



*Picture from the Democratic Republic of Congo, by J.C. Goussaud*

## Anti-corruption in the health sector: Reducing vulnerabilities to corruption in user fee systems

Designed to promote efficiency and expand access to health care services by leveraging financial contributions from patients, user fee systems are in place in government and private facilities throughout the world. Yet, without proper financial controls and personnel management systems, user fee revenue is vulnerable to corruption.

This case-based brief illustrates how one hospital was able to introduce policy and system changes to reduce corruption and increase responsible stewardship of user fee revenues for the public good.

Although typically user fees generate no more than 5-10% of recurrent costs in health facilities<sup>1</sup>, these small, continuously occurring cash transactions provide a temptation to collection staff, as well as higher level government agents. One scenario is when a patient is charged the official fee for services received, but some or all the fee goes into the fee collector's pocket, rather than benefiting the institution. In systems with pervasive corruption, fee collectors may be pressured to kickback some of the fees to their supervisors. Exemption systems may also be manipulated, with collection

agents exempting individuals (friends or well-connected individuals) who are not entitled to having their fees waived.

This brief follows the experience of Coast Provincial General Hospital (PGH), in Mombasa Kenya, as the hospital begins to tackle the problem of vulnerabilities to corruption and inefficiency in user fee systems<sup>3</sup>. PGH was assisted by the USAID-funded APHIA Kenya Financing and Sustainability Project, implemented by Management Sciences for Health, an American NGO, from 1996-2001.

## **SITUATION FACING COAST PGH**

Coast Provincial General Hospital (PGH) in Mombasa is the second largest government hospital in Kenya, with an available bed capacity of 550 and a staff of 660. PGH is the primary hospital for the City of Mombasa's population of 600,000, and is the referral hospital for Coast Province.

In the late 1990's, declining government support for hospital operations, caused by declining GDP growth in the country, made the hospital heavily reliant on cost sharing through user fees to support non-personnel requirements. In addition, the hospital received some income through reimbursements from the National Hospital Insurance Fund (NHIF), but this funding source was also declining. Total user fee revenue and NHIF billings were about 14.1 million Kenyan Shillings in FY1998 (about \$243,000, at an exchange rate of 58 K Sh per USD). This accounted for about 30% of the hospital's non-personnel expenditure budget. Of this, amount, about 11.3 million KSh (80%) was in cash collections and 2.8 million KSh (20%) was insurance billing. Insurance reimbursement dropped 35% between FY1997 and FY1998, as a percentage of total cash and insurance reimbursements. Further declines in reimbursement were expected, due to financial difficulties within the National Hospital Insurance Fund. The total hospital budget was 199.2 million KSh in FY1998. About 69.5% was allocated to personnel, and 23.4% was for non-personnel expenditures. Overall, patient fees accounted for 5.7% of total revenue, while NHIF reimbursement accounted for 1.4%.

Consultants who assessed Coast PGH in 1998 concluded that "the existing organizational systems are almost all

malfunctioning or broken and need replacement....dramatic improvements are needed in the organization's performance." The consultant report detailed problems in the areas of organization, governance, staffing, patient care, finance and accounting. Waiting time for patients was very long, and patient satisfaction was low. Patients perceived that service quality was weak and medical personnel had poor manners and negative attitudes. Satisfaction surveys also reported that patients suspected fraud in the revenue-collection process.

On the positive side, during the 1990's, PGH started to receive assistance from the Japan International Cooperation Agency (JICA) to modernize its plant and repair the run-down conditions. The capital improvements were nearing completion in 1998. Additional revenue was needed to support the operation of the renovated facilities. Coast PGH also had strong support from the provincial medical officer (PMO), the hospital administrator, and the Hospital Board, all of whom were committed to improving the quality and responsiveness of the hospital.

## **USER FEE SYSTEM**

Under the cost sharing system in Kenya, government hospitals and health centers could charge nominal fees to patients and seek reimbursement for services rendered to NHIF members. Exemptions existed for certain vulnerable populations and the very poor. Seventy-five percent of the revenues from cost sharing were retained by the facility and spent on non-personnel requirements to improve services, and 25% were retained at the district level for preventive care measures. User fee revenue was in addition to normal Government budgetary allocations, i.e. the government budget allocation was not reduced in proportion to revenue collected. Thus, the hospitals and health centers had a positive incentive to collect more user fees.

The administrative system for fee collection covered all the services in the hospital where fees could be charged, i.e. outpatient clinics, ancillary services such as the different laboratories and diagnostic equipment centers, and the inpatient billing offices. Collection clerks were stationed in each of these services. For most outpatient services, fees were collected before the client

was seen; however, for other services (prescription drugs, for example, and inpatient stays) the cost of services was calculated and paid upon discharge or when the patient visit was over. The clerks collected fees, filling out receipts in triplicate (with one copy kept by the patient, one copy kept by the collection unit, and one copy sent to central accounting). Each clerk also implemented policies for exemptions or waivers of fees for those who qualified. After filling out the receipts, the clerk would put the revenue in a drawer or cash box. At the end of the day or shift, the clerk would write in a ledger book the total cash collected. Supervisors were assigned to collect the cash and review the receipt books, in order to reconcile the information to what was written in the ledger and reported to accounting.

## **IDENTIFIED CONCERNS**

Coast PGH managers recognized that some of their cost sharing revenue was being lost through corruption. Part of the problem seemed to be collection agents who did not charge their friends, or who charged patients but pocketed the income for themselves. But it was hard to know how great the problem was. The manual receipt books permitted collection clerks to underreport collections. Patients also reported that it was difficult to verify their bills. Because of delays and gaps in the data collection and analysis, it was difficult to predict what the user fee revenue was supposed to be.

Fees were modest when compared with the cost of care and with inflation. However, there was a lack of public confidence in the hospital, and fee increases would not be politically acceptable to the local community until something was done to decrease fraud and more completely capture the official patient charges.

## **PLAN OF ACTION**

The Coast PGH management team began working with APHIA project consultants to address the vulnerabilities in the user fee system. The first step Coast PGH undertook was to put in place an improved manual system for reporting daily cash receipts. While this strengthened checks and controls to some extent, the manual system was laborious and did not allow daily reconciliation of accounts. Data were not available fast enough to verify that

the cash collected matched the revenue recorded. In addition, the manual system did not provide information needed to model expected revenue. Coast PGH managers needed to be able to estimate expected revenue, based on the types and quantities of services provided and standard pricing sheet and exemption criteria. With this information, they then could compare the expected revenue with actual revenue, in order to detect discrepancies and pinpoint problems which needed management action. Even with better manual systems, the lack of timely financial information—both estimates of expected revenue, and reports of actual revenue by type of service—was still a major obstacle to accountability.

The solution: a system of networked cash registers. By implementing the automated cash registers, which would be connected to each other through a local area network, Coast PGH managers could get information on the exact amounts billed, and how much was collected from patients for each type of service. The management team estimated that by implementing the system, they could increase user fee revenues by 25%.

PGH management worked with the consultant team to develop a detailed request for proposals for implementation of locally available networked point of sale (POS) cash registers. Multiple cash collection points were to be reduced to five: Casualty, Outpatient Pharmacy, Laboratory, Maternity, and NHIF office. These were linked via network to a central server in the Accounts Office. After 4 months, through a competitive procurement process, PGH selected an experienced local vendor. The vendor took 3 months to implement the new system, which cost \$42,000 and was paid by the project. The expected increase in annual revenue would equal or exceed this investment.

The new system operated similar to cash registers at a supermarket checkout. After paying her bill, the patient was given a receipt that had a printed description of all items paid for, amount paid, and change given. There was a cash till to keep funds secure. This was exactly the same system as used in department stores and supermarkets in the private sector in Kenya, with two important modifications: 1) billing for

the National Hospital Insurance Fund was coded into the software, and 2) accounting for waivers & exemptions to patients.

The networked cash register system produced several management reports, including daily revenue and cumulative monthly revenue, by fee-for-service item, by cash collection point, by cost center, and by cashier.

Along with system implementation, staff needed to be trained in how to operate the system. Here, the project ran into unexpected problems. Hospital collection staff didn't want to attend the training on how to use the new system. In fact, some staff outright refused to be re-trained. PGH management, concerned about the potential to undercut the new system, decided to hire new staff who were trained to operate the cash registers. This unexpected resistance to change may have been motivated by fear of loss of opportunity for personal gain.

## RESULTS

Based on the experience of another hospital in Kenya that had moved to using cash registers, the PGH management team first estimated that cash collections would increase 25%. They collected baseline data on utilization and cash collections for 3 months before implementation, then 3 months afterwards, in order to monitor the actual increase in revenue. In fact, cash collections exceeded expectations, going up 47% (1.4 m. for 3 months prior to implementation, to 2.1 m. for 3 months after). There was no effect on service utilization.

PGH management and the consultant team also evaluated staff perceptions regarding the new system. Most personnel were happy with the system, and thought it benefited the patient. Staff reported no complaints from patients about having to make informal payments to get favors from staff (a practice that some had observed before the system was modified), and there were reportedly fewer complaints about waiting lines, people jumping the queue, people wandering around to figure out where to pay.

But the implementation was not without problems. Some issues which arose were the long hours for cash register operators, who complained

about irritated eyes and back problems. Some nurses complained that their workload had increased also, possibly from the more rigorous procedures for recording services and supervision. At times, patients were caught giving their used receipts to others to use as evidence of having payment, because the receipts didn't show the names of patients. Systems were adjusted, and staff meetings were held to try to address these problems.

On an ongoing basis, the management reports produced by the system allowed PGH officials to practice continuous quality improvement. For example, after reviewing the preliminary results, PGH management realized that many charges for services were still not being reflected in bills paid at the cash register. With the help of the consultants, the management team created a flow chart analysis of the steps for the billing process. After reviewing the flow chart, they took steps to streamline the process, re-assigning staff and training them so they implemented the new process efficiently. They also worked on changing the patient discharge process, improving communication between management and staff, and increasing patient information. The result of all these changes: user fee revenue increased another 36%. The gains achieved through the new system held up over time, and revenue collection in FY2001 was 400% greater than in FY1998<sup>4</sup>.

The unexpectedly large increase in user fee revenues from the new system meant that hospital managers needed to spend money quickly. This, in itself, can be a trigger for corruption, and indeed PGH spending decisions around this time were criticized for lack of transparency, and for allocating resources to low priority requests. PGH management responded by introducing more transparency in the planning and budgeting process, to improve accountability.

## CONCLUSION

User fee systems in developing countries are vulnerable to diversion of funds and improper administration of exemption systems for personal advantage. These vulnerabilities can be traced to many causes, including outside financial pressures or social pressure from patients or family members, inadequate supervision, and



lack of information with which to monitor performance and hold different organizational units (and individual agents) responsible. Stronger financial accounting and management information systems can go a long way in reducing these vulnerabilities. In large hospitals, the use of networked electronic cash registers can be especially effective in improving accountability, as shown in PGH. More frequent reporting of performance indicators, including expected versus actual cash collections or exemptions, can help managers detect anomalies, pose questions, explore root causes of problems, and take actions to resolve them. At the same time, if corruption is pervasive and the “principals” or higher level managers are colluding with fee collection agents to permit corruption, systemic changes are not likely to be as effective. The PGH case study highlights the positive role that outsiders such as consultants or oversight committee members can play in promoting transparency. People inside the system may be too fearful of repercussions to advocate for change, but they may nonetheless support those changes once the issue is raised with external support. While the use of outsiders can help to start the ball rolling, sustained operation of a transparent system requires ongoing management commitment to public service, a difficult and daily challenge.

## NOTES

1. Gilson, L. 1997. The lessons of user-fee experience in Africa. *Health Policy & Planning* 12(4): 273-85. Ms. Vian teaches courses in financial management and preventing corruption in health programs, and conducts research and consulting on the topic of corruption and health.
2. Ms. Vian teaches courses in financial management and preventing corruption in health programs, and conducts research and consulting on the topic of corruption and health.
3. Information for this brief was obtained through review of Project documents, including Stover C. *Health financing and reform in Kenya: lessons from the field. Background document for end-of-project conference for the APHIA Financing and Sustainability Project. Nairobi, Kenya May 22-24, 2001*, and through interviews with consultants who participated in the work described.
4. A price increase did take effect in late 1999. Although the changes were modest, this probably contributed to the increase in revenue.

## FURTHER READING

- Collins, D., J. Quick, S. Musau, and D. Kraushaar. 1996. *Health Financing Reform in Kenya: the Fall and Rise of Cost Sharing, 1989-94*. Stubbs Monograph Series Number 1. Boston: Management Sciences for Health. (Available through the MSH Bookstore at <http://www.msh.org> ).
- Stover C. *Health financing and reform in Kenya: lessons from the field. Background document for end-of-project conference for the APHIA Financing and Sustainability Project. Nairobi, Kenya May 22-24, 2001*. (<http://www.U4.no/themes/health/health-financing-reform-kenya.pdf>)
- Newbrander, W., D. Collins, and L. Gilson. 2000. *Ensuring Equal Access to Health Services: User Fee Systems and the Poor*. Boston: Management Sciences for Health. (Available through the MSH Bookstore at <http://www.msh.org> ).

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