Governance factors that affect the implementation of health financing reforms in Tanzania: an exploratory study of stakeholders’ perspectives

Doris Osei Afriyie,1,2 Brady Hooley,1,2 Grace Mhalu,3 Fabrizio Tediosi,1,2 Sally M Mtenga3,4

ABSTRACT
The development of effective and inclusive health financing reforms is crucial for the progressive realisation of universal health coverage in low-income and middle-income countries. Tanzania has been reforming health financing policies to expand health insurance coverage and achieve better access to quality healthcare for all. Recent reforms have included improved community health funds (iCHFs), and others are underway to implement a mandatory national health insurance scheme in order to expand access to services and improve financial risk protection. Governance is a crucial structural determinant for the successful implementation of health financing reforms, however there is little understanding of the governance elements that hinder the implementation of health financing reforms such as the iCHF in Tanzania. Therefore, this study used the perspectives of health sector stakeholders to explore governance factors that influence the implementation of health financing reforms in Tanzania. We interviewed 36 stakeholders including implementers of health financing reforms, policymakers and health insurance beneficiaries in the regions of Dodoma, Dar es Salaam and Kilimanjaro. Normalisation process theory and governance elements guided the structure of the in-depth interviews and analysis. Governance factors that emerged from participants as facilitators included a shared strategic vision for a single mandatory health insurance, community engagement and collaboration with diverse stakeholders in the implementation of health financing policies and enhanced monitoring of iCHF enrolment due to digitisation of registration process. Governance factors that emerged as barriers to the implementation were a lack of transparency, limited involvement of the private sector in service delivery, weak accountability for revenues generated from community level and limited resources due to iCHF design. If stakeholders do not address the governance factors that hinder the implementation of health financing reforms, then current efforts to expand health insurance coverage are unlikely to succeed on their own.

INTRODUCTION
Sustainable Development Goal (SDG) 3.8 promotes universal health coverage (UHC), ensuring that all people will obtain the quality health services they need while not suffering financially as a result of seeking healthcare.1–3 The journey towards UHC requires inclusive social health protection based on health systems that are affordable and able to adapt to sociodemographic and technological changes, responding to the evolving needs of the population. In the last decade, several low/middle-income countries have implemented health system reforms, including the introduction of health insurance schemes, to accelerate progress towards UHC.4 Understanding of the contextual factors, along with sound health system governance
Collaboration and strategic partnerships should extend beyond the health sector and local communities to non-health actors and private partners; in doing so, Tanzania may better mobilise adequate resources for operating sustainable health financing schemes.

The Tanzanian government should invest in resolving the governance issues which affect health financing reforms such as iCHF in order to improve the quality of healthcare and the perceived value of social health protection—doing so will be important for encouraging the enrolment of new members in both current and future social health protection schemes.

In broad terms, governance can be defined as how societies make and implement collective decisions. Yet, in relation to health systems, governance has been conceptualised in different ways. Governance encompasses multiple aspects, such as systems of representation and engagement for citizens, accountability mechanisms, power and institutional authority, ownership, political stability, transparency and the rule of law. It is related to how policies are formulated and implemented, how regulation is generated and exercised, and to the accountability mechanisms of all stakeholders.

Governance is thus related to how political, economic and administrative leadership and authority are exercised within a health system.

The WHO defines health systems governance as ‘ensuring strategic policy frameworks exist and are combined with effective oversight, coalition-building, the provision of appropriate regulations, attention to system-design, and accountability.’ From this perspective, good governance involves leadership in coordinating the resources and stakeholders (policymakers, implementers, civil society groups, private sector and citizens) involved in the implementation and accountability of health services and programmes. Evidence has also shown how good governance is imperative for the operationalisation and successful implementation of health financing strategies.

Yet, there is little clarity about the specific governance elements, which are important for particular health financing strategies.

In Tanzania, there are two main insurance schemes—the National Health Insurance Fund (NHIF) and the improved community health fund (iCHF). The NHIF mainly covers public sector employees while the iCHF, a voluntary scheme, targets the rural and informal sector; with a majority of Tanzanians falling within this category. Introduced in 2018, iCHF is an upgrade of the community health fund (CHF) which was established in 2001. The launch of iCHF included pooling of funds at the regional level and expansion of the benefit package to include health services at the regional level. Financing of iCHF is through premiums from households and contributions from the national government. In the design of the scheme, households who are deemed too poor are exempt from premium payments. Premiums are per household of six and are set according to the geographical location of households (rural vs urban region). From each premium payment, 80% is allocated to capitation payments to hospitals and primary care facilities, 10% commission for the officer who enrolls a household, 9% for administration costs and 1% for reserves. Contributions from the national government comprise equal matching funds for each household premium contribution received at the regional level. For example, if the household premium at a region is 30,000 shillings (US$12.94), government contribution should match equally to have a total contribution of 60,000 shillings (US$25.87) per household. There are also expenditure allocations for the matching funds received from national government: 80% to health facilities on a per capita basis, 15% for administrative costs and 5% for reserves.

Tanzania’s Health Sector Strategic Plan IV-2015–2020 emphasised the need to improve governance, revenue collection, and the pooling of funds and healthcare purchasing. This plan outlines the long-term aim to scale up the coverage of the existing health insurance schemes with the long-term objective to integrate them into a single mandatory national health insurance to reduce fragmentation and to extend coverage to the entire Tanzanian population. A key part of the plan is to scale up the coverage of iCHF. Yet, despite government efforts, only 25% of the population is enrolled into iCHF. Prior research on community health funds has found the low enrolment rate to be associated with demand-side issues such as poor understanding of the scheme and supply-side factors including a limited benefit package and poor quality of care at public health facilities. There are also concerns about the financial sustainability of iCHF. However, the literature related to the governance factors surrounding the implementation of iCHF in Tanzania remains limited.

As the time frame of this strategic plan has ended, it is important to identify and understand the factors that have been influencing the implementation of health financing reforms in Tanzania. Therefore, the aim of this manuscript is to present a synthesis of identified governance-related barriers and facilitators for the successful implementation of health financing reforms, including the improved community health fund, in Tanzania.

METHODS

Study design and settings

This study used a qualitative research design to elicit the views of health sector stakeholders regarding the implementation of iCHF. The study was conducted in...
three regions in Tanzania, which are Dodoma, Dar es Salaam and Kilimanjaro. These regions were purposively selected because the Dodoma and Dar es Salaam regions host the headquarters of the NHIF; the Ministry of Health Community Development, Gender, Elderly and Children; and the President’s Office of Regional Administration and Local Government, thus facilitating the recruitment of relevant policymakers engaged in the implementation of health financing strategies. The Kilimanjaro region was selected because it was expected that participants from the region would provide rich discourse on iCHF implementation and health financing, as the region was one of the first to pilot and subsequently adopt the iCHF in 2014.19

Study population and participant selection
The data for the study were obtained from in-depth interviews with 36 health stakeholders conducted between November 2019 and January 2020. Prior to recruiting participants, a context mapping was conducted to gain a deeper understanding of who to interview based on their direct and indirect contributions to the implementation of health financing strategies.20 Twelve key informants were identified through the context mapping. After the context mapping, a snowball sampling approach was employed to identify additional relevant stakeholders.21 Recruitment ended at the level of theoretical saturation of the data.21 22

Participants of the study included policymakers and implementers such as regional and district coordinators of iCHF, medical directors of health facilities, health workers, district council management teams, community leaders and iCHF members. Medical and healthcare professionals made up the largest portion of participants; many of whom were responsible for health facility governance, budget planning or the implementation of the iCHF in their respective health facilities and jurisdictions. The full details of participant characteristics can be found in online supplemental table 1.

### Study conceptual framework
In order to investigate the factors that have influenced the implementation and scale-up of the coverage of iCHF in Tanzania, the normalisation process theory (NPT) was integrated into the inquiry process.23 24 The NPT framework focuses on the work that individuals and groups do to enable the normalisation of complex interventions or programmes including policies.25 The NPT framework was used to investigate how governance-related factors have been affecting the implementation and scale-up of iCHF.

NPT in this study denotes the normalisation of the implementation of all iCHF activities—that is, education about iCHF, revenue generation, supervision and delivery of health services and claims reimbursement. Normalisation is achieved when the implementers’ roles and activities are standardised or conform to the requirements (ie, governance aspects) of successful implementation of iCHF.

There are four main domains of NPT: coherence, cognitive participation, collective action and reflexive monitoring. Coherence is how actors involved in the intervention make sense or understand the aims, objectives and expected benefits of the intervention. Cognitive participation is the relational work that actors do to build and sustain intervention. Central to cognitive participation is “the question of who does the work?” Collective action is the operational work people do to enact a set of practices. It focuses on how the work is done by actors. Reflexive monitoring is the formal and informal appraisal of the effectiveness and progress of the intervention or programmes by actors.

In addition to NPT framework, we adapted a governance framework drawing from the Siddiqi framework for assessing health systems governance and WHO health systems governance framework, to understand governance factors which have promoted or inhibited the implementation of iCHF.10 27 The governance elements in our adapted framework have six main domains, which include policy guidance and vision; intelligence/
information; system design; accountability and transparency; regulation and incentives; and participation, collaboration and coalition building (table 1). Our assumption underlying the use of NPT and the aforementioned governance frameworks in our study was that both frameworks provide a deeper understanding of the factors that have affected the implementation of iCHF.

Data collection and analysis
In-depth interviews were carried out using a semistructured interview guide in the local language (Kiswahili). The interviews were conducted at the preferred location of the participants; most participants selected their offices. The interviews lasted 15–90 min. The interview guides were designed using NPT and governance constructs.

Each domain of NPT and governance were operationalised into specific questions. The questions focused generally on the roles of the stakeholders, their perceptions about the challenges that affect the implementation of health financing reforms and the participation of local community members in the formulation of health financing policies in the country. The questions were piloted during interviewer training. All necessary revisions to the interview guide were made prior to proceeding with principal data collection (training process described in online supplemental materials). Research assistants conducted in-person interviews in Kiswahili, then simultaneously transcribed and translated the Kiswahili audio recording to English text.

We used framework analysis to guide deductive data analysis within the scope of the NPT and governance frameworks, while inductive analysis explored themes as they emerged from the data.8 23 24 Three authors coded the data separately before being validated by intercoder agreement. The data were first coded using governance elements of the adapted governance framework and later reorganised under the related NPT domains. Analyses were performed using ATLAS.ti V.8.0.

RESULTS
Governance elements that emerged as facilitators or barriers to the implementation of iCHF are presented within the NPT domains in table 2. We also present a broader description of the findings supported by participants’ excerpts.

<table>
<thead>
<tr>
<th>NPT domain</th>
<th>Description</th>
<th>Governance factors that emerged</th>
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| Coherence                | The manner in which key implementers and beneficiaries make sense of the health financing strategy and how they understand the strategic vision at national level. | Facilitators 1. Coherent understanding of current health financing policy 2. Shared strategic vision for a single national health insurance by stakeholders  
Barriers 1. Lack of transparency leading to misunderstanding of iCHF benefit package 2. Limited capacity of health facility-governing committees and communities to actively participate in the implementation of health financing strategies |
| Cognitive participation  | The relational work that implementers, communities and other actors do to build and sustain a community of practice around implementing iCHF. | Facilitator 1. Engagement and collaboration of stakeholders in the designing and implementation of health financing strategies  
Barrier 1. Limited involvement of the private sector in service delivery for iCHF |
| Collective work          | The operational work that people do to enact a set of practices; including resources such as finances and data to operationalise iCHF. | Barriers 1. Limited financial resources to support awareness campaigns 2. Weak accountability of revenues generated from premiums 3. Incentives for the implementation of iCHF are irregular 4. Failure of iCHF design to support a wider access to medicine for beneficiaries 5. Limited data or information to determine eligible groups for premium exemptions under iCHF |
| Reflexive monitoring     | Formal or informal appraisal in which implementers and beneficiaries appraise the progress of the implementation of health financing strategies and the social health protection schemes in Tanzania. | Facilitator 1. Enhanced monitoring of enrolment progress due to digitalisation of registration process  
Barrier 1. Limited supervision of iCHF due to inadequate resources |

iCHF, improved community health fund.
Coherence
Facilitator
Coherent understanding of current health financing policy
Having clearly defined policy guidance is an important element of good governance. Stakeholders’ responses about the current health financing strategies and arrangements were consistent and coherent. Policymakers and stakeholders at higher levels of the health system seemed to be most familiar with the reforms:

When you speak of this policy, you speak of the guideline of financing health services [that] was put into place by the ministry of health. [...] Speaking of financing health services, I can speak of three major areas: we finance by using health insurance, this is iCHF, which was previously known as CHF, then there is NHIF and other private insurances, then there is cash payment. (IDI 25, social worker at the President’s Office)

Shared strategic vision for a single national health insurance by stakeholders
Most stakeholders reported a shared strategic vision with the aim to implement a mandatory and single national health insurance. Although some participants were not specifically asked about mandatory health insurance, they consistently cited it as a policy priority. Stakeholders thought that it is necessary for the government to make health insurance mandatory in order to create the opportunity for all individuals to access affordable healthcare:

For us to reach the goals [access to quality services for all without financial hardship], health insurance should be mandatory. Every family should have [health insurance]. [...] If this is done, even the services will improve because there will be sufficient money to run the health centres. (IDI 24, enrolment officer)

Barriers
Lack of transparency leading to misunderstanding of benefit package
Stakeholders mentioned that there is misunderstanding about health insurance schemes among community members. They explained this was due to limited transparency about the benefit packages of the health insurance scheme. Some participants explained that some policymakers such as politicians convey inaccurate information to the public, thus creating mistrust of iCHF among beneficiaries.

Politicians just tell citizens that everything is free, something which is professionally not possible. How can an adult access health care for only 1600 shillings (US$0.69). (IDI 10, social welfare officer)

Limited capacity of communities to participate actively in iCHF
Community members who are involved in health facility governing committees mentioned that they have received a few orientations about health insurance schemes but they have not participated in specific training about health financing, thus they do not have full capacity to implement health insurance schemes such as iCHF. Participants also mentioned that the communities have a poor understanding of how health insurance schemes work generally.

Cognitive participation
Facilitator
Collaboration/participation and coalition building
Collaboration and participation of various actors within and outside the health sector are important for good governance. Participants perceived that there is a strong collaboration between implementers of iCHF and other stakeholders such as politicians, religious leaders and non-governmental organisations (NGOs) with each stakeholder having specific roles. They reported that members of parliament and religious leaders have been important players in creating awareness about the importance of iCHF to communities. They also mentioned that NGOs have also been instrumental in paying premiums on behalf of vulnerable households.

Stakeholders in higher administrative levels mentioned that it is standard practice to involve communities when developing national policies, and stakeholders at lower levels of the health system agreed by mentioning that health facility governing committees involve communities in both decision-making and policy implementation. They also gave the expansion of the benefit package to regional hospitals as an example of including communities’ voices in iCHF implementation.

Barrier
Limited involvement of the private sector in service delivery for iCHF
Stakeholders mentioned that the role of the private sector is limited in the implementation of iCHF. They explained that the government could collaborate with private health facilities to provide healthcare or diagnostic services in case the services are unavailable in the public health facilities. Participants also mentioned public–private partnership to purchase and maintain laboratory equipment in public health facilities, which are not always readily available.

I think the government should involve private sector in the provision of health care. For example, the government has laboratories. The medical equipment facilities are changing almost each year. The government can partner with the private sector to purchase or maintain its equipment such as CT scan, X-ray etc. (IDI 08, NGO stakeholder)

Collective action
Under collective action, inadequate resources such as finances, human resources and medicines emerged as the main barriers that affect the operationalisation of iCHF. Governance factors, which were cited to contribute to inadequate resources, include system design, poor regulation/incentives, weak accountability of revenues and limited intelligence/information.
Barriers

**Limited financial resources**

Participants explained that one of the challenges that affects the implementation of iCHF is that the current iCHF design does not account for financial resources to support districts on community education and awareness activities:

> The responsibility [of education campaigns] should go hand in hand with funding resources because it is difficult to assign a staff to go more than 50 km for sensitization campaign without providing him/her a transport, fare [for public transport], funds for accommodation, etc. So, funds and human resources are still a challenge [for sensitization campaigns]. (IDI 30, member of Council Health Management Team)

Some healthcare workers indicated that due to the limitation of financial resources for education activities, they often use their own resources for awareness campaigns. They explained that they do this because of the realization that increasing enrolment will generate more revenue for their respective health facilities.

Furthermore, participants highlighted various governance factors that contribute to limited financial resources as follows:

**Weak accountability of revenues generated from premiums**

Stakeholders across various levels of the health system reported that weak financial accountability plays a significant role in limiting financial resources. At the community level, stakeholders mentioned that ensuring accountability in the submission of premiums collected by enrollment officers has been an issue:

> Most of the time, you will find [that] the money in the [bank] account is 75%–80% of the total money that is supposed to be in the account. This means that, there are people who have been registered, and they are supposed to receive the services but their contribution has not reached at the administrator. Why? Most likely, the money is still in the hands of the registration officers and they use the money. (IDI 09, iCHF coordinator)

**Incentives for the implementation of iCHF are irregular**

According to iCHF regulations, central government is supposed to match the funds received from every premium collected, however, participants reported that they experience challenges in receiving these iCHF matching funds:

> I am just telling you [it] has been challenging to get that extra 30,000 shillings [matching funds] from the government. We did not receive [the contributions] last year [or] this year. By policy and procedure, we expect 60,000 shillings but we end up [only] getting 30,000 shillings. This is very hard because in the end the health facilities are still providing the services but with little money. (IDI 09, regional iCHF coordinator)

**Failure of iCHF design to support wider access to medicines for beneficiaries**

Participants mentioned that availability of medicines is one of the main expectations of beneficiaries when they receive health services. However, the availability of medicines in public health facilities is often limited. Therefore, even iCHF members may have to pay out-of-pocket for medicines at pharmacy outlets.

> I think things should be improved in the CHF to allow patients to get medicines from a nearby pharmacy if medicines they need are not available at the health facility. This is because if medicines are not available they have to go to buy and they start complaining: ‘what is it for we are paying if we cannot get drugs at the health facility?’ (IDI 07, community health worker)

**Limited intelligence/information to support identification of vulnerable groups**

Participants further mentioned that limited information about vulnerable groups, who are eligible for exemption under iCHF, is another implementation challenge. This challenge makes it difficult to identify and include vulnerable groups in the iCHF:

> The challenge we face is how to identify those extremely poor communities. [That needs] an intensive survey to identify them. (IDI 36, iCHF coordinator)

In addition, stakeholders also mentioned that limited intelligence to determine eligibility for exemptions has led to abuse of the policy:

> […] Its implementation has challenges because there is no special recognition system to identify if this is a poor person or not. So you will find sometimes that there are people who do not deserve to get exemption but they are getting it that way. That is a challenge. (IDI 23, economist)

**Reflexive monitoring**

**Facilitator**

**Enhanced monitoring of enrolment progress due to digitalisation of registration**

Stakeholders explained that the new digital system for enrolment has made it easier to monitor enrolment rate progress of iCHF for households. Participants at the regional levels mentioned that the current iCHF digital system has enabled them to monitor daily enrolment without having to travel to the district levels. In addition, the digital system of the enrolment process has also helped to identify the discrepancies between the number of people enrolled and the revenue collected.

> ICHF has a proper system, a system that from where I am, I can tell what is happening in Tandahimba. I can see how many people are registered and the amount of money collected in every council. (IDI 25, social worker)

**Barrier**

**Inadequate supervision due to limited resources**

Supervision can be an important aspect of enhancing monitoring and accountability of progress towards successful implementation of iCHF. Coordinators of iCHF mentioned that supervision of enrolment centres and health facilities is one of their responsibilities but...
due to lack of financial resources, they are unable to fulfil this responsibility:

Sometimes we face the challenge of financial resources. There was a time we needed funds for fuel to enable us to do supportive supervision but we didn’t get hence we failed to support the planned activities. (IDI 36, iCHF co-ordinator)

DISCUSSION

This study has explored the factors which have influenced the implementation of iCHF using NPT and governance frameworks. Our findings suggest that collaboration and participation by various actors are prominent aspects of governance and NPT that support the implementation of iCHF in Tanzania.

Politicians and religious leaders have played a role in creating awareness about health insurance schemes. Unfortunately, participants frequently reported that politicians sometimes use simple yet misleading statements, such as ‘free healthcare’, to attract popularity. Other evidence from sub-Saharan Africa has demonstrated that opaque communication can also confuse communities and erode their trust in preventive health services.28 29 Although politicians and other influential stakeholders are important collaborators for iCHF, it is important that their communication about the iCHF benefit package and how insurance works be consistent and accurate to improve the awareness and acceptability of health insurance in Tanzania.

Participants also identified that community engagement and collaboration are standard practices when developing national policies such as for iCHF in Tanzania. Evidence shows that routine practices of implementing health financing reforms can be achieved when multiple actors engage in delivering health insurance outputs and share a coherent view of their roles and purpose.23 A study in South Africa revealed that community engagement in the introduction and implementation of national health insurance was useful for holding the government accountable, while a systematic review of other settings revealed that community engagement was important for addressing inequalities in health.30 31 Conversely, studies in other countries have found that communities can lack commitment or react hostilely to programmes when they are not included in planning and budgeting processes.32 As Tanzania continues to make important decisions regarding health financing reforms, such as mandatory health insurance, it is important that communities are included in this process.17 However, the low enrolment rates of communities into iCHF and their limited capacity to understand health financing strategies, including health insurance schemes, raise concerns about the degree of community engagement and collaboration. This limitation of communities may not only affect cognitive participation, but also their influence in collective action. Beneficiaries of iCHF and citizens can also influence the implementation of iCHF through collective action.33 The literature has shown that investments in improving communities’ required skills and confidence are important enablers for effective engagement and their subsequent participation.34

Although various actors were engaged in the implementation of iCHF, the design of iCHF has restricted the resources needed to take collective action to effectively implement iCHF. One of the main themes that emerged was the need for intensive awareness campaigns in communities about health insurance schemes. Yet, according to participants, the design of iCHF does not take into account the necessary resources needed to conduct these awareness campaigns. Participants also mentioned that the inconsistent availability of medicines in public health facilities is a major challenge, which is a critical factor for users’ perception of health insurance. Participants mentioned that the collaboration of iCHF with the private sector could bridge this gap. Some of these design challenges highlighted by participants are not unique to Tanzania. In both Ghana and Gabon, for example, there have also been accounts of medicine stock-outs and financial challenges hindering the implementation of their health insurance schemes.35–37 This evidence reinforces the notion that implementing effective social health protection schemes requires taking into account quality healthcare that responds to the population’s needs in the design of these schemes.

Patients also reported that weak accountability of iCHF premiums has contributed to the limited financial resources available. The digitisation of the enrolment process has made it easier to monitor discrepancies between the number of enrollees and revenue collected. However, there need to be better controls to account for this discrepancy. Weak accountability can have multiple negative implications on programme performance; for example, a systematic review revealed that limited financial accountability could hinder the utilisation and financial sustainability of CHFs in low-income and middle-income countries.38 However, strong oversight competencies can foster accountability in public healthcare systems.39 Therefore, enrolment officers, community leaders and district supervisors should cooperate to implement strong accountability systems, ensuring that iCHF premiums actually reach health facilities and that enrolment officers are fairly compensated accordingly.

Another important challenge facing health insurance schemes is the limited intelligence or information to support the identification of groups who should be exempt from paying insurance premiums (including weak means-testing mechanisms). Achieving equity in access to health insurance depends on the extent to which health financing reforms integrate mechanisms to include vulnerable and low-income population groups.40 Evidence indicates that Tanzania has yet to implement efficient, accurate and community-accepted methods for identifying low-income households and that current interventions can fail to identify up to one-third of households that should have been eligible for premium
exemptions. In order to avoid setbacks to achieving UHC, health insurance schemes should collaborate with other social protection programmes, such as the Tanzania Social Action Fund, to learn from their experiences in identifying and protecting vulnerable groups.

Across our findings, we demonstrate how NPT constructs and governance elements can provide a deeper understanding of the implementation of iCHF. NPT helped in the exploration of the multidimensional nature of the relationship between communities and health systems while identifying the key governance elements that facilitate or hinder the implementation of iCHF.

Limitations
The findings of this study should be interpreted in light of some important limitations related to the study design and settings. First, this study only focused on the views of domestic government partners and did not include stakeholders working in the private sector or international organisations, which are important players in the health financing ecosystem in Tanzania. In addition, in using a qualitative approach, the findings reflected stakeholders’ perceptions and not necessarily the actual governance actions. However, the policymakers, implementers and beneficiaries who participated in this study provided insights that could improve the development of health financing reforms in Tanzania and could guide policymakers on how they should implement upcoming mandatory and single health insurance schemes in Tanzania. To the best of our knowledge, this study is the first to use NPT constructs to investigate governance-related factors that facilitate or hinder the implementation of health financing reforms. Future studies using similar frameworks will provide additional valuable insights regarding their application in this context.

CONCLUSION
This study used NPT constructs to identify multiple governance-related barriers and facilitators that affect the implementation of health financing reforms in Tanzania. Regarding health financing reforms, policymakers and implementers were most familiar with the iCHF. However, they must address governance and operational challenges, such as limited financial accountability, lack of transparency and lack of financial resources, if Tanzania wishes to implement an effective, sustainable and equitable health financing strategy. Collaboration and strategic partnerships should extend beyond the health sector and local communities to non-health actors and private partners. In doing so, Tanzania may better mobilise adequate resources for operating a sustainable health financing strategy.

The findings of this study support the argument that if the government and stakeholders do not resolve governance issues that negatively affect the implementation of iCHF, then current efforts to increase the coverage of health financing schemes may not be sufficient for achieving their goals of the Health Sector Strategic Plan and for UHC.

Author affiliations
1Household Economics and Health Systems Research Unit, Swiss Tropical and Public Health Institute, Basel, Switzerland
2University of Basel, Basel, Switzerland
3Health Systems, Impact Evaluation and Policy Group, Ifakara Health Institute, Dar es Salaam, Tanzania, United Republic of
4Institute of Health and Wellbeing, University of Glasgow, Glasgow, UK

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Competing interests None declared.

Patient and public involvement Involvement of the public was central to the design of this study, in that we sought to include participants from all levels of the Tanzanian health system—from policymakers to patients and beneficiaries. Involvement of the Tanzanian public will also extend to the dissemination of these findings: we will directly visit with Tanzanian policymakers, implementers and beneficiaries in order to present these findings to them, and subsequently engage in focus group discussions in order to explore the incorporation of these findings into the future and ongoing development and implementation of health financing reforms.

Patient consent for publication Not required.

Ethics approval The study was approved by the institutional review board of the Ifakara Health Institute (reference number: IH/IRB/No:i55-2020) and the National Institute for Medical Research of Tanzania (reference number: NIMR/HQ/R.8a/Vol. IX/3518). Written informed consent was obtained from all participants prior to taking part in the research.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. According to the institutional review board of IH, we are not allowed to make the data publicly available. Interested researchers should contact the corresponding author.

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ORCID ID
Brady Hooley http://orcid.org/0000-0003-1948-9654

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SUPPLEMENTARY MATERIALS

Training of research assistants
The research team was recruited based on their experience with qualitative research, particularly the implementation of IDIs with key government officials, community members and health care providers. Research assistants were evaluated based on their understanding of the human research ethics. During the training, the research assistants were exposed to the aims of the study, study objectives, tool guides, means of safeguarding the quality of qualitative research and the essentials of informed consent. Study tools were piloted at the completion of training. All observations from the pilot study were considered and adjustments relating to the questions were immediately implemented prior to proceeding with principal data collection.

Participant characteristics
Table 1: Characteristics of study participants (N=36).

<table>
<thead>
<tr>
<th>Variables</th>
<th>n (%)</th>
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<tbody>
<tr>
<td><strong>Level of education (n=35, missing=1)</strong></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>1 (2.9)</td>
</tr>
<tr>
<td>Primary (standard 7)</td>
<td>9 (25.7)</td>
</tr>
<tr>
<td>Some secondary</td>
<td>2 (5.7)</td>
</tr>
<tr>
<td>Advanced diploma</td>
<td>1 (2.9)</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>9 (25.7)</td>
</tr>
<tr>
<td>Dental medicine</td>
<td>1 (2.9)</td>
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<tr>
<td>Diploma in medicine (Clinical officer)</td>
<td>4 (11.4)</td>
</tr>
<tr>
<td>Doctor of medicine (Medical officer)</td>
<td>8 (22.9)</td>
</tr>
<tr>
<td><strong>Stakeholder Category (N=36)</strong></td>
<td></td>
</tr>
<tr>
<td>Beneficiary</td>
<td>7 (19.4)</td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Community leaders (with health promotion role)</td>
<td>2</td>
</tr>
<tr>
<td>Community Health Worker</td>
<td>2</td>
</tr>
<tr>
<td>Social Worker</td>
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</tr>
<tr>
<td>With iCHF coordination role</td>
<td>2</td>
</tr>
<tr>
<td>Without iCHF role</td>
<td>1</td>
</tr>
<tr>
<td>Non-governmental stakeholders</td>
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<tr>
<td>Member of Parliament</td>
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<tr>
<td>Ministry of Health Official</td>
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<tr>
<td>NHIF Personnel</td>
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<tr>
<td>Healthcare provider (n=11)</td>
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<tr>
<td>With iCHF coordination role</td>
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<tr>
<td>With governance role</td>
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</tr>
<tr>
<td>Without governance role</td>
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<tr>
<td>Health Facility Governing Committee Chairperson</td>
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<tr>
<td>iCHF Enrolment Officer</td>
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<tr>
<td>Council Health Management Team Member</td>
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