management structures and committees;
- Role of oversight agencies;
- Monitoring and supervision.

Supply of Baseline Books

The state DRF teams supplied the necessary books and forms to the facilities in readiness for the actual set up of the DRF at facility level.

Procurement for Capitalisation

Drug procurement for capitalising the facilities occurred in two phases. In the second phase, stakeholders utilised the lessons learnt in the first phase (in terms of drug selection and inevitable quantification errors). Seed stocks of drugs were mainly provided through support from the DFID funded Health Commodities Project (HCP) but, in most States, government also contributed funds to procure drugs.

Formation of In-State Teams to Roll-out DRF

Conscious of the need to roll out the DRF quickly and cheaply, states initiated a process of building local capacity to oversee the roll-out process. To this end, in-state DRF teams were formed. The first step was training national consultants – both pharmacists and accountants. These consultants then trained two in-state teams of facilitators - one for hospitals and the other for PHC facilities. The teams were responsible for rolling out the DRF/FM systems and for providing technical support to facility staff.

4 For more detail see the PATHS Technical Brief on Minimum Service Package.

Displayed Drugs Price List, Enugu

Creating Community Awareness, Mobilisation and Ownership

Creating community awareness, mobilisation and ownership of the DRF was an integral feature of the scheme. Ensuring that communities were aware of the scheme and understood how it worked prior to the scheme 'going live' was vital. In the PATHS states, community level meetings were used to sensitise people in the catchment area of the DRF facilities, and key messages were reinforced via the radio. Sensitization of the community included a focus on ownership (an overview of the role of the DRF management committee was provided) and on the transparency of the scheme (e.g. the fact that facilities would display price lists and issue receipts for drug purchases).

"There was a recent situation where community members knew that a price list for drugs should be on display. It wasn't. They complained and the facility responded by putting one up."

Kano, State DRF Committee Member

"My people travelled long distances to source drugs and medication. The services of PATHS are a significant milestone and frankly speaking we have never had it so good and this kind of partnership with government should be sustained."

Chief Lawrence Ozochukwu, Chairman, Health Committee, Oyofo Oghe Community

CASE STUDY:

Communities Lobby for Inclusion in the DRF Scheme

In Galadi Community, Maigatari LGA, Jigawa, members of the community identified lack of drugs and poor infrastructure of their health facilities as two of the most pressing health issues. The community resolved to present the issue and press for renovation of their facility and access to the DRF scheme through the head of the local government Health Department, who would, in turn, present the case to the local government policy makers who were responsible for releasing money from the ballot box funds. Local CBOs supported the community to articulate their needs in writing and the letter was presented to the LGA policy makers. Elites belonging to the CBO, including the elected councillor of the ward, followed up on the written request. The facility was renovated through funds released from the ballot box and was later selected for participation in the DRF scheme.*

****From Soyoola, M., 2007, Strengthening Citizens Voice and Accountability for Better service Delivery: Case Study of Community Action Cycle (CAC) in the DFID Funded PATHS Programme in Jigawa State, Nigeria, Prepared for Options Consultancy Services, May.***

Monitoring and Supervision

Following the launch of the DRF, the in-state teams conducted DRF monitoring in three phases:

First phase (one week after the DRF went live) – this involved checking compliance with the guidelines and supporting staff where necessary.

Second phase – continuation of monthly monitoring. In most states this was for one year.

Third phase - routine monitoring was conducted on a quarterly basis.

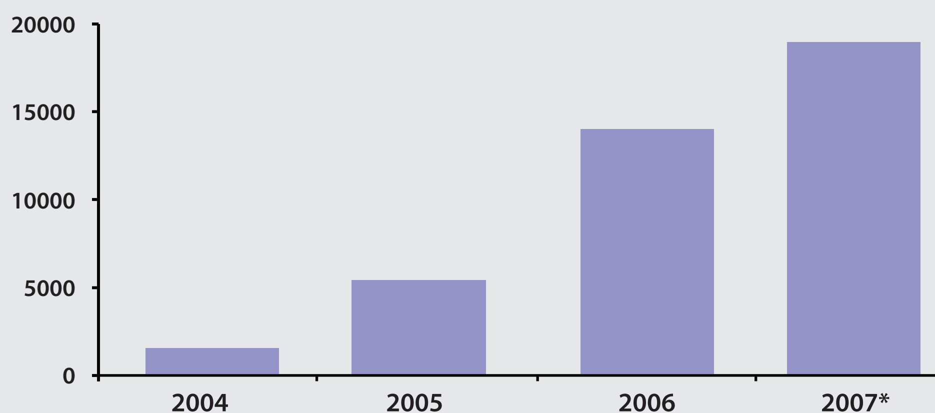
PATHS provided funding for the first two monitoring phases. Thereafter, the oversight agencies (SMOH, SHMB, LGAs) were encouraged to take responsibility for all monitoring, evaluation, supervision and sanction (MESS) activities. In order to fund this important aspect of DRF, the SHC facilities remitted some proportion of the DRF mark-up to the appropriate oversight agency. Over time, DRF supervision would integrate with the general supervision system that government would hopefully fund directly. In the 2008 budgets, some states had a budget line item for supervision.

Pharmacist taking Stock in a Hospital in Jigawa

Ekiti introduced DRFs from late 2004 onwards

The diagram below shows that over the period of DRF implementation, patient attendance in Ekiti PHC facilities increased from under 10,000 to over 200,000.

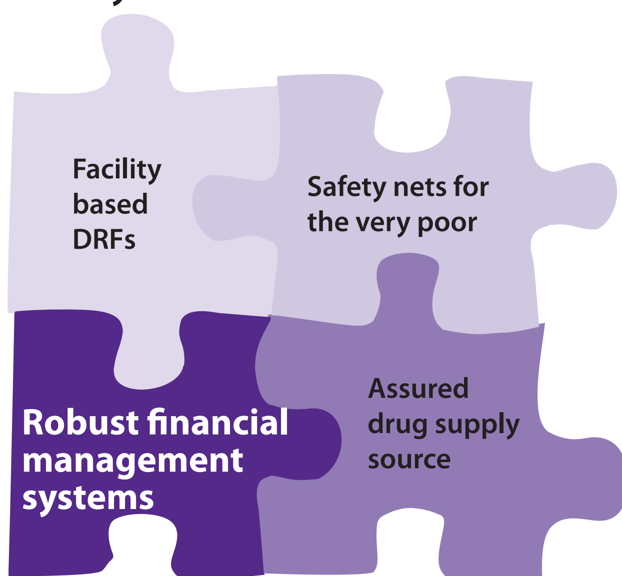
Patients Attendance in PHC Facilities 2004-07 in Ekiti



** Extrapolated from Jan-June 2007 actual data*

Strengthening Financial Management Systems

Four key elements for SDSS success:



Historically, strengthening of financial management systems was not seen as a major requirement in the process of establishing DRFs in Nigeria. The lack of financial management tools to demonstrate transparency and accountability meant that it was almost impossible to track revenue and measure relative performance. More importantly, an audit trail for transactions was commonly completely lacking. Early on, PATHS recognized the need for a robust financial management system to underpin the DRF. The system needed to be easy to learn and cheap to implement. Facility staff would produce statements of income received and payments to measure the inflow and outflow of funds from the facilities. The data generated from these statements, combined with other financial statistical data, produced the DRF fund valuation statement.

Challenges

Across the States supported by PATHS, critical challenges in strengthening the financial management systems were apparent at an early stage. The major challenge was multiple oversight institutions all of which had generally weak financial management systems. In most States, State Hospital Management Boards had been established to exercise the necessary oversight over hospitals while the SMoH limited itself to planning and policy formulation. In a few cases, such as Jigawa and Federal Capital Territory (FCT), the SMoH (or its equivalent - the Health and Human Services Secretariat in FCT) combined the function of SMoH and SHMB. This presented a challenge as it called for a different set of accounting rules. In Jigawa,

the direct access of health facilities to government Treasury added to the complexity of the resulting financial management systems. At the LGA level, the situation was similar.

Other challenges included:

- Establishing FM systems in facilities in the face of acute shortages of accounts staff
- Establishing FM systems in an environment with low capacity among facility staff
- Entrenching a culture of transparency and accountability
- Rolling out the FM system across states with few experienced consultants
- Involving other facility staff (e.g. in the wards) who had previously not been involved in book keeping and were resistant to these changes.

Challenges in Strengthening the FMS

- Multiple oversight institutions
- Shortage of accounting staff
- Poor capacity of accounting staff
- Lack of a culture of transparency and accountability
- Few local experienced consultants
- Other facility staff resistant to changes in the accounting system

Strategies Adopted to Address Challenges

Early in the engagement process, the state DRF team emphasized that establishing a robust financial management system was necessary to manage scarce health resources and indispensable for a sustainable drug supply system.

The team addressed the challenges of oversight, accountability and transparency through a combination of high-level advocacy activities and the involvement of community members in the affairs of the facilities. In some states, community members became signatories to the drug account. The idea was that this would help maintain the integrity of the fund and ensure its survival.

The states solved the challenges of shortage of accounting staff, poor capacity of skilled staff and the shortage of experienced consultants for roll-out in the following ways:

- The proposed financial management system was simple and easy to teach, but robust. The system included organising the FMS at the secondary level into four components:
  - DRF Store;
  - Pharmacy/Dispensary;
  - Service points;
  - Hospital-wide integrative component
- Advocacy to ensure that government deployed a sufficient number of accounting staff to secondary health care facilities.
- Training accounting staff at the hospital level, as well as some of the key staff of the LGAs and primary health care facilities.
- The new FM system operated for six to twelve weeks prior to the introduction of the DRF system in hospitals.
- Training relevant staff of the oversight agencies to provide technical support for facility staff and support for the system.

Steps in Strengthening Financial Management Systems

The steps for strengthening financial management systems were similar to those adopted for implementing the facility-based DRFs. Stakeholders and in-state DRF teams often integrated and implemented the steps simultaneously. In most cases, the two sets of consultants (for financial management system strengthening and DRF implementation) worked together.

KEY STEPS:

Key steps in creating a robust FMS

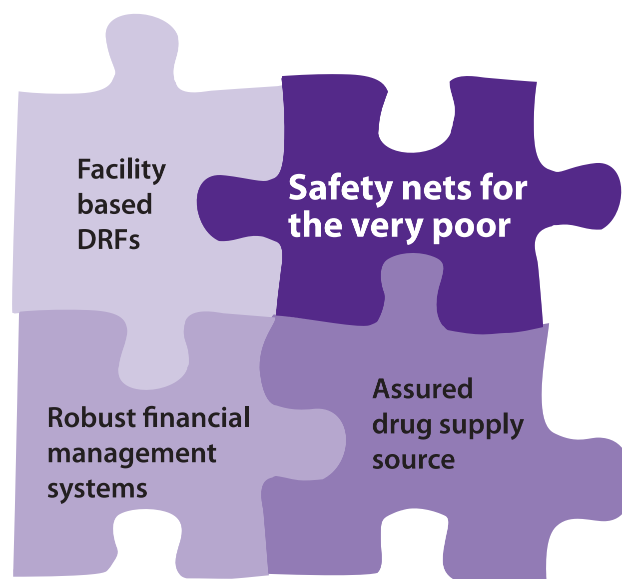
- Engagement process
- Systems review
- Identification of critical accounts staff and deployment to the facilities (SHC level)
- Development of Operational Guidelines
- Supply of baseline books
- Formation of in-state teams to roll out the FMS
- Creating community awareness, mobilisation and ownership
- Monitoring and supervision

At the LGA/PHC level, the financial management system was uncomplicated. Unlike hospitals, PHC facilities had no multi-service points and wards. Thus, the financial management system recorded stock movements and sales at the LGA level, and stock movements, utilisation, and service charges at the PHC level. Because the system was relatively simple, there was no need to establish the financial management system prior to the establishment of the DRF. Therefore, both systems were introduced at the same time.

The emergence of Free Maternal and Child Health Services (MCH), financed by government, as in Kaduna and Enugu, presented a different challenge to the DRF and the underpinning financial management system. The critical issue was sustainability – whether or not the "political will" to fund the programme would be sustained. Accordingly, the design of the financial management system focused on the financing of the drugs and services rather than on the supply of the drugs and services. The system (drug supply and financial management) ran DRF and Free MCH in a harmonised manner but tracked both actual units of MCH drugs and services consumed and the cost equivalent. Thus, the free MCH system was maintained separately from the DRF/FMS. The free MCH costs were later reimbursed from the fund established for that purpose. This set-up had the advantage of insulating the DRF from the impact of possible instability of the Free MCH programme should it be discontinued.

Creating Safety Nets for the Poor

Four key elements for SDSS success:



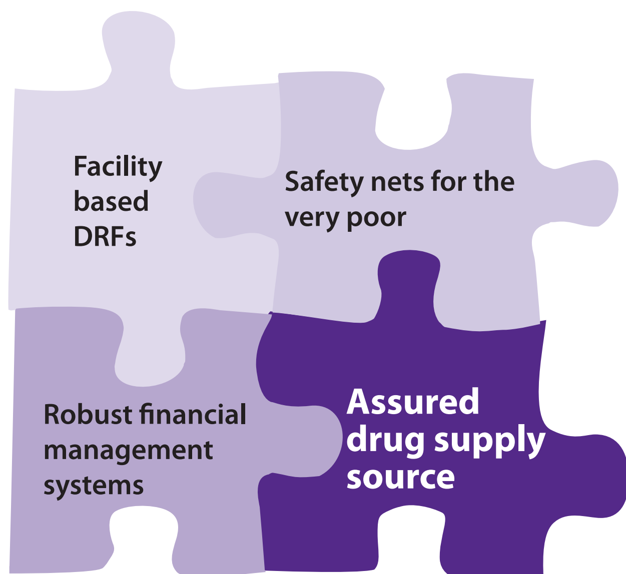
A key concept of the DRF was that all transactions were cash based - the principle of cash and carry. Because this could become a potential barrier to accessing health care, the creation of safety nets for the very poor[5] and vulnerable groups was an important component of the DRF. While other safety net mechanisms (e.g. free MCH services) were encouraged, the specific DRF safety net was the deferral and exemption (D&E) scheme. The

5 See Technical Brief on Safety Nets for the Poor and Equitable Health Care Financing.

D&E scheme was financed through adding a small percentage to the cost of drugs sold; and was established as an integral component of the DRF in Ekiti and Jigawa States.

Establishment of an Assured Drug Supply Source

Four key elements for SDSS success:



The State Central Medical Stores were essentially drug and equipment distribution centres for public health facilities and were managed by either the SMOH or the SHMB. In practice, many CMSs functioned poorly. The lack of autonomy and the fact that CMSs generated revenue meant that their financial resources were often used to fund other SMoH activities. This was especially the situation when other sources of funding were not available. To assure regular supplies of drugs and medical supplies to the health facilities, the CMSs needed strengthening. In all states, creation of an autonomous CMS was seen as a critical step. This would safeguard the funds. A Board, on which community members sat, maintained oversight. Linked to the autonomous nature of the CMS, was the advocacy for facilities to retain their IGR. The DRF could not function if the facilities did not retain the DRF money. Allowing facilities to retain other IGR (e.g. from consultations, laboratory tests) strengthened their ability to provide better services.

Strategies Adopted

The transition from a state-owned logistical organisation to an independent Central Medical Store, managing all essential functions associated with drugs and other consumables supply (purchasing, storing, selling, distributing), posed a variety of challenges. These included:

- Insufficient warehouses, storage facilities and other infrastructure;
- Insufficient number of staff to address the increased number of activities and level of operations;
- Challenges with organising the new institutional configuration for the CMS;
- Poorly functioning systems needed for efficient operations;
- Obtaining the necessary approval from state authorities to function as an independent organisation;
- Inappropriate use of the IGR generated by the DRF.

The state DRF teams worked with key stakeholders to find solutions for most of these challenges.

One significant system change was the introduction of the "cash and carry" principle to allow the CMS to revolve their working capital and to avoid eroding the DRF. The state governments supported this change. In addition, the internal operations of the CMSs were restructured through the development of Standard Operating Procedures and the development of business plans.

The ownership of the Central Medical Stores shifted from government to a group of stakeholders,[6] of which the community played an important part. Full and transparent collaboration between the stakeholders, with one organisation assuming the responsibility to act as a champion for the change, was necessary for a successful completion of the transition.

In Ekiti, community representatives have signing power on DRF expenditure at CMS level - three community representatives are members of the CMS management committee.

6 In Jigawa the formal transition has not yet been completed.

Steps in Establishing an Assured Drug Supply Source

Across the States supported by PATHS, assuring a reliable supply of drugs and consumables via strengthening a Central Medical Store was essential for the long-term sustainability of the DRF. Transformation of procurement and supply organisations takes time – a minimum of 12 months is required. However, a period of 24 months is more realistic to introduce and manage the necessary steps. If a change of legislation is required, even a two-year timeframe may not be enough. Necessary steps included:

1. Needs assessment of CMS infrastructure and operations
2. Advocacy for the transformation of the procurement and supply system
3. Lobbying and coordination amongst stakeholders to build consensus
4. Preparation and passing of legislation (if necessary)
5. Training of CMS staff in DRF procedures
6. Rehabilitation of storage and warehouse premises, as appropriate
7. Capitalisation
8. Staff assessment
9. Internal re-organisation of the CMS, including computerisation of stock and financial management

Central Medical Store, Jigawa

CASE STUDY:

Ekiti - Revolutionising the CMS

The Unified DRF in Ekiti, initiated in 2004, came at a time when there was much scepticism from the community, as the state government had only a few months previously introduced a free health scheme that was not sustainable. In 2004, the SMoH managed the CMS and drug availability was poor. The first challenge was obtaining State Executive Council approval to upgrade the status of the CMS to an autonomous parastatal institution with a separate management structure. The next step involved getting the support and commitment of LGAs to become joint owners and partners with the State in this endeavour. After sustained advocacy, the State Government, Local Government Service Commission, the LGAs and representatives of the community signed a MOU establishing the autonomous CMS.

A unique partnership for the CMS strengthening process was established. State actors, PATHS, the DfID funded Health Commodities Project (HCP) and the World Bank funded Health System Development Project (HSDPII) all shared in developing a plan to strengthen the management of the stores; as well as in co-funding the provision of seed stock, refurbishing of facilities and capacity building of staff.

The CMS now serves all 21 public SHC facilities (and five private facilities) and 75% of the PHC facilities (215 facilities). Turnover for the year ended December 2007 was N74.7million (£300,000). The turnover for the preceding years, 2006 and 2005, was N40.2million (£160,000) and N11.7million (£47,000) respectively. The CMS meets 100% of orders. Because of its performance, the CMS has received increasing support from the State Government, which has:

- Approved the release of N32million (£128,000) to increase CMS operating capital, train facility staff and capitalise additional health facilities. As of late 2007, the first tranche of N8million (£32,000) had been released. It is expected that the government budget will cover the annual running costs.
- Supported the introduction of the Emergency Ordering System (EOS) by providing four motorcycles and three telephone hotlines and a monthly operating budget of N100,000 (£400). Under the EOS, the CMS delivers any emergency order to a facility within two hours of receiving the order by telephone.
- Insisted that drugs needed for special purpose interventions by government are sourced from the CMS.
- Directed all Ministries, Departments and Agencies to purchase their drugs from the CMS.

Impressed by the successes of the SHC facility DRF, the Local Government Service Commission created a Health Department to provide the necessary support to LGAs. This included ensuring that PHC DRFs would be sustained. This included ensuring that facilities obtain their requirements from the CMS.

By sitting on the CMS Board, representatives of the community (including key traditional leaders) have a strong voice in the governance of the CMS (particularly in exercising financial control over CMS funds).

Sustainability of the CMS depends on the continuing support it receives from the Executive Council and the State legislature. There is still a need to give the CMS a legal backing beyond a MoU. This can be achieved by enacting a law to formalise the status of the CMS.

CASE STUDY:

Jigawa – Government and Communities take Ownership

Before the introduction of the DRF, Jigawa had experimented with different drug management systems ranging from central DRF to a 50% drug recovery system and a Free MCH programme. Financial management systems had been relegated to the background. This period was characterised by an acute shortage of drugs and consumables in all facilities. The free MCH programme was clearly not sustainable because of poor funding of the health sector. Following a series of activities which included refurbishment, formulation of DRF operational guidelines by stakeholders, and initial procurement of drugs and consumables for capitalisation, the financial management system and DRF started running in some secondary and primary care facilities in June and September 2004 respectively.

The establishment of the DRF and the financial management system had a positive impact on health facilities, communities and the government. The availability of drugs and improved services increased patients' confidence resulting in increased patronage. Small but important changes (e.g. the publishing of price lists and the issuing of receipts to acknowledge payments by patients) were noticed and became a talking point.

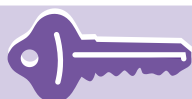
In response to the impact of the DRF, communities supported health facilities to upgrade their infrastructure (e.g. building pit latrines in Dutse, Jahun, Aujara). The Harbo community purchased beds and bedding materials for the facility.

Without any prompting, ten communities renovated ten facilities in readiness for receiving the DRF. As an economic safety net, some communities pooled resources by contributing money in support of a D&E scheme in their facilities (e.g. Roni and Aujara PHC facilities).

As drugs became available, the government took notice and became receptive to requests for support to the health sector. For example, the government purchased drugs and equipment worth N45million (£180,000) for the health facilities in the State. Government has taken full ownership of the D&E scheme by providing funding in support of the programme and other special purpose interventions. For example, the government released N10million (£40,000) for free treatment of pregnant mothers requiring emergency obstetric health care and another N20million (£80,000) for treating students from boarding schools. The government was rehabilitating facility drug stores and dispensing units to receive the DRF in other communities as well as renovating one PHC facility per political ward in readiness for the DRF.

The DRF resulted in increased patronage health facilities like this one in Jigawa

Results



KEY FACTS

DRF Facilities per State

State	SHC Facilities		PHC Facilities		Total Facilities
	Public	Faith Based	Public	Faith Based	
Benue	2	2	277	-	281
Ekiti	21	5	207	-	233
Enugu	7	-	88	4	99
Jigawa	12	-	115	-	127
Kaduna	5	-	13	-	18
Total	47	7	700	4	758

By early 2008, 758 (54 SHC and 704 PHC) health facilities established DRFs. It is expected that this number will increase fairly substantially throughout 2008 and this excludes FCT.

Hospital Drug Store, Kaduna

For all tracer drugs, the prices in the DRF facilities were all lower than in private pharmacies.

From DRF Review meeting, late 2007

Availability and Affordability of Drugs

Increased availability of drugs across the states supported by PATHS was evident since the establishment of the DRF. Assessments undertaken after the introduction of DRF found that the availability of tracer drugs was as follows:

- 96% at the two levels of healthcare in Ekiti
- 95% and 96% for secondary and primary facilities respectively in Benue
- 90% for primary and secondary care facilities in Jigawa
- 84% for District Hospitals (40% prior to DRF), and 78% for primary clinics in Enugu.

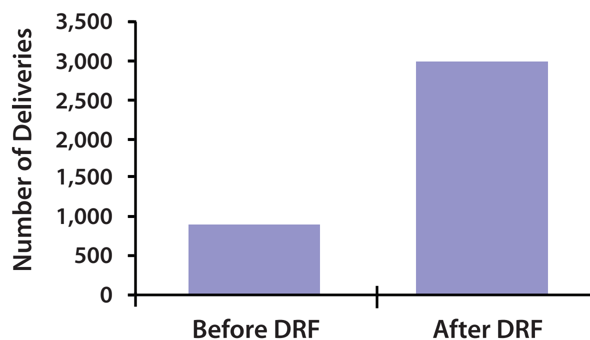
In general, all four states had drugs, mainly sourced from the CMS, that were generally cheaper in DRF facilities compared to non-DRF facilities.

Utilisation of Services

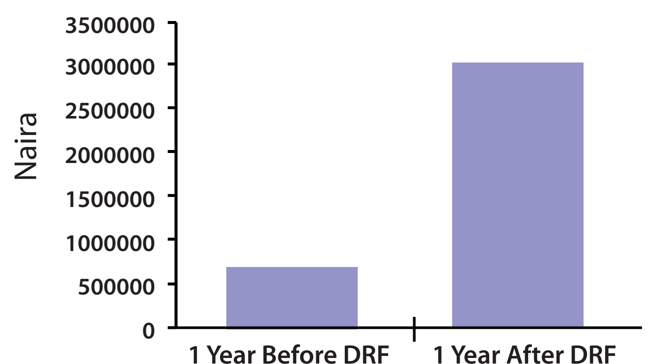
The DRF impacted positively on utilisation[7] of services in the health facilities across the states.

In Benue, the increase in utilisation was quite phenomenal, although more so at the PHC level than the secondary level. Comparing data one year before and after establishing the DRF, at PHC level patient attendance increased by 360%; deliveries increased by 276%; and internally generated revenue increased by over 440%.

Deliveries in PHC Clinics in Benue



Internally Generated Revenue in PHC Clinics in Benue

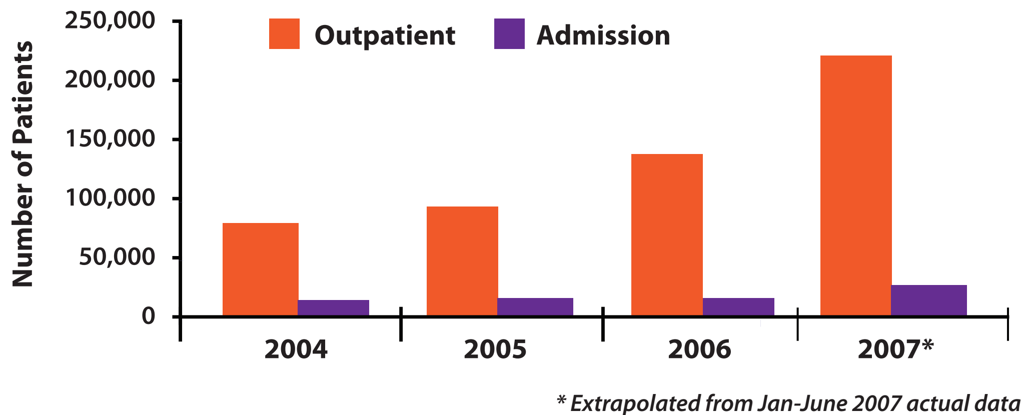


IGR is the total IGR (drug sales plus other revenue)

7 Data from the routine HMIS and the DRF monitoring reports.

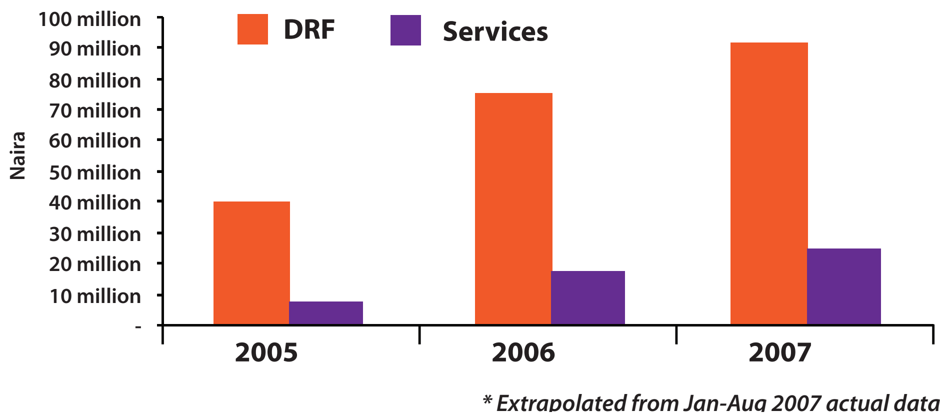
In Ekiti, Jigawa and Enugu, comparative data from 2004-2007 indicates similar increases in utilisation of services. Note that the data for 2007 are extrapolated as at the time of writing complete data for the year was not available. In Ekiti, 80,000 outpatients were recorded in 2004, while in the first six months of 2007, 110,000 outpatients were recorded (extrapolated to 220,000 for the year). In Jigawa, IGR from the DRF at hospital level increased from under N40 million (£160,000) in 2005 to nearly N100million (£400,000) in 2007. A similar picture was recorded in Enugu.

Patients Attendance in SHC Facilities, Ekiti (Outpatients/Admissions) 2004-2007



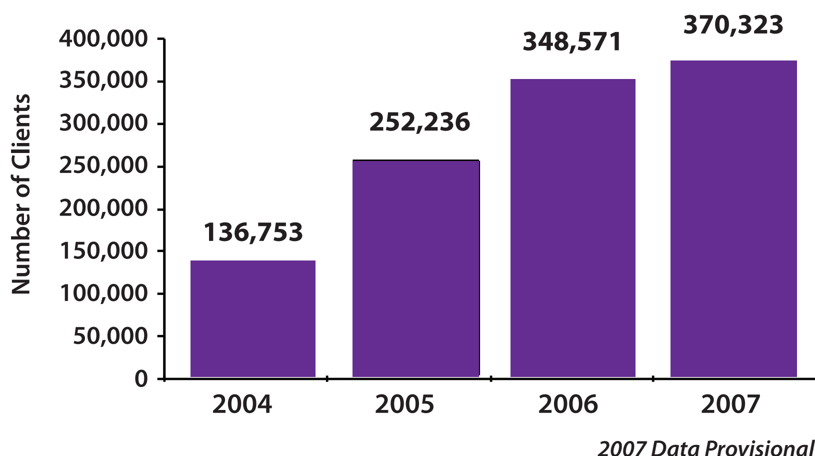
** Extrapolated from Jan-June 2007 actual data*

Internally Generated Revenue in SHC Facilities in Jigawa



** Extrapolated from Jan-Aug 2007 actual data*

Patient Attendance at SHC and PHC Facilities in Enugu Facilities 2004-2007



2007 Data Provisional

CMS Utilisation

By early 2008, in Ekiti state, 75% of the PHC facilities and 100% of the SHC facilities procured their drugs and medical supplies requirements from the CMS. In Jigawa 100% of SHC facilities and a few PHC facilities procured their supplies from the CMS. Jigawa had only recently received their full seed-stock and was working on an arrangement to serve the PHC facilities scattered all over the state. In Enugu 100% of capitalised public facilities procured from CMS. In addition, 20 faith-based facilities were replenishing at CMS. The turnover of the Enugu CMS increased from less than N1million per annum (£4,000) prior to 2006 to N11.5million (£46,000) between September 2006 and December 2007.

Financial Reports, Revenue and Expenditure Tracking

The new financial management system made it easy for facilities to track internally generated revenue. The availability of financial information allowed the facility to monitor the performance of the various service units as well as monitor the drug revolving fund. By the end of 2007, all states were able to produce consolidated financial reports for secondary level health facilities that disaggregated the financial results of the services points, the DRF and the entire hospital. This informative financial information was important for managerial decision-making. At the PHC level, this information could help the LGA and indeed the community to monitor the facility's operations, thereby strengthening accountability to the community.

Community Engagement

There were many examples of how the DRF has had a very positive impact on communities in the catchment area of participating facilities. Improved supplies of quality drugs provided a very tangible signal to communities of government commitment to strengthening the health system, and helped to reawaken community interest in their local facility. In addition, in some states the involvement of community representatives in the governance of the DRFs helped to strengthen accountability between health providers and the communities they served, by introducing essential checks and balances into the DRF system. Stronger linkages between facilities and communities manifested themselves in a number of ways. For example, some communities supported infrastructure improvements (e.g. undertaking roof repairs or digging pit latrines), others provided nighttime security for their facility in order to prevent misuse and vandalism, and others purchased or repaired essential equipment and supplies such as beds, refrigerators, generators and curtains. Some communities contributed money toward the deferrals and exemption system.

In Jigawa State, ten communities renovated their PHC facilities in order to meet criteria for being involved in the DRF programme. In Enugu, a number of communities set about renovating their facilities that were to introduce DRF. In Benue and Ekiti, communities used service charges to carry out much needed repairs to buildings, and in one case contributed counterpart funding to facilitate the construction of a new building. In Ekiti, the community developed a strong voice; they brought burning issues to government and pressurised them to act. For example, this resulted in the construction of a new block to serve as doctors' quarters at Iyin General Hospital and the purchase of an ambulance at Aramoko Hospital.

Contribution towards a Safety Net for the Poor

By design, the DRF contributed to creating a safety net for the very poor and vulnerable (the D&E scheme) to enable the very poor to access healthcare. Apart from Benue and Enugu where no formal deferral and exemption (D&E) system was established, the DRF fund provided the financial resources to set up and run the D&E scheme in Ekiti and Jigawa[8].

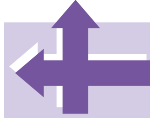
8 See PATHS Policy Brief on Health Safety Nets and Equitable Health Care Financing for more information on the D&E schemes in these two states.

Impact on Government Policy and Activities

Probably the greatest impact of the DRF has been in its role as a catalyst for reshaping government policies. One key policy change was allowing facilities to retain internally generated revenue. This helped the SHC facilities in particular to improve services. In Gumel, Jigawa, for example, the General Hospital built an office block, renovated staff quarters and painted buildings. In Hadejia, also in Jigawa, similar renovations were funded through use of IGR. Indeed, by late 2007 using retained IGR to improve services was the vogue across the states supported by PATHS.

In Jigawa, the government established JIMSO (central medical store) moving it out of the government bureaucracy to ensure efficient provision of affordable and quality drugs. In Ekiti, the government strongly supported the autonomous Central Drug Store established under the unified DRF scheme. This led to increased government funding and provision of equipment and delivery vehicles to enhance performance. It also translated into gradual improvement in health commodities procurement procedures.

In Enugu, the Government agreed to allow the facilities to retain all their IGR; while in Ekiti the percentage of the IGR to be remitted to the oversight agencies was reduced.



CROSS CUTTING:

Other changes in government policy that created an enabling environment for implementation of DRFs included:

- Retention of internally generated revenue
- Relative financial autonomy of facilities and the CMS
- Shift towards managerial autonomy at facility level
- Community representation in facility management committees and CMS Boards
- Decentralisation of the health system

Jigawa Central Medical Store Truck

Sustainability

Establishing DRF and financial management systems against a backdrop of weak financial transparency and accountability presented challenges for sustainability. This issue was addressed through the following mechanisms.

Strengthening and Sustaining Monitoring, Evaluation, Supervision and Sanction

Robust monitoring and supervision was central to the sustainability of the DRF. Although the DRF made some provision for funding supervision, this was not sufficient to fund sustained monitoring and supervision. Fortunately, the state governments, who had taken ownership of the DRF in most States, picked up these costs.

CASE STUDY:

Communities in Enugu State take Ownership of DRF

The Ozalla PHC centre was one of the Early Bird Clinics in Enugu State to receive the DRF in 2006. An initial delay because of the establishment of the District Health System created doubt in the minds of community members who wondered if the DRF would ever take-off. The assessment of the facility in 2005 rekindled hope, while the refurbishment of the facility store eliminated all doubts about the seriousness of the programme. However, the decisive factor was the community engagement exercise, as part of the DRF roll-out, which brought about increased community awareness and interest in the affairs of the PHC facility. A cross-section of the community, including the community leaders, explained that in view of previous experiences, the DRF "is our life". They stated that they would do everything within their power to protect the DRF. The leaders explained why. Previously, the PHC centre had only existed in name because drugs were commonly not available and they depended on patent medicine dealers. This increased the chances of obtaining poor quality drugs. To avoid this, patients had to travel to Agbani or Enugu to receive health care or to buy drugs.

With the establishment of the DRF the situation was said to have changed. Community leaders and members explained that they now had confidence in the facility as improved drug availability had made it possible for them to receive 24 hour services. The example was given of a pregnant woman who arrived at Ozalla PHC at 7pm and who finally delivered at 2.00am. On another occasion, a road traffic accident case was brought in at midnight and was treated. According to the community, this would not have been possible in the past. The DRF was said to have resulted in cost savings for the patients in two ways: (i) community members no longer had to travel long distances to buy efficacious drugs; and (ii) drugs were more affordable than in patent medicine stores. The result was increased utilisation of services offered by the facility.

Taking ownership, the community organised themselves to provide security throughout the night. They were involved in projects ranging from civil works to cleaning the facility environment. They also replaced the old facility signboard with a more conspicuous one. A community member donated a refrigerator for storage of vaccines because he was happy with the availability of drugs and improved services provided by the centre.

Clearly, the involvement of the community has improved the relationship of the facility with the community making the latter see the facility as their own, which they have to protect at all costs.

Community Participation

Ensuring that community involvement in DRF was sustained at a high level was essential to ensuring the overall sustainability of these schemes. If community trust in DRFs weakened – or the systems that would allow the community to hold DRF office holders to account for poor performance were not in place – this would undermine the scheme's sustainability. Since community participation in health was a key component of many systems-strengthening activities in the PATHS states, this implied a need for co-ordinated and (wherever feasible) integrated planning and implementation of DRF with other systems strengthening activities. The same stage of harmonisation was not reached in all the PATHS-supported states.

Continuous Advocacy to Political Leaders

Robust funding of the health sector in the face of dwindling financial resources and competing interests was a challenge requiring tough political decisions. It was important, therefore, to take advantage of the 'goodwill' generated by an operating DRF to fuel continuous advocacy, targeted to top political leaders, for support and funding of the health sector as a whole.

Performance Based Incentives

The increased utilisation of services, which arose because of the introduction of DRFs in the states supported by PATHS, exerted heavy demands on health providers and other support staff. It was important to create incentives for staff to ensure that they maintain a sustained level of output. Provision of regular, supportive supervision was one way to do this. However, improved human resource management and development systems were also critical.

Need to Expand the Safety Net Funding Base

The creation of a health safety net was an important means of increasing the financial access of the very poor and vulnerable to quality drugs. However, relying solely on the DRF to provide funds for deferrals and exemptions was not a viable solution since the funding from this source was insufficient to cover needs. In Jigawa, for example, the exemptions component of the D&E fund was not operational for the first couple of years following the establishment of the D&E fund. This component only began once additional government funds for exemptions were provided. Although free MCH and other free services programmes presented opportunities to expand the number of safety nets available to the poor, there will always be a need (in the absence of a comprehensive national health insurance scheme) to continue funding an exemptions scheme that is targeted specifically to the very poor (as opposed to specific age groups or health conditions). It was therefore important for state governments to create a budget line to fund D&E schemes, particularly at the primary level where it is most needed.

Assured Source of Drug Supply

Key to the sustainability of the DRF in the long term was the assured source of drug (re)supply. Many approaches have been used to address this, the most common of which has been the establishment of central medical stores. However, legislation is often needed to entrench the status of the CMS.

Lessons Learned

Implement DRF and Financial Management Systems in a holistic manner

A drug revolving fund system or an SDSS is most effective if implemented in a holistic manner, and where the total environment within which the DRF will operate is addressed. This includes political support, community mobilisation and ownership, assured source of drug supply, financial management system, stakeholder-driven pricing policies, and a clear implementation plan. The experience of PATHS and its stakeholders showed that although there is certain to be initial resistance to the introduction of a DRF, not least because it removes many opportunities for rent-seeking, involvement of the political leadership and robust consultation and involvement of stakeholders including catchment communities will help to overcome any resistance. Community involvement in the management of DRF introduces important checks and balances into the system, while the financial management environment helps to deliver transparency, accountability and stewardship.

Introduce the Financial Management System before DRF at SHC level

It is important that the FMS is established and allowed to operate before installing the drug revolving fund system in hospitals. This allows the system to bed-in, and the operators to adjust and begin to familiarise themselves with the demands of the new system. Experience in the PATHS states showed that the FMS should operate for between six to twelve weeks before the DRF is introduced.

Place greater emphasis on the multi-disciplinary nature of DRFs

In states where intensive skills-based support (in the form of training and on-going supportive supervision) was provided to Facility Health Committees so that they could play an effective role in the governance of health facilities (including the management of DRFs), community representatives are probably better-equipped to play an effective role on DRF sub-committees. Where the roll-out of DRF relied on a once-off briefing of community representatives, and focused mainly on the dissemination of the content of the DRF operational guidelines, community participation on some DRF committees has been relatively token. Two key lessons emerge from this: first, that DRF implementation and roll-out need to be supported by social development expertise in addition to drugs and financial management expertise, and in-state DRF teams require a member who has specific expertise in and responsibility for community participation. Second, that wherever possible, it is essential to plan and co-ordinate the implementation of different systems strengthening activities e.g. support for DRF and comprehensive support for strengthening Facility Health Committees, so that communities have the skills and confidence to participate effectively in the management of their own drug supply systems.

Synchronise initial drug purchases with overall implementation plan

It is important to synchronise ordering, arrival and delivery of drugs for capitalisation of the facilities with the training of operators and the DRF set-up. During the second phase, the states lost a considerable amount of implementation time due to the late arrival of drugs. This resulted in delayed trainings across states, creating credibility problems in some facilities/communities.

The quantification, ordering and delivery of drugs to the facilities must be synchronised with other activities so that the drugs arrive when they are needed and when the training of operators is about to commence.

DRF as a catalyst and a gateway

In the states supported by PATHS, the establishment of DRFs proved to be both a catalyst and a gateway. As a catalyst, it widened the horizon of policy makers

to take rational decisions to strengthen health care delivery. Some key policy changes included the retention of IGR, funding of deferral and exemption schemes, decentralisation, strong support for community participation and allocating funds for monitoring and supervision.

As a gateway to improved health services, the DRF:

- Encouraged rational use of medicines and resources
- Provided a platform for revitalising ailing health care services
- Boosted the confidence of health care providers
- Increased patient confidence in the health system, thereby increasing attendance and revenue generation (which was channelled into further improvements in service delivery).

Decentralisation and IGR retention

A DRF is likely to survive in an environment where there is a substantial level of decentralisation, and where facilities have autonomy to manage their own finances. In other words, it is best to allow facilities to retain their internally generated revenue (e.g. from consultations, laboratory services) to improve service delivery. In this way, the DRF is ring-fenced for drug re-procurement thereby ensuring the integrity of the fund. Experiences across the PATHS-supported states show that retained IGR has been key in improving service delivery.

Appropriate staff complement and critical infrastructure

Implementing the FM/DRF systems without ensuring the necessary staff complement, infrastructure and resources compromises the performance of both systems. In Enugu, for example, the failure to establish a district bulk store as originally planned created a painfully long process of stock replenishment. In some states, rolling out the DRF without copies of the Operational Guidelines resulted in a clear knowledge gap amongst the operators.

Create demand for financial information to strengthen accountability

Robust financial management systems help strengthen accountability. However, experience shows that accountability is more likely when management and other recipients of financial information are able and willing to demand information. The fact that oversight institutions are reviewing financial and monitoring reports helps to keep DRF operators 'on their toes'. However, transparency is only guaranteed when proper books and records are kept and practices are adhered to. Performance indicators can be introduced to evaluate and compare the functioning of the different institutions. At the PHC level, the involvement of communities in the management of the DRF helped strengthen provider accountability to the community.

In-state set up teams

Although set-up costs are high, a roll-out strategy led by state facilitators (in-state DRF teams) is likely to reduce costs significantly and will result in a cost effective and efficient DRF implementation. For scaling-up purpose, there will be a need to set up trained DRF state teams to deliver the DRF in each State. There will still be a role, at least in the short-term, for experienced national consultants to support these teams and provision should be made by governments to eventually cover their cost.

Strengthening oversight agencies for Data Management and Analysis

There is need to strengthen the access of oversight ministries or agencies (SMoH, MoLG, LGSC, LGAs) to financial and health management statistics as part of the overall financial management information and health management information system. Also important will be building capacity within these agencies to analyse the data and to use it for management decision-making. Investments in computerisation of data processing might be necessary.

The Future

In November 2007, a review of the models recommended that there was a need to revise the models both to improve operational efficiency, reduce costs and to deal with critical emerging issues in the health sector. Key recommendations from the review included:

Recommendations for DRF

- The model should now metamorphose into a more general 'Sustainable Drug Supply System' which encompasses DRF as well as special purpose interventions (e.g. Free MCH, NHIS)
- Reduce workload by collapsing and further simplifying the resulting paper work as well as addressing staffing issues by specifying minimum staffing requirements vis-à-vis increased utilisation of services
- Modify the pricing system at the LGA/PHC level whereby the LGA includes the transportation cost incurred for replenishing its stock in the LGA Store

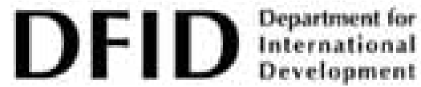
Recommendations for FMS

- At the SHC level simplify the FM systems, model the system into components, reduce workload, and address minimum staffing requirements
- At the PHC level simply the system to the barest minimum, and reduce paperwork taking into account the staffing and skill problem at this level of health care

Overall recommendations

- When introducing SDSS reduce time spent on systems review by having an all-purpose Joint Systems Review Mission to address systems issues including drug management, financial management, infrastructural and facilities adequacy, safety nets, and institutional and stakeholders' analysis
- Include a section on 'advocacy strategy during implementation' as well as scaling-up or rollout strategy which should include setting up the in-state team of facilitators
- Include a section that emphasises strengthening the oversight agencies so that they can serve efficiently as repositories of data from the facilities. In a very simplified model, this should include IT support to receive and manage FMIS and HMIS Data at the central level
- There should a model for Central Drug Supply System at the State level as an assured source of drug and other medical supplies. The emerging and visible role of the central medical stores is indicative that a model for this initiative is overdue
- Consider extending sales to the faith based sector.

Partnership for Transforming Health Systems (PATHS)



PATHS is a programme of collaboration with Nigerian partners to develop partnerships for transforming health systems in Nigeria. It is funded by the UK Department for International Development (DFID).

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