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Bank accounts for public primary health care facilities: Reflections on implementation from three districts in Tanzania

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Abstract

Health care financing reforms are gaining popularity in a number of African countries to increase financial resources and promote financial autonomy, particularly at peripheral facilities in low-income settings. The paper explores the establishment of facility bank accounts at public primary facilities in Tanzania with the intention of informing other countries embarking on such reform of the lessons learned from its implementation process. A case study approach was used as it allows in-depth, multi-faceted explorations of complex issues in their real-life settings. Three district councils were purposively sampled: one urban and two rural districts councils. Two rounds of data collection were carried out in 2013 and 2015 to understand the initial implementation steps, the stakeholders involved, their expectations and implementation challenges at the district and facility level. A total of 34 focus group discussions and 14 in-depth interviews were conducted across the three districts, together with a document review. Thematic content analysis was used for data analysis. The study revealed that formal and informal communication from the district managers to the health facilities had been used in the process of facilitating the opening of facility bank accounts. The main use of bank account revenue was for the purchase of drugs, other medical supplies and minor facility needs. To ensure accountability for funds used, facilities had to submit monthly reports of expenditures incurred by the facility. District managers also undertook quality control of facility infrastructure which had been renovated using facility resources and purchases of equipment and other supplies. Facilities reported challenges in securing financial resources to cover transport costs,

stationary and the initial deposit funds when opening the accounts. Moreover, implementation did not take into account the preparation needed to empower facility staff and facility governing committees to effectively manage and report on funds deposited in their accounts. Facility autonomy in the use of revenue retained in their accounts would improve the availability of drugs and service delivery in peripheral areas. The experienced process of opening facility bank accounts, managing and using the funds; highlights the need to strengthen the capacity of staff and health governing committees.

Keywords: facility bank account, accountability, financial autonomy, Tanzania

Background

Adequate and equitable financing remains a challenge for many low income country health systems', constraining access to services of sufficient quality [1-5]. As a result, some countries have embarked on a series of reforms to raise additional revenue [1-6], change how services are paid for, as well as how funds flow through the system and are managed. Decentralisation of financial management from central or local government level to facility level is one among many reforms that are gaining popularity in a number of African countries and has been found to increase the availability and accessibility of funds at the service delivery level [7, 8]. While a number of countries have decentralized health care administration to local government levels (e.g. district and province level), financial dependence on the central government tends to remain significant. However, in such cases, the predictability of central government transfers can be low which affects resource availability at the local level.

Public primary health care facilities in Low and Middle-Income Countries (LMIC) have historically had less autonomy compared to hospitals [9, 10]. Low autonomy results in misalignment in priority settings between central government and health care facilities [11]. Current reforms to financial management involve, among others, the introduction of facility bank accounts at primary care level, to provide them with greater financial autonomy to generate, plan for and manage their own funds [12]. Often times these initiatives are linked to the implementation of pilot interventions that are subsequently scaled

up, such as direct facility financing (DFF) in Kenya [13]; or pay for performance (P4P) and subsequently results-based financing (RBF) in Tanzania [14, 15].

Resource allocation through a decentralized health system has been reported to reduce financing inequalities between rural and urban districts [16] and bring more autonomy to frontline health workers at the public primary health care facilities [8, 17]. In Uganda, decentralization led to increased health care utilization at facilities, but it failed to improve the availability of drugs, efficient use of resources and staff motivation [18]. While in Nepal, service users and providers felt that decentralization resulted in improvements in service delivery within primary health care institutions [19]. Koivusalo et al, argue that prioritysetting by decision makers in local areas may increase or decrease inequity in access to care, depending on the different capacities to use resources efficiently [20]. Evidence suggests that health provider autonomy has some potential benefits, including enhanced efficiency, improved responsiveness to local needs and better health outcomes, effectiveness, accountability, improved quality of care and equity [9, 21, 22]. Nonetheless, atonomization also come with the risk of marginalizing public interests, reducing efficiency and deleterious health outcomes [22]. Financial aautonomy accompanying decentralization requires that regulatory measures are enforced by the central level, with due consideration for performance criteria, standard setting and cross-subsidization across populations to address inequity [20]. As with any health system reform, it may depend on other reforms for its success. Healthcare provider autonomy is complex and its success or failure rests on the implementation process, as well

as broader contextual factors related to the country's political and health care system.

The introduction of facility bank accounts at the level of primary care providers affects purchasing arrangements by enabling providers to control the procurement and purchase of various medical commodities (such as drugs and equipment) employ casual workers, finance facility operational costs, conduct minor renovation and provide community outreach services [23-25]. They can also affect the pooling function of financing by enabling facilities to retain costsharing funds at the local level which increases provider control over these funds, but may also fragment the risk pool, limiting risk-sharing and increasing the vulnerability of smaller pools [23]. By providing greater autonomy to providers regarding the allocation of funds, the introduction of facility bank accounts at the primary care level could potentially contribute to addressing quality of care constraints in public primary care facilities and improving efficiency [9, 26].

A limited number of studies have examined the effects of bank accounts on the operation of public primary health care providers and service delivery and suggests positive impacts. In Yemen, public primary facilities were required by law to open bank accounts in which they received drug revolving funds for improvement of service quality [27]. This was found to result in a slight increase in service utilization, because of enhancements to the availability and quality of drugs [27]. In Kenya, direct transfer of funds to facility accounts each quarter resulted in improvements in governance [28], increased health worker

motivation; improved quality of care; service utilization and outreach services [29]. There is much less understanding of the process of introducing facility bank accounts at the primary care level and how primary health care facilities access and use the resources deposited in their bank accounts. This is the key to better understand how these accounts and the resulting enhanced financial autonomy bring about quality of care improvements and how to sequence them with other reforms, how soon they are likely to show effects. Furthermore, understand how to successfully implement reforms, foresee challenges and put measures in place to prevent them.

This paper aims to explore the process of establishing bank accounts for public primary health care facilities through a case study of three district councils in Tanzania, with the view to inform the roll out of this reform within Tanzania, and to provide lessons for other countries planning similar reforms. Specifically, we focus on the process of opening bank accounts, accessing and using funds in accounts and challenges encountered. We then discuss what measures could be put in place to prevent such operational challenges and optimise implementation.

Methods

Study Setting

Historically, public health centres and dispensaries in rural districts in Tanzania did not have bank accounts [23, 30]. Rather, any funds they collected such as user fees or insurance premiums for the Community Health Fund (CHF)/ Tiba kwa Kadi (TIKA) or reimbursements for the National Health Insurance Fund (NHIF) were transferred to the district council bank account each month and kept in this account [31]. To access funds, facilities had to make a request, resulting in delays and facilities were often not aware of how much money they had accumulated resulting in funds remaining unused. Health facility governing committees had responsibility for managing and allocating facility revenue, but due to the limited degree of local control or oversight of funds, these committees generally met infrequently [32].

Starting from 2007-2008 with the introduction of the Tanzania's Primary Health Services Development Programme (PHSDP), commonly known in Kiswahili as (*Mpango wa Maendeleo wa Afya ya Msingi*, MMAM) there was a growing pressure for primary level facilities to open their own bank accounts. Its overall objective was to facilitate the provision of primary health care for all by improving access to primary health services. As part of this programme, a number of district councils allowed health centres and dispensaries to open bank accounts to access funds to support their renovation or the construction of new dispensaries in the neighbouring area. Health facility governing committees were often tasked with managing these funds on behalf of the village government where the new facility was to be built. From 2011, some district councils were also encouraged to support the opening of lower level facility bank accounts in relation to a pay for performance scheme pilot (in Pwani region) [14]. A number of donors supported the introduction of bank accounts to enhance membership of community health fund, in 2012 Germany's Federal Ministry for Economic Cooperation and Development, through KfW Development Bank in Tanga and

Mbeya regions [33]; from 2014 PharmAccess in Kilimanjaro and Manyara regions [34] and from 2014 the Swiss Agency for Development and Cooperation (SADC) in Dodoma and Morogoro regions [35].

In 2012, the Prime Minister's Office for Regional Administration and Local Government (PMO-RALG) issued a circular that instructed all district councils to open bank accounts at primary care facilities. At the same time, the NHIF started encouraging districts to support the opening of primary care facility bank accounts as a means of boosting CHF/TIKA enrolment in the district councils.

Conceptual framework

We hypothesised that the introduction of bank accounts at primary health care facilities would support progress towards universal health coverage by: increasing effective resource availability at public primary facility level enabling the efficient procurement of needed inputs (including medicines and medical supplies), enhancing the quality of services delivered. The availability of drugs and supplies would enable more effective care and reduce the burden of out of pocket payments, making services more affordable to poor populations, and increasing access [36, 37]. Bank accounts and the resulting control over local resources were hypothesized to motivate health facility governing committees to meet more regularly, increasing the governance function of the health system potentially leading to greater service availability and responsiveness (Figure 1).

Study design

A case study approach was used since it allows in-depth, multi-faceted explorations of complex issues in their real-life settings [38]. Three districts were purposively sampled: one urban and two rural districts: namely Kinondoni municipal council (MC), which had bank accounts since 1999, with the exception of newly constructed facilities, that opened their accounts following construction; Singida and Manyoni districts councils from Singida Region, which introduced bank accounts in 2012. Districts were selected where the research team had strong existing links and with contrasting contexts (urban/rural; high CHF enrolment/low CHF enrolment). This study was part of a larger study "Universal Coverage in Tanzania and South Africa" (UNITAS) which aimed to support the implementation of reforms intended to achieve universal health coverage in South Africa and Tanzania by monitoring and evaluating the policy processes.

Data Collection

Two rounds of data collection were carried out to understand the initial implementation steps, those involved in implementation, their expectations and implementation challenges. The first round of data collection took place between February and March 2013 for Kinondoni municipal council, April to May 2013 for Singida district council and November 2013 for Manyoni district council. The second round of data collection took place between October and November 2015. During both rounds, data were collected at the district level as well as from a sample of 13 public dispensaries and health centres which were purposively

selected. In each round of data collection, a total of 34 focus group discussions and 14 in-depth interviews were conducted across the three districts (Table 1).

A document review was also conducted to understand national policy/guidelines on health facility bank accounts, procedures for opening bank accounts and types of funds to be deposited in these accounts.

Health System	Stakeholders	Number conducted	
Level		First Round	Second Round
District	Council Health Management Team (CHMT) ¹	2	2
	Council Health Service Board (CHSB) ²	2	2
Health Facility	Health Facility Governing Committee (HFGC) members ³	9	10
	Construction committee members	4	3
District	Program coordinators: CHF, Mpango wa Maendele ya Afya ya Msingi (MMAM), Tiba Kwa Kadi (TIKA), Health Planning managers, NHIF regional manager, the district health accountant and district health secretary	10	14

Table 1: Overview of data collected

¹ CHMTs' key functions include organizing, supervising, monitoring and evaluating health services, and development of the annual Council Comprehensive Health Plan (CCHP).

² CHSB ensure that the CHMT facilitates provision of quality cost effective and sustainable health services taking into account equity concerns

³ HFGC's is composed of health care providers and community members. HFC's are responsible for receiving, discussing and approving plans, budget and progress reports at their levels and ensure that the health services meet the required standards and satisfy the needs of the target population, identify and solicit financial resources for running the facilities

Data Analysis

Thematic content analysis was conducted, which entailed coding data according to key themes arising from the data. Initial coding was done by two research scientists with the assistance of senior scientists. The codebook had two major themes: the process of opening bank accounts and the operation of facility bank accounts. Subthemes included the communication process; guidelines and changing requirements; resourcing the reform; resources channelled to the account; access to funds and accountability; how funds were used; and managing funds at the facility level. Validation of the study findings was done by triangulating and synthesizing data across respondent groups. Verbatim key quotations have been incorporated in this manuscript.

Consent and quality control

Ethical clearance for this study was obtained from the Ifakara Health Institute Institutional Review Board (IHI/IRB/No 32-2013), the Tanzanian National Institute for Medical Research (NIMR) and the London School of Hygiene & Tropical Medicine (LSHTM) Research Ethics Committee (LSHTM ethics ref: 6492). District managers and health facility in-charges were informed about the study and written informed consent was obtained from each participant. Interview guides for key informants and focus group discussion were all pretested for quality control and field interviewers and supervisors were trained and supervised by two research coordinators.

Results

In the first round of data collection in 2013, 11 health facilities in Manyoni DC had managed to open bank accounts, while in Singida DC 20 facilities had met all the requirements for opening bank accounts and the rest were in the process of doing so. In the second round of data collection in 2015, 45 facilities in Manyoni DC had already opened bank accounts, while all but three facilities in Singida DC had not opened accounts.

In the three district councils, the opening of bank accounts at primary care public facilities was reported as a key institutional change that was expected to increase access to funding for the public primary facilities and reduce bureaucracy. We first describe the process of opening bank accounts and the challenges encountered in opening the accounts followed by a review of the operation of facility bank accounts and operational challenges encountered.

Overview of the process of opening facility bank accounts

During the first round of data collection, we found that most of the facilities had received directives from the district headquarters to open an account. For example, some facilities confirmed that they received letters from the District Medical Officer (DMO) and District Executive Director (DED) ordering them to open facility bank accounts. Information was also conveyed verbally during supportive supervision visits at facilities by the CHMT and when facility staff visited district offices.

"...district health managers said that all the dispensaries must have a bank account, so it came as an order, [the objective was] to simplify operations....[without accounts] even the purchase of a door lock required you to go and make a request to the district medical officer" (FGD, CHMT, Kinondoni MC, First Round)

"... we received order from the district that each dispensary is supposed to open facility bank account...each dispensary should have its own account, so we were given the order....." (FGD, Singida DC, HFGC, First Round)

During the first round of data collection we found that stakeholders interviewed at all levels were aware of the purpose of having the facility bank accounts, suggesting that the goal of the policy had been communicated to them.

"...main objective of the account is that facility will be able to know its revenues and enable them to budget accordingly...... if one wants to spend another one's revenue it will be difficult and that will make each facility to spend according to what it has earned. ..." (FGD, Manyoni DC, CHMT, First Round)

"...the purpose of opening the account was to know how much money the facility has it means even now if you ask me how much we have I need to consult the books, but it becomes easy for me to know how much is in the bank account....in the beginning it was not easyhaving your account you become free to do what you need, without the account you are not free

..." (FGD, Singida DC, HFGC, First Round)

The decision as to which bank a facility would use to open a bank account was left to the discretion of the facility in-charge and the HFGC. The majority chose to open an account with a local/nearby bank. In order to open a bank account, facilities were required by the bank to present minutes from the HFGC meeting that discussed opening a bank account, a signed letter from the DMO and DED, completed bank forms, a list of signatories and their passport-sized photos.

"...we were given a letter from the municipal council, we combined [it] with minutes of the [HFGC] meeting, then we presented it to the bank ..." (FGD, Kinondoni MC, HFGC, First Round)

Challenges in opening facility bank accounts

There were two main challenges of opening bank accounts reported by stakeholders: evolving requirements from banks to open the account and financial barriers to opening accounts.

Evolving bank requirements

One concern voiced by participants was that banks changed the requirements for opening accounts over time, and this caused confusion for facilities and was responsible for delaying the opening of accounts in some cases.

"..... each facility was supposed to open its own account, but till now, I think there are about 11 facilities which opened accounts though many facilities are in the finals stages (...) because they have already submitted their minutes, in the course of submission, they found some requirements were changed, so they have to make changes in order to open their account... ..." (IDI, Manyoni DC, DMO, First Round).

"...we did deposit a lot of money in the bank but they have returned the money in respect of 15 dispensaries, because they added another term which required the village to request the opening of a bank account through a written letter whereas this was not in the list of requirements before.so they did come up with that new system of writing a cover letter for opening an account though we told them that we opened the previous account without such letters and they said, that was the new system......" (FGD, Manyoni DC, CHMT, First Round)

Financial and time barriers to opening accounts

Facilities required funding to cover transport costs to travel to and from the bank, for photographs of signatories, stationary for writing meeting minutes as well facility reports and for an initial deposit of funds that were required to make when opening the bank account. Generating sufficient revenue to cover these costs was a challenge for some facilities, which did not have petty cash.

"...it becomes a burden because four people who come from the village to open an account, they spend their own money for transport and come all the way here. So, the same person comes several times......" (FGD, Manyoni DC, CHMT, First Round) In order to open a bank account, facilities had to deposit at least 10,000 TZS (US\$ 4.68⁴) initially, and this later increased to 100,000 TZS (US\$ 46.79). In Manyoni district council, some facilities struggled with this, and the council decided that they could use the funds they had collected from the community health insurance scheme (the CHF premium) to finance the deposit.

"...at the beginning it was 10,000/= TZS until it was 100,000/= TZS (US\$ 46.79). So we took nearly four million from the CHF revenue and it was in cash for distributing to dispensaries each 100,000/= TZS (US\$ 46.79) for opening an account and aiding the process of taking photographs" (FGD, Manyoni DC, CHMT, First Round)

The whole process of opening up a bank account was perceived to have taken a lot of health worker time to the extent that those who were responsible had to forego other activities. Health facility in-charge was supposed to prepare monthly reports and had to travel to the district headquarter and spend a whole day.

"...there were some challenges.....in the whole procedure of opening up an account it had a long process, the moment you get out of there, you may find perhaps the whole day you have only worked on that particular issue...also because the health facility in-charge is involved, it means that there are some of their responsibilities which will not be performed...." (FGD, Kinondoni MC, HFGC, Second Round)

4 1 US\$ 2137

Operation of Facility Bank Accounts

Resources channelled to the account

Once opened, cost sharing funds were deposited into facility bank accounts. These included CHF premium; user fees from patients; as well as reimbursements from the National Health Insurance Fund (NHIF) for services provided to members. Facilities were instructed by district managers to retain 33% of the funds from the CHF and user fee revenue while 67% was still to be pooled at the district level. NHIF reimbursements did not need to be pooled at the district level. Study participants perceived that health facility bank accounts would also provide the opportunity for direct facility financing by the government, as well as other organizations implementing different health programs in the councils within the country.

"...cost sharing funds and health insurance revenue....[...NHIF.].. Supposed to be deposited directly in the facility account...." (FGD, Kinondoni MC, HFGC, First Round)

"... It will be possible for any organization to deposit the money in the facility account so that they can use it. Contrary to depositing it at the district, when it hardly reaches the health facility...." (FGD, Singida DC, CHSB, First Round)

Staff Time

Facility in-charge had to prepare monthly financial reports for the account and submit them to the District Medical Officer. To submit the reports they had to travel to the district headquarters and would often spend the whole day doing so.

How funds were used

The main use of bank account revenue was for the purchase of drugs and other medical supplies. Funds were also used to pay casual workers (security guards/cleaners etc.) who were working at the facility as they did not have an employment contract with the government.

".....right now we are able to order the drugs and medical supplies, but in the beginning, the CHMT used to purchase for us......" (FGD, Singida DC, HFGC, First Round)

"...there are those who have enough money they can even employ a cleaner to help a nurse, because the nurse is all alone, so they have to hire at least a cleaner to help cleaning the dispensary so that she can do her nursing work, even if they have agreed to pay the cleaner 30,000/= per month.....and the other part of the money will be used to pay the hospital watchman......." (FGD, Manyoni DC, CHMT, First Round) "...we have withdrawn money from the account for paying facility security guards and other staff who were volunteering......" (FGD, Manyoni DC, HFGC, Second Round)

In some facilities, funds were used for minor facility needs such as the purchase of solar power; repair of doors and facility improvement, or to pay allowances (such as transport, food, accommodation, communication etc) for facility staff.

"...there are some places they even got to buy solar because there are places that don't have electricity but they manage to get the power, there are other places that use the money to build benches, 33% of the collection is for electricity at the facility, water services and paying for security guards, at times we use them to purchase drugs" (FGD, Manyoni DC, HFGC, Second Round)

".....for example, we do not have a lamp, once you take the money you go.... buy a solar and install it....or even an office chair if it is broken ... (FGD, Singida DC, HFGC, First Round)

Access to Funds and Accountability

To access the funds that had been transferred to the district level, the facility incharge together with the HFGC had to submit a proposal to the district regarding the level of funds required and the proposed use of funds. If they required drug procurement, they had to specify if stocks were low due to low order fulfilment rates for supplies from the Medical Store Department (MSD) in a given quarter or if it was an emergency case. There were no specific guidelines describing how the funds retained at the facility should be used, nevertheless they could not use these to procure drugs without authorization from the district.

"...health facility in-charges need to monitor expenditure.....they prepare a proposal and submit it to the District medical office, and then a voucher is issued, while a chequebook remains there and every facility has signatories to ensure accountability....." (FGD, Kinondoni MC, CHMT, First Round)

During the second round of data collection, Kinondoni municipal council had formulated bylaws to allow facilities to use their own funds up to 300,000TZS (US\$ 140.38) to procure urgent medical supplies for service provision, without having to first submit a request to the district.

"...an amount which doesn't exceed three hundred thousand Tanzanian Shillings, this is based on a bylaw which was formulated which allows a district to formulate mechanisms which controls it's expenditure.....for example, when there is an emergency during heavy rain they can use the money for renovation if there happens to be any disruption....." (FGD, Kinondoni MC, Health Secretary, Second Round)

To ensure accountability for funds used, facilities had to submit monthly reports of facility expenditures. Receipts and bank statements were also reviewed during facility supervision. District managers were responsible for quality assurance of renovation work carried out to improve facility infrastructure, as well as the purchase of equipment and other supplies.

"...for the board to understand that a certain facility has spent such an amount from the account.....they provide a financial report to the council health service board that they decided to take a certain amount of money and used it for this and this, the amount which remains in the account is this much (FGD, Kinondoni MC, CHSB, Second Round)

Challenges in the operation of facility bank accounts

While facility bank accounts were introduced in part to reduce bureaucracy in accessing funds, in practice there still seemed to be substantial bureaucracy. There were also a number of challenges in managing the funds, including the lack of guidelines on how funds could be used, lack of safe keeping options for cash and limited accounting skills at the facility level.

While facility bank accounts were introduced in part to reduce bureaucracy in accessing the funds that were sent back to the district, there were mixed views as to whether this had been achieved. The process of gaining authorisation to use funds was felt to be time consuming and involving a variety of steps and stakeholders. However, it was also perceived by some as being less onerous and more efficient as compared to procedures for spending facility funds prior to the introduction of bank accounts. "...at the district level it has to be signed by all, the executive director, district medical officer, treasury, and district accountant, all of them must go through the document for us to withdraw the money, is a long process" (FGD, Kinondoni MC, HFGC, First Round)

".....bureaucracy has declined to a greater extent, right now if a facility has a certain amount of money, they just come with the minutes [from the committee meeting], the DMO assess the documents and how much the facility has, once approved they get all the needed and return to the facility.....DMO doesn't take much time to approve......" (FGD, Manyoni DC, CHMT, Second Round)

Facility managers and the HFGCs had autonomy on how to use facility funds. There was no written guideline on how money could be used, which sometimes delayed decision-making on the use of the funds. While district level managers suggested there had been plans to introduce guidelines for facilities, these were not available at the time of the study.

".....we didn't know clearly about the use of the funds, I went to the DMO to explain to him, he said even in the district there is none ..." (FGD, Manyoni DC, HFGC, Second Round)

"...when we convened as a board, the DMO said will prepare a plan for the health facility in-charges to get guidelines on how to operate the accounts. He said that he will also share with them some techniques, instruct and train them on how to use the accounts ..." (FGD, Manyoni DC, CHSB, Second Round)

The implementation of facility bank accounts was not accompanied by any formal training to staff or governing committee members on how to open or manage accounts and to generate financial reports. The routine clinical training of health care providers is not geared towards financial management. Whereas all hospitals have accountants who are responsible for the financial management of the revenue accruing to the facility as well as expenditures, and have been trained in financial management and reporting; lower level facilities' health care staff were not trained in these matters nor did they have an accountant. They only received informal training and guidance during supportive supervision visits from district managers or when they take revenue collected to the district accountant. Staff also sometimes struggled to take on the accounting tasks demanded of accounts alongside rendering health care services to the patients. In Kinondoni MC where bank accounts had been operating for longer, during the second round of data collection, we found that facilities which had been collecting a lot of revenue had been allocated an accountant.

"...training on how to open a bank account was not rendered and that is what caused a delay in opening a bank account, village staffs are the ones who assisted since some of the villages have accountants, and most of the time they are given instruction by the district accountant ..." (FGD, Manyoni DC, CHMT, Second Round)

"...collection of money is still a challenge; because most of the staff at the facilities are complaining that they have been assigned accountant's tasks while they are not accountants" (FGD, Manyoni DC, CHMT, Second Round)

Revenue collected at the facility was sometimes kept at the facility for some time before being deposited into the facility bank account. This also raised concerns about the safety of funds, as there was no safety deposit box. However, there were no cases of theft reported in the two rounds of data collection.

"...there is a risk of keeping the money at the facility while some doors have no locks so they keep the money at their home instead of keeping it at the health facility, also facilities have no security guards, this is a challenge which we are encountering......." (FGD, Manyoni DC, CHMT, Second Round)

Discussion

The opening of bank accounts at public primary healthcare facilities in Tanzania is one of the healthcare financing strategic reforms underway in the country aimed at improving service provision in peripheral areas. This study looked at the opening of accounts and the operation of the accounts at the primary health care level and challenges therein based on a case study of three districts. We found that facilities were generally aware of the need and rationale for opening bank accounts and most facilities had successfully taken the required measures to open accounts. However, some facilities had faced challenges opening accounts due to the lack of transparency on requirements, and the fact these changed over time and due to insufficient financial resources to support the

transport to banks and initial deposit that was needed. Facilities were able to deposit a share of their cost sharing revenue into their accounts and had been successful in withdrawing funds to purchase of drugs and other medical supplies that were out of stock; to pay and employ auxiliary staff as casual workers and for minor facility needs such as the purchase of solar power; repair of doors and other facility improvements. This had increased facility autonomy over financial resources and planning. However, facilities still required district authorisation for using funds which delayed their access to resources, although the process appeared less bureaucratic than before. Furthermore, not all the staff at the peripheral facilities had training or accounting skills to account for the money collected and used at the facility, and the reporting requirements were found to be burdensome on staff time. These factors are likely to constrain the benefit that can be derived from having the bank accounts, and has implications for their expanded use going forward.

A study in Kenya also reported a reduction in bureaucracy in accessing funds at the district level following the introduction of bank accounts and avoiding situations where district managers re-direct facility funds to other activities in the district [28]. Decisions on how to spend funds were subsequently made at the facility level, without the need for higher level authorisation, although facilities were expected to comply with certain guidelines [13]. Health facility committees were responsible for approving work plans and the budget of the facility as well expenditures and financial reports prepared by the officer-incharge. In case of any change in their previously approve expenditure plans that required alterations to expenditure categories, they had to seek approval from

the district health management teams (DHMTs) [29, 39]. Healthcare facilities reported no problem in fund access from their bank accounts. In contrast, in Tanzania, the district-level managers still have ultimate control over how funds are spent [9]. Facility accounts will have potentially greater impact in Tanzania once this level of autonomy can be achieved at peripheral health care facilities. However, this has to be balanced against ensuring accountability for how funds are used. Another study in Tanzania also found that bank accounts reduce the misuse of funds and increased facility revenue, in the context of a pay for performance scheme [14]. Although we were unable to quantify the effects on facility revenue in our study, it is clear that bank accounts made revenue more accessible to facilities. As of early 2018, the Tanzanian government is channelling basket funding to facility bank accounts direct facility financing (DFF), similar to the Kenyan initiative, which is likely to substantially increase the amount of resources facilities have access to through their accounts.

While the procedures for accessing and using funds in Tanzania did take some time, this was also a result of efforts to ensure accountability for the use of funds at the community level. Indeed, through the health facility governing committee, which comprises health workers and community members, the community is able to influence decisions on how funds are used, and also act as signatories on fund withdrawals from the bank. This practice was similar to that reported in Kenya [24, 28]. While compiling financial reports was an additional time burden on staff, such practice has been reported elsewhere [28] and served to further enhance accountability for the use of funds.

Our findings of a lack of financial management skills among the health facility committee and a lack of clear written guidelines on the use of funds at the facility level were also reported in a study in Yemen [27], while in Kenya health facility committee members and the facility in-charge received at least two training sessions on the DFF scheme [39].

Facility bank accounts provided the opportunity to improve the provision of health care services, through investment in medical supplies and facility improvements among other. In Kenya, facility funds were similarly used to support staff such as cleaners and patient attendants, outreach activities, renovations, patient referrals and increasing HFGC activities [24]. Although not measured in our study, such investments are likely to improve utilisation and quality of care, as was reported in Kenya [28].

Our study had a number of limitations. First we only selected three districts which were at different stages in the implementation of the reform, yet findings were consistent across districts. Secondly we were unable to look at the effect of facility bank accounts on service delivery (such as service use, drugs and other medical supplies purchased, review of bank statements on the use of funds etc). Third, we were not able to assess the effect of bank accounts on the regularity of health facility governing committee meetings, although we hypothesize that this would have been enhanced, as committees had an important role in deciding on how to use funds. Finally, we were also unable to assess in detail how funds were used by facilities and the factors shaping this. Ultimately facility funds

might be used to hire accountants to support primary care providers. These areas would be important topics for future research.

Conclusion

The implementation of health care financing reforms aims to improve access to health services, especially in rural areas. Although there were some challenges in the opening of facility bank accounts, most of the facilities managed to open and use the retained funds in their accounts to cater for facility needs. The experience of opening facility bank accounts, management and use of the funds highlights the need to strengthen the capacity of staff and health governing committees, prior to or alongside such reforms promoting financial autonomy.

List of Abbreviations

ССНР	Comprehensive council health plans
СНМТ	Council Health Management Team
CHSB	Council Health Service Board
DC	District Council
DED	District executive director
DHMT	District Health Management Team
DMO	District Medical Officer
HFGC	Health Facility Committee
IHI	Ifakara Health Institute
IRB	Institutional Review Board

LGAs Local Governmental Authorities

- LSHTM London School of Hygiene & Tropical Medicine
- MC Municipal Council
- MoF Ministry of Finance
- MoHCDEC Ministry of Health, Community Development, Gender, Elderly and Children
- MSD Medical Store Department
- NHIF National Health Insurance Fund
- NIMR National Institute for Medical Research
- 00P Out-of-pocket payments
- P4P Pay for performance
- PMO-RALG The Prime Minister's Office Regional Administration and Local Government
- PWC PricewaterhouseCoopers
- RBF Results based financing
- SDC Swiss Agency for Development and Cooperation
- TGPSH Tanzanian German Programme to Support Health
- TIKA Tiba kwa Kadi
- ToC Theory of change
- TZS Tanzanian Shilling
- UHC Universal Health Coverage
- UNITAS Universal Coverage in Tanzania and South Africa
- URT United republic of Tanzania
- USAID United States Agency for International Development
- WHO World Health Organisation's

Declarations

Ethics approval and consent to participate

Ethical clearance for this study was obtained from the Ifakara Health Institute Institutional Review Board (IHI/IRB/No 32-2013), the Tanzanian National Institute for Medical Research (NIMR) and the London School of Hygiene & Tropical Medicine (LSHTM) Research Ethics Committee (LSHTM ethics ref: 6492). District managers and health facility in-charges were informed about the study and written informed consent was obtained from each participant. Interview guides for key informants and focus group discussion were all pretested for quality control and field interviewers and supervisors were trained and supervised by two research coordinators.

Consent for publication

Not applicable

Availability of data and material

The dataset(s) supporting the conclusions of this article is owned by Ifakara Health Institute (IHI) and available upon request

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

AK participated in data analysis, interpretation of data and drafted the manuscript; MR participated in interpretation of results, GM, SM and S.Makawia participated in data collection and interpretation of results. GM and JB developed the study protocol and participated in interpretation of results. All authors have critically reviewed the manuscript and approved final version.

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Exchange rate

1 US\$ = 2137 TZS

References

- Kuwawenaruwa, A., et al., An assessment of equity in the distribution of non-financial health care inputs across public primary health care facilities in Tanzania. International Journal for Equity in Health, 2017. 16(1): p. 124.
- Musango, L., et al., *Moving from ideas to action developing health financing systems towards universal coverage in Africa.* BMC International Health and Human Rights, 2012. 12: p. 30-30.
- 3. USAID, *Health Care Financing Reform in Ethiopia: Improving Quality and Equity*, 2012: Addis Ababa, Ethiopia.
- 4. Mills, A., *Health Care Systems in Low- and Middle-Income Countries.* New England Journal of Medicine, 2014. **370**(6): p. 552-557.
- Han, W., Health Care System Reforms in Developing Countries. Journal of Public Health Research, 2012. 1(3): p. 199-207.
- 6. Asante, A., et al., Equity in Health Care Financing in Low- and Middle-Income Countries: A Systematic Review of Evidence from Studies Using

Benefit and Financing Incidence Analyses. PLoS ONE, 2016. **11**(4): p. e0152866.

- Mbogela, C.S. and H. Mollel, *Decentralization and Financial Management in the Tanzanian Local Government Authorities* Public Policy and Administration Research 2014. 4(12).
- 8. Frumence, G., et al., *Challenges to the implementation of health sector decentralization in Tanzania: experiences from Kongwa district council.* Glob Health Action, 2013. 6: p. 20983.
- 9. De Geyndt, W., Does autonomy for public hospitals in developing countries increase performance? Evidence-based case studies. Soc Sci Med, 2017.
 179: p. 74-80.
- Collins, D., et al., *Hospital autonomy: the experience of Kenyatta National Hospital.* Int J Health Plann Manage, 1999. 14(2): p. 129-53.
- Barasa, E.W., et al., *Recentralization within decentralization: County hospital autonomy under devolution in Kenya.* PLoS ONE, 2017. **12**(8): p. e0182440.
- 12. Goodman C, et al., Funding Kenyan health centres: experiences of implementing direct facility financing and local budget management, in 3rd Global Symposium on Health Systems Research in Cape Town, South Africa.2014.
- 13. Chuma, J., et al., *Reducing user fees for primary health care in Kenya: Policy on paper or policy in practice?* International Journal for Equity in Health, 2009. 8(1): p. 15.

- Mayumana, I., et al., *Effects of Payment for Performance on accountability mechanisms: Evidence from Pwani, Tanzania.* Soc Sci Med, 2017. **179**: p. 61-73.
- Antony, M., M.P. Bertone, and O. Barthes, *Exploring implementation practices in results-based financing: the case of the verification in Benin.* BMC Health Serv Res., 2017. 17: 204(1472-6963 (Electronic)).
- 16. Nyamhanga, T., et al., *Achievements and challenges of resource allocation* for health in a decentralized system in Tanzania: perspectives of national and district level officers. East Afr J Public Health, 2013. **10**(2): p. 416-27.
- 17. Johwa, W., Incentives and autonomy for frontline health workers: How RBF programs are changing the face of maternal and child health, in RBF Health2014.
- 18. Anokbonggo, W.W., et al., *Impact of decentralization on health services in Uganda: a look at facility utilization, prescribing and availability of essential drugs.* East Afr Med J, 2004. **Suppl**: p. S2-7.
- Regmi, K., et al., Decentralization and district health services in Nepal: understanding the views of service users and service providers. Journal of Public Health, 2010. 32(3): p. 406-417.
- 20. Koivusalo, M., K. Wyss, and P. Santana, *Effects of decentralization and recentralization on equity dimensions of health systems*, in *Decentralization in Health Care; Strategies and outcomes*, R.B. Saltman, V. Bankauskaite, and K. Vrangbæk, Editors. 2007, McGraw-Hill Education: New York, NY 10121-2289, USA.
- 21. Chawla, M. and R. Govindara, *Improving Hospital Performance through* Policies to Increase Hospital Autonomy:Policies to Increase Hospital

Autonomy:Implementation Guidelines 1996, United States Agency for International Development (USAID) Washington through the AFR/SD/Health and Human Resources for Africa (HHRAA) Project.

- 22. London, J.D., *The promises and perils of hospital autonomy: Reform by decree in Viet Nam.* Social Science & Medicine, 2013. **96**: p. 232-240.
- Borghi, J., et al., Promoting universal financial protection: a case study of new management of community health insurance in Tanzania. Health
 Research Policy and Systems, 2013. 11(1): p. 21.
- 24. Opwora, A., et al., Implementation of patient charges at primary care facilities in Kenya: implications of low adherence to user fee policy for users and facility revenue. Health Policy Plan, 2015. **30**(4): p. 508-17.
- 25. URT, United Republic of Tanzania. Community Health Fund: Operations Guidelines. MoHSW; Dar es Salaam: Tanzania 2001.
- Suriyawongpaisal, P., Potential Implications of Hospital Autonomy on Human Resources Management. A Thai Case Study Human Resources Development Journal, 1999. 3(3).
- 27. al-Serouri, A., D. Balabanova, and S. al-Hibshi, *Cost Sharing for Primary Health Care: Lessons from Yemen* 2002, Oxfam GB.
- 28. Waweru, E., et al., Tracking implementation and (un)intended consequences: a process evaluation of an innovative peripheral health facility financing mechanism in Kenya. Health Policy Plan, 2016. 31(2): p. 137-47.
- 29. Opwora, A., et al., Direct facility funding as a response to user fee reduction: implementation and perceived impact among Kenyan health centres and dispensaries. Health Policy Plan, 2010. **25**(5): p. 406-18.

- 30. Boex, J., L. Fuller, and A. Malik, *Decentralized Local Health Services in Tanzania Are Health Resources Reaching Primary Health Facilities, or Are They Getting Stuck at the District Level?*, 2015, The Urban Institute.
- 31. Maluka, S. and D. Chitama, *Primary care systems profiles & performance (PRIMASYS); Tanzania Case Study*, 2015, Alliance for Health Policy and Systems Research (AHPSR) in collaboration with the Bill & Melinda Gates Foundation, : WHO.
- 32. Macha, J., H. Mushi, and J. Borghi, *Examining the links between* accountability, trust and performance in health service delivery in Tanzania. 2011, CREHS Research Report. Consortium for Research on Equitable Health Systems, 2011.
- 33. TGPSH, Better Services for Better Health: Tanzanian-German Programme to Support Health Phase IV (2013-2016), 2016, Tanzanian German Programme to Support Health
- 34. PharmAccess, *iCHF How a public-private partnership can help make healthcare work in Northern Tanzania*, 2016: Amsterdam, The Netherlands.
- 35. URT, The United Republic of Tanzania, Prime Minister's Office, Regional Administration and Local Government; Community Health Funds (CHF) Financial management and operational guidelines for Local Government Authorities; Dar es Salaam: Tanzania, 2014.
- Masiye, F., O. Kaonga, and J.M. Kirigia, *Does User Fee Removal Policy Provide Financial Protection from Catastrophic Health Care Payments? Evidence from Zambia.* PLoS ONE, 2016. **11**(1): p. e0146508.

- Xu, K., et al., Designing health financing systems to reduce catastrophic health expenditure. Technical Briefs for Policy-Makers Number 2. Geneva: WHO; 2005, 2005.
- Crowe, S., et al., *The case study approach*. BMC Medical Research Methodology, 2011. **11**: p. 100-100.
- 39. Goodman, C., et al., Health facility committees and facility management exploring the nature and depth of their roles in Coast Province, Kenya. BMC
 Health Services Research, 2011. 11: p. 229-229.

Figure 1: High Level Theory of Change: Causal Pathway from having health facility account to Increased fund use at the facility

The figure shows the whole process of opening bank account, resources retained at the facility bank account, and pooling at the district level, role of health facility governing committee and other stakeholders as well as use of the resources