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Integrated community case management for childhood illnesses: explaining policy resistance in Kenya

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Abstract

Background: There has been a re-emphasis recently on community health workers to provide child health care services including integrated community case management for childhood illness (iCCM). This research analysed iCCM policy development in Kenya and in particular the types of decision-making criteria used by Kenyan policy-makers in considering whether to advance iCCM policy.
Method: Data were collected through document reviews ($n = 41$) and semi-structured interviews ($n = 19$) with key stakeholders in iCCM policy including government officials, development partners, bilateral donors, and civil society organizations. Initial analysis was guided by the policy triangle with further analysis of factors affecting policy decision-making drawing upon a simple framework developed by Grindle and Thomas (Policy makers, policy choices and policy outcomes: the political economy of reform in developing countries. 1989; *Policy Sci* **22**:213–48.).
Findings: Policy development for iCCM has been slow in Kenya, compared with other Sub-Saharan African countries. At the time of the study, the Government had just completed the Community Health Training Manual which incorporated iCCM as a module, but this was the only formal expression of iCCM in Kenya. We found technical considerations, notably concerns about community health workers dispensing antibiotics to be a key factor slowing iCCM policy development, but this also overlapped with bureaucratic considerations, such as how the development of community health worker cadres may affect clinicians, as well as initial concerns about how an integrated approach might affect vertically oriented programs. International actors through agreements such as the Millennium Development Goals helped to get child survival onto the national policy agenda and such actors were active promoters of iCCM policy change. However international funders had not committed funding to scale-up iCCM policy, and this probably constrained their influence over iCCM policy debate.
Conclusion: Kenyan actors' concerns about iCCM underline the importance of adapting global policies to local conditions, and also generating local evidence to inform decision-making.

Key words: Case management, child health, policy analysis, Kenya

Key Messages

- Policy change for iCCM in Kenya has lagged behind that in many other Sub-Saharan countries, there is no support of CCM for pneumonia and very few policy documents articulate support of CCM for diarrhoea and malaria.
- Multiple factors explain policy resistance to iCCM in Kenya, the most significant being challenges of coordination across multiple government units, inadequate funding to support implementation, resistance to CHWs dispensing antibiotics, and lack of local evidence.
- Kenyan policy-maker concerns about iCCM are substantive ones that relate to the fit of iCCM in the local health system, global level efforts to support community health services need to be informed by local evidence and tailored to reflect differing needs and contexts.

Introduction

Background

The acute shortage of health workers in sub-Saharan Africa has been a constraint to scale up of health programs. In this context, policy promoting 'task shifting' (the shifting of tasks from more to less skilled workers) has been advocated for with an emphasis on shifting certain tasks to Community Health Workers (CHWs) (Haines *et al.* 2007; Fulton *et al.* 2011). In addition international health organizations have emphasized investment in CHWs to provide a variety of community-level services including integrated Community Case Management of childhood illness (iCCM) (WHO/UNICEF 2012). International agencies, donors and countries have prioritized iCCM and CHWs as critical to success of child survival strategies (WHO/UNICEF 2004, 2012; Rasanathan *et al.* 2014). Most recently, studies have further validated iCCM as a strategy by finding it to be effective in hard to reach communities in Africa (Hamer *et al.* 2012; Klyango 2012; Mercader *et al.* 2014). Despite increasing implementation of iCCM, studies analysing it through a policy analysis lens are scarce.

The policy issues surrounding iCCM are specific to each leading cause of death. Although many countries have developed policies to allow CHWs to treat diarrhoea and malaria this is less so for pneumonia, although a trend in supportive policies exists (Rasanathan *et al.* 2014). With regards to pneumonia, while there is international literature presenting evidence in favour of allowing CHWs to prescribe antibiotics for pneumonia (Sazawal and Black 2003; Winch *et al.* 2005; Dawson *et al.* 2008; Marsh *et al.* 2008), various concerns exist and recent papers have questioned the strength of the evidence regarding CCM for pneumonia in Sub-Saharan Africa (Druetz *et al.* 2013). The most commonly cited concern is potential misuse of drugs by CHWs leading to antibiotic resistance. There are, however, counter arguments that CHW treatment of pneumonia, if accompanied by proper supervision of CHWs, could actually decrease improper use of antibiotics (Marsh *et al.* 2008). Several authors (Zachariah *et al.* 2009; Fulton *et al.* 2011) have suggested that there is both professional and institutional resistance to shifting responsibilities for providing sensitive services involving powerful medical therapies to less skilled CHWs; however, the evidence base to support these assertions is not strong.

Study focus

This case study was part of a broader research program conducted in six countries in Africa (Burkina Faso, Malawi, Mali, Mozambique, Niger and Kenya). Overall, Kenya has been relatively slow in proceeding with iCCM policy compared with many other African countries. Despite a history of NGO pilot initiatives on community-based child health, and the formalization of CHW roles in the Kenyan Community Health Strategy in 2007 (MOH 2007), policy formulation for iCCM was still in its early stages at the time of the study. Efforts to integrate child health services, including iCCM, in the community health strategy had not been fully successful: CCM for diarrhoea was approved, CCM for malaria approved but not scaled up and CCM for pneumonia had yet to achieve traction on the policy agenda. Kenya was therefore selected because of its slower adoption of iCCM.

The article analyses the relatively slow evolution of iCCM policy in Kenya. We seek to (i) document the overall process of iCCM policy development and (ii) analyse the factors that have affected iCCM policy formulation, and in particular the reticence to move forward with iCCM policy development among policy elites.

Theoretical framework

Walt and Gilson's frequently applied Policy Triangle (Walt and Gilson 1994) provided a starting point for our analysis, assisting the research team to document systematically the actors, contexts, policy content and policy process involved in the development of iCCM policy in Kenya. To this framework we added an explicit consideration of the role of evidence and ideas in shaping policy discussions. However during the analytical and write up phase we recognized that the focus of this case study was primarily on the policy formulation stage of the policy cycle, and in particular the factors that led to hesitation in Kenya to proceed with iCCM policy development.

Although many articles have addressed the policy formulation phase (Sidney 2006; Berlan *et al.* 2014) there is a lesser degree of convergence around core theoretical approaches to understanding policy formulation than for some other stages of the policy cycle such as agenda setting. For example, Sidney describes theories that focus on policy design, assessing how factors such as bounded rationality and context affect policy content, as well as work on policy tools i.e the array of policy instruments available to promote policy change (Sidney 2006). Berlan *et al.* (2014) break down the policy formulation phase into a series of seven steps from the generation of policy alternatives through to the actual formulation of policy and development of guidance on the implementation of policy.

In the Kenyan context, at the time of the study, while the problem of how to address high rates of child mortality was clearly on the policy agenda, policy to formulate iCCM was not developed. Accordingly our study focuses on the initial steps of policy formulation: generation of policy alternatives, deliberation, advocacy, lobbying and negotiation. As is often the case in the policy formulation stage much of the policy action took place among state-centred actors (such as Ministry of Health officials, Benson 2008) as well as international actors (such as UNICEF, WHO and USAID). We seek

to understand the factors affecting decision-making by the key actors involved in iCCM policy formulation through the application of a simple framework proposed by Grindle and Thomas (1989). Grindle and Thomas (1989) identified four types of criteria that policy elites are likely to pay attention to as they determine whether and how to take a policy forward, these comprise:

- *Technical analysis and advice*—including appraisals of how sound the problem analysis and technical advice is;
- *Bureaucratic considerations*—which may be multiple, but often focus on how decisions support the official's own position, or those of his or her unit or department, and/or enhance personal promotion prospects;
- *Political stability and support*—including factors such as how the decision will affect the political regime's hold on power;
- *Relationships with international partners*—including the nature of dependency between national and international actors, which might correspond with the significance of resources made available by international actors.

Grindle and Thomas acknowledge overlap between these factors. They also propose, based on their own multi-case study, that context affects the importance of these different factors, with political stability and support likely dominating decision-making in a context of crisis, whereas bureaucratic concerns may dominate in contexts where there is no crisis. Further, they argue that technical issues and considerations regarding relations with international partners may be relevant to decision making but are unlikely to dominate.

Methods

A qualitative retrospective case study design was used to analyse iCCM policy development in Kenya. The study was conducted at the national level where all health policies are developed and coordinated. Data were collected between April and October 2012, through document reviews, semi-structured in-depth interviews and a workshop with stakeholders.

Documents reviewed included published and unpublished information from official sources, such as official websites, and made available through personal contacts with local implementing organizations. Forty-one documents, including strategic plans, program documents, training guidelines, action plans and relevant reports, were reviewed. Basic data were extracted from each of these documents, including the timeline for policy development, policy content and processes of development and the actors involved in the process.

Participants for the in-depth interviews were identified purposively based on their positions and responsibilities relating to child health in their organization and through snowballing until saturation were reached. In total, 32 potential respondents were identified and approached for interview, of which 19 key informants participated in the study. They included representatives from relevant divisions of the Ministry of Public Health and Sanitation (MOPHS), Ministry of Medical Services (MOMS), NGOs, international organizations, donors and universities who had participated in the iCCM policy process at national level (Table 1). It became apparent during data collection that a number of the proposed NGO respondents had not been involved in iCCM policy discussions and hence they were not further pursued for interview.

Table 1. Profile of respondents and non-respondents

Category of respondent	Number of respondents	Number of non-respondents and people dropped from list
Government officials—child health	6	0
Government officials—non-child health	6	4
NGOs and academia	2	8
International organizations/donors	5	1
Totals	19	13

A semi structured interview guide was used to conduct the interviews. The questions focused on the content of iCCM policy for each condition, the iCCM policy development process, actors who were involved in iCCM policy development, and contextual factors influencing policy development (Walt and Gilson 1994). In addition there were questions about the role of evidence in the policy process.

Study respondents were invited to participate in the study through telephone and email communication. Those who agreed to participate received further information about the study and signed consent forms before the interviews began. Most of the interviews lasted about 30 min to 1 h. Interviews were recorded and later transcribed.

Data analysis

Transcribed data from interviews were entered into QSR Nvivo 9, qualitative analysis software. Initial codes were developed based on broad categories including policy context, content, process, actors, evidence, implementation, financing, barriers and facilitators. Thematic coding and pattern identification was then done by the research team. Data from the interviews were triangulated with those from document reviews. A validation workshop was held in February 2013, with 43 individuals who had participated in the study and other stakeholders from the government and partner NGOs to validate emerging findings and give more input. Detailed notes of the meeting were taken, and additional points of fact were added to the analysis.

Results

We begin by describing the overall process of iCCM policy development in Kenya (applying the policy triangle), before seeking to analyse the factors affecting policy development, employing the four main types of criteria for policy decision making (technical analysis; bureaucratic considerations; relations with international actors, political stability and support).

Overview of iCCM policy development

iCCM policy content

Respondents agreed that there was no policy document specific to iCCM at the time of the study. A draft CHW training curriculum under development was the only formal expression of policy support for iCCM (MOPHS 2012). Most respondents recognized that policy on treatment for childhood diseases at the community level was not yet well defined:

> iCCM strategy involves more curative targeting of the main killers. In Kenya, diarrhea, pneumonia, malaria and even acute malnutrition are the main issues around child deaths. The country is prioritizing malaria, diarrhea, pneumonia and even the issues of newborn care but it's still a bit not well refined especially the

> treatment component, but for diarrhea the policy allows for the use of ORS—(09-Govt Official, Non-Child Health)

With regard to specific components of the policy, the National Diarrhea Policy (MOPHS 2010a) adopted low osmolarity ORS and zinc for treatment of childhood diarrhoea, however this policy did not mention CCM of diarrhoea and did not clarify whether ORS and zinc should be used by CHWs. Zinc had been included in the 2011 CHW training manual draft even though there was not a formal policy on this. Concerns around zinc appeared to have focused on its side-effects and whether such a costly formula should be included in the CHW package.

> We still have some policy issues to do with zinc being given at the community level. But it was basically accepted to be in the kit. (11-Govt Official, Child Health)

> we thought that zinc is not a safe drug and .... currently the ministry has presented the evidence to make zinc available as an over the counter drug so that it can be dispensed by shopkeepers.. for use at the community level. (14-NGO)

In October 2012, the MOH gave approval for the WHO/UNICEF recommended dosage of zinc supplementation for children 0–5 years, as an over the counter medicine (MOH 2012a,b).The 2009 National Malaria strategy (MOPHS 2009) formally adopted home management of malaria as a policy, with use of rapid diagnostic tests (RDTs) and malaria medicines particularly artemisinin-based combination therapy by CHWs (MOPHS 2010b). This was piloted in malaria pandemic areas by the Kenyan Red Cross and the Millennium Villages Project. At the time of the study, the division of Malaria Control was in the process of rolling out RDTs to other parts of the country. Although it was planned to train CHWs on malaria case management, prevention, behaviour change communication, record keeping and reporting, for both adults and children this had not been scaled up. Initially, first-line malaria medicines and thereafter RDTs were be integrated into the CHW commodity kit.

For pneumonia, policy guided CHWs to identify danger signs and refer to the nearest health facility. Treatment by CHWs with antibiotics had not been approved for inclusion in the training guidelines and was still being debated:

> Now as we are revising the guidelines we have been having discussions to see if it can be agreeable for community health workers especially in hard to reach areas to provide treatments for pneumonia .... Their mandate is to identify children with pneumonia and refer them to health facility". (06- Govt official, Child health)

Malaria and diarrhoea had clearly moved faster than pneumonia, which was still awaiting policy approval. At the time of data collection, iCCM guidelines for training CHWs to treat diarrhoea and malaria, and to recognize and refer pneumonia, had just been completed and there were plans to start piloting in districts. The malaria component had already been piloted on a fairly large scale by the division of malaria control [with support from the President's Malaria Initiative (USAID 2011)] and this was to be scaled up to other parts of the country.

Policy context

iCCM policy development was rooted in the historical push to develop primary health care programs to enhance access to health services. Kenya has had a long history of community-based health services, including training of CHWs (Kaseje and Sempebwa 1989); however, CHWs have been mainly supported by NGOs. More formal recognition of CHWs by the public sector occurred with the development of the second Health Sector Strategic Plan 2005–2010 (MOH 2005) which incorporated a community strategy. The objective of the Community Strategy was to provide health care services for all life cohorts and socioeconomic groups at household and community level. The implementation began by establishment of community units (about 5000 people per unit) and training of CHWs with support from various partners, to offer services to households within the units (McCollum *et al.* 2015). Implementation and training guidelines were completed in 2007 (MOH 2007), and were under revision at the time of interviews with the development of a comprehensive CHW curriculum. When compared with other countries CHWs in Kenya have relatively limited training (2–6 weeks) and although the government has officially approved a CHW salary (US$24 per month at the time of the study), this had not been included in the budget.

iCCM policy was being developed against the backdrop of a persistently weak national health system coupled with weakness in implementation of previous health sector policies and poor resource allocation in the sector (MOH 2005). Although the country's health policy documents and strategic plans have consistently emphasized issues of access and equity, adequate human resources remain a challenge. Although Kenya has performed better than some countries in the region in terms of human resource numbers, there are still major challenges with distribution of health workers particularly to the rural and hard to reach areas (MOH 2005).

Actors

Many organizations had been involved in child health initiatives, the development of the CHWs training curriculum and further drafting of the iCCM module. After the 2007 election the Ministry of Health was split into two (the MOMS and the MOPHS), largely to appease different political factions. The ministries of health jointly and through the department of Adolescent and Child Health led the policy process. Donors like USAID and technical advisers from WHO, UNICEF and USAID played a major role in organizing advocacy meetings with senior policy makers and program managers to develop iCCM. NGOs that were implementing child health programs, such as Save the Children, and AMREF, as well as international projects such as USAID's Maternal and Child Health Integrated Program were involved as members of the Child Health Interagency Coordinating Committee (ICC) and as contributors in the development of the training modules (MOPHS 2011). In addition NGOs frequently engaged in advocacy concerning the development of iCCM and acted as technical support during meetings. International actors such as WHO, UNICEF and USAID hosted meetings, funded production of training materials and financed trainings.

Policy formulation process

iCCM policy formulation was widely perceived to have been relatively open and consultative compared to other policies, such as home management of malaria.

> There was a lot of consultation and it was more participatory. But for malaria it was just being dictated "Lets change this, let's do this", under the malaria program, but for this one there was a lot of consultation even the health coordinating committee and the steering committee where all the partners have been involved in championing for this policy. (007- Govt Official, Non-Child health)

> Yah, I think it has been quite consultative according to my judgment. It has been quite consultative because open meetings have been there and everyone whose mandate it touches on has been involved. (008- International Org/Donor)

As noted previously, the consultations and dialogue had led to clear conclusions about the need to support iCCM for malaria and diarrhoea, but not for pneumonia where decision-makers were awaiting evidence from pilot studies. Decisions were also needed regarding resource allocation, supervisory structures, and monitoring and evaluation for iCCM. Discussions appeared to have progressed with respect to supervisory, and monitoring and evaluation plans, but significant questions remained about long term financing for the program.

The role of ideas and evidence

Evidence played a role in informing decisions on iCCM policy as well as iCCM training guidelines. Local sources of evidence mentioned by respondents included statistics from national demographic and health surveys, and reviews on progress in achieving MDGs. International sources included the Lancet series on child survival (Black *et al.* 2003; Bryce *et al.* 2003; Jones *et al.* 2003) (which was shared at stakeholder meetings), the WHO/UNICEF iCCM guidelines (WHO/UNICEF 2012) and evidence from other countries that had implemented iCCM, sometimes acquired through study tours by MOPHS officials to countries such as Malawi, India, Pakistan, Nepal, Bangladesh and Ethiopia.

> We have country statistics, how are we doing towards MDGs? and if children are dying why are they dying . . . .? And we get information from countries which have made good progress like Pakistan, Sri Lanka (. . .) have made a difference in their indicators because they have invested in CHWs at the community. Ethiopia, Malawi have the health services assistants who have made some impacts on child survival . . . . . (01-Govt Official, Child Health)

> We used global papers on iCCM, reports from countries, we also looked at the Siaya study and evidence in peer reviewed journals. (018- International Org/Donor)

There have been multiple pilot projects over the years, largely implemented by NGOs that provided evidence on what kinds of activities were feasible in the Kenyan context as well as informing training guidelines. For instance, CARE Kenya developed IMCI algorithms for use by community-based providers in Siaya District. In this pilot, CHWs used septrin to treat childhood pneumonia (Rowe 2007). However, the study revealed concerns about the quality of care provided by CHWs and interventions related to training, supervision and other factors did not appear to increase adherence to guidelines. Catholic Relief Services implemented C-IMCI in Mbeere district (CRS 2003), with CHWs diagnosing and treating malaria, but only recognizing and referring cases of childhood pneumonia. The tools developed by these projects, along with WHO/UNICEF guidelines were useful in developing iCCM training guidelines.

More recently the Kenya Red Cross implemented and evaluated a pilot project in the coastal region for CCM for malaria (Kisia *et al.* 2012).

> Initially the kit was missing anti-malarials but the study that was done by the malaria program and the Red Cross in Kilifi gave us a very strong indication that there is no abuse and there is a lot of impact arising from the CHWs use of artemether/lumefantrine (AL). So we have allowed use of AL in our management meetings (07-Govt Official, non-Child Health)

Save the Children, Kenya also implemented a pilot iCCM project in Wajir, one of the districts in hard-to-reach areas from 2011. These pilot projects were diverse in their nature. Although evaluation findings for most projects had been shared at national stakeholders meetings, none of these pilot projects have received sufficient support to scale up. Nonetheless government decision makers continued to demand additional local evidence particularly on the use of antibiotics at the community level.

> There is need for evidence for policy makers. They continue asking how do we do it? Now that's why we are doing the research. We are still moving on. Integration in CHW training manual has to be within the framework. We worked closely with the Community Strategy unit to develop commodities for CHWs but they wanted more evidence (018-International Org/Donor)

Factors affecting decision-making

In this section, we use the four factors identified by Grindle and Thomas (1989) as influencing elite decision making to reflect on issues affecting the uptake of iCCM policy by Kenyan policy makers.

Technical analysis and advice

Interviews revealed clear technical concerns regarding iCCM as a policy solution in the eyes of policy makers. These concerns centred primarily on the use of antibiotics by CHWs. Many respondents noted a resistance from some health actors, including officials within the Ministry of Health, who had a clinical background. Reasons for this resistance included fears of irrational drug use, and concerns about quality of care provided by CHWs.

> . . . there has been a lot of resistance to actualizing the whole process. Doctors being what they are, don't like medicines to be used by people they have doubts about . . . . they allowed drugs like analgesics and anti-worms but antibiotics is still a problem and I am informed [name of senior official in MOPHS] doesn't want the idea of CHWs using antibiotics, we need to look into how we can go over it, because children are dying at home anyway (010 NGO/Academic)

> . . . . ..policy makers fear having antibiotics and having them being misused. Not only the policy maker but also the professional associations, nurses, doctors, we have discussed this with them and they say 'No . . . . no.' we have very many nurses who are unemployed out there, why don't they use them instead of getting people who are not qualified to do this (03-Govt Official, non-Child Health.)

A few respondents also viewed health professionals in general to be resistant to CHW use of antibiotics; however, this position had been changing as some health professionals realized the magnitude of child health issues and the need to address them at the community level.

Although Kenyan policy makers demonstrated a relatively high awareness of international evidence, several respondents were cautious about the transferability of such evidence to their own setting, particularly given differences between Kenya and other countries in the region in health service coverage.

> I wouldn't call it opposing, it is like a country really exploring, because you see these guidelines are for all countries but there are those who will need them more than the others depending on your health care coverage. (011 Govt official, Child Health)

Respondents pointed out that Kenyan CHWs are first and foremost community members who for a long time have been considered volunteers, compared with (e.g.) salaried health surveillance assistants in Malawi, hence there was a need to be cautious about the

applicability of evidence from elsewhere. The persistent shortage of professional health workers in the system (Adano 2008) also led to concerns about which cadre could best supervise CHWs. These differences between the Kenyan context and conditions elsewhere appeared to be driving the demand for additional Kenya-specific evidence noted earlier.

Bureaucratic considerations

Some of the technical concerns identified in the previous section regarding CHWs dispensing antibiotics, could also be viewed as having bureaucratic origins. Although not necessarily protecting or promoting individual interests, resistance from some clinicians to iCCM could be interpreted as protecting group interests. Although this may be an underlying motive, this viewpoint was only clearly articulated by one respondent:

> Clinicians have been resisting with no good options. It's all about protecting their profession. There is a lot of ego issue, they think CHWs are taking their work. (019 NGO/Academic)

Within the Ministries of Health iCCM policy touched upon multiple different departments and units, including Adolescent and Child Health, Community Health, Malaria, Reproductive Health, Immunization and Nutrition. Some of these departments and units (such as Malaria) were better funded than other groups. This perhaps gave them greater independence in decision-making, and could also act as a disincentive to integration. There were clearly tensions between different parts of the Ministry, particularly during early discussions around iCCM. This was because different departments had diverse opinions regarding iCCM given the vertical programs they were implementing.

> initially, Family Health wanted to handle issues of iCCM, maternal and newborn separately, Malaria wanted to do it separately, but the policy is very clear, all services pertaining to community health must be coordinated from the division of Community Health Service, Department of Primary Health . . . They were resistant in the first and second year of the roll out, but now we are all together (007 Govt official, non-Child Health)

The fact that iCCM policy potentially affected the interests of so many different departments and units, appeared to be one of the reasons why such a consultative approach to policy formulation had been employed, but was also clearly a factor slowing decision-making. Most respondents in the Ministry recognized that while community health policy all came to a 'head' at the CHW, there were multiple vertical programs that did not necessarily have aligned interests.

> . . . .you see when you integrate and you still remain vertical, that is what hampers the whole thing because we say ok if we want it to be integrated then why can't it be under one house? . . . .. Because what I get from there will not score me much. . . . are you getting me? (02-Govt Official, non-Child Health)

Finally, one further factor that may have contributed to impetus for the strengthening the community strategy was the establishment of the MOPHS separate from the MOMS. The existence of MOPHS and its focus on promotive and preventive health services may have helped strengthen community level services.

Relationships with international actors

Policy development in relation to community-level child health interventions emerged from both a global push and local recognition of the problem, with most respondents feeling that the iCCM policy agenda was driven in good part by the global push to address the main issues contributing to child morbidity and mortality, and the need to achieve the MDGs.

> It's based on the child health indicators, they were too poor and we were really struggling to catch up with the MDG targets. You know whenever the president reports the progress of MDGs in Geneva every year, we have that difficulty especially with the child health indicators . . . .. our indicators have been poor and we have to improve them. That is what triggers the policy (007, Govt official, Non-Child Health)

The existence of global evidence and recommendations on successful childhood interventions at community level shaped the thinking around the iCCM agenda among government actors. Various national level meetings were held between 2010 and 2012 to discuss iCCM and related issues. Of particularly importance were the issues around use of zinc and antibiotics at the community level and the integration of iCCM in the overall community strategy. Development partners pushed for acceptance of use of antibiotics and zinc by higher-level decision makers.

Participants emphasized WHO and UNICEF, in addition to the Ministry of Health, as being the most powerful actors who had been strongly supportive of iCCM in the country.

> these two agencies [WHO and UNICEF] have really been drivers of child survival both at global, regional and country level. And maybe they feel that as a ministry we are not moving fast enough to start adopting these policies. For them, this should have happened yesterday. (01-Govt Official, Child Health)

Although respondents widely acknowledge the influence that international actors had brought to bear on iCCM policy debates, there remained a lack of clarity on the financing and sustainability of a potential iCCM policy. Several donors mentioned intentions to support the scale up of community interventions, but their commitments to iCCM were not very specific and the funding that was available appeared to be for relatively small scale pilots rather than nationwide scale up:

> We have resources for child health but they are limited and we're gonna have to make some very difficult choices on what we can do with those resources. We do ask our partners on the ground to leverage on other sources of funding . . . . . you get a mix of the resources and see whether you can get a greater effect. But really our resources, what is available, is not enough to provide a huge coverage for ICCM. 05-International Org/Donor

At no stage in the Kenyan case was a substantial amount of money made available by donors for iCCM implementation (in contrast e.g. to Mozambique, Burkina Faso and Niger). Thus although international actors had clearly been influential in iCCM policy debates, there appeared to be relatively lower dependency on them for financing child health programs than in other contexts.

Political stability and support

Finally we note that concerns about political stability did not enter into debates about iCCM policy formulation in Kenya. Although there was high-level political concern regarding the country's trajectory to achieve MDG 4 on child survival, and this created a window of opportunity for iCCM policy, the policy itself did not appear to be of sufficient significance to garner political support.

Discussion

This case study provides insights on the evolution of iCCM policy in Kenya, and the factors influencing policy-maker decision-making.

Despite strong encouragement from development partners and international organizations to proceed with iCCM, the pressure to achieve the MDGs, as well as national and regional meetings on iCCM, at the time of the study the only formal expression of policy to support iCCM was a set of draft training guidelines for CHWs. This contrasts with other countries in the region that have been much quicker to adopt iCCM and to formalize it within their policy instruments. This discussion summarizes the factors affecting Kenyan policy-maker views on iCCM policy adoption and then develops broader conclusions.

Factors affecting Kenyan policy-maker positions on iCCM

Grindle and Thomas (1989) predict that under non-crisis conditions, bureaucratic considerations and micro-political issues are likely to dominate policy-maker decision-making, with technical concerns and relations with international partners being important but not decisive factors in decision-making. In the case of iCCM policy in Kenya we saw a very close connection between technical and bureaucratic considerations. Non-acceptance of CHWs' use of antibiotics by clinicians was a major factor that slowed the policy process. The resistance was not only felt from professionals at program level, but also from high-level decision makers. There were clear technical underpinnings to these arguments. International evidence and guidelines were not sufficient to convince policy-makers of the effectiveness of antibiotic use by CHWs, particularly given the contextual specificities and the negative outcome of the prior pilot at Siaya (Rowe *et al.* 2007). However these technical arguments were likely reinforced by bureaucratic concerns, including caution about allowing the emergence of a new group of health care providers who may undermine demand for regular health practitioners.

Bureaucratic considerations were also important with respect to the support that different vertically oriented programs were willing to provide to an integrated policy such as iCCM. However this appears to have been a more significant barrier at the beginning of the negotiation process, rather than at the time of the study. It is possible that declining funding for some of the previously strong vertical programs had helped nurture interest in iCCM (indeed one of the respondents from a strong unit with vertical focus identified integration as being a key strategy to promote sustainability). There were also important challenges related to simply coordinating action on a policy that cross-cut multiple departments. The significant transaction costs associated with a cross-cutting policy such as iCCM, given the nature of organizational structures in the Ministries of Health slowed policy change.

International organizations played a major role in influencing policy discussions. These actors, particularly UNICEF and WHO, were extensively involved in advocacy to influence the government's position on iCCM; they brought experience and evidence from elsewhere to inform policy content, and supplemented this with technical support and financial resources. Although external actors provided resources to support international meetings, study tours, policy fora and pilot projects, they did not provide significant funding. It is unclear why this is the case, but it appears likely that Kenyan policy maker caution about iCCM policy was well known among development partners and there were concerns about commitment of the Kenyan government to financing iCCM in light of inadequate historical resource commitments to the Kenyan Community Strategy (UNICEF and Government of Kenya 2010; McCollum *et al.* 2015). The lack of significant financial resources coming from international partners implies that the government was not extensively reliant on donor resources, and this may have been a factor that also contributed to relatively slow uptake of iCCM.

Broader implications

Overall the simple policy decision-making framework proposed by Grindle and Thomas provided a useful way of framing the factors affecting policy-maker decision making in this case. It would be interesting to see the framework applied to other health policies with differing characteristics, or being debated under crisis conditions. In particular, iCCM is in some respects a relatively technocratic policy: the extent to which it is perceived to be effective depends upon stakeholders perceptions of the skills of CHWs and their conception of the clinical processes involved in providing care. Policies those are less technical in orientation, e.g. policies on user fees for health services, or seat belts to reduce traffic accidents may elicit higher levels of engagement by stakeholders outside of government, and give play to a different set of factors in decision-making.

In the Kenyan iCCM policy debates, policy-makers were not fully convinced by the nature of evidence presented by international partners. In particular, they harbored concerns about the applicability of arguments supportive of iCCM to the Kenyan context, and cited specific features of the Kenyan context that might inhibit the transferability of evidence. Participants also identified the lack of local evidence as a barrier to policy development, and thus additional pilot studies were requested. Although to some extent this demand for evidence may have been a delaying tactic, there was a lack of local evidence with regard to some key questions (notably CHWs ability to manage antibiotics). International actors need to be cognisant of the fact that differences in health systems, and local values and conditions, may undermine the transferability of evidence, and consider investing more in the development of locally relevant research.

Limitations

iCCM had not been fully developed as a policy in Kenya, and it was complicated to investigate why something had not happened, rather than why it had. Also, perhaps reflecting the relatively low political priority accorded to iCCM, it was often difficult to secure interviews and of the 32 potential respondents identified, only 19 interviews were completed, despite repeated attempts to contact respondents. Of the 13 potential interviewees who did not participate in the study, four came from government and the remainder were representatives of development partners and NGOs. Several of the NGO respondents who were initially invited to interview but failed to respond, were later dropped as it became clear that they had not participated in iCCM policy processes. Overall, among groups who were pursued for interview, there did not appear to be any clear pattern in non-responses.

Conclusions

There has been a slow progress in developing iCCM policy in Kenya despite the existence of international guidelines and strong policy support from development partners. Resistance to policy change originated primarily from clinicians both inside and outside of government, and centred on concerns about the ability of CHWs to offer quality care, and the potential consequences of inappropriate use of antibiotics by this cadre. Further, Kenyan policy makers identified differences in their context that led them to question the applicability of evidence on iCCM effectiveness from elsewhere. Addressing these concerns would require greater clarity about mechanisms to

assure the quality of care offered by CHWs (such as supervision, training etc), local evidence that demonstrates the effectiveness of iCCM, and, critically, clear financial commitments that assure the feasibility and sustainability of iCCM programmes.

Although the study participants in Kenya expressed their apprehensions about iCCM with perhaps greater force than participants in other countries included in the broader study, their concerns are neither new nor unique to Kenya. Other analysts and researchers have also underlined the health system challenges associated with maintaining CHW programs, focussing particularly on CHW remuneration, training and supervision, and critically financial sustainability (Haines *et al.* 2007; Lehmann *et al.* 2009). Although it may be tempting to view actors' resistance to iCCM in Kenya as being driven by a desire to protect the professional interests of qualified health workers combined with a relatively weak commitment to primary health care, this would be an over-simplification. In order to advance the iCCM policy agenda in Kenya, and similar countries, multiple interconnected health systems concerns will need to be addressed and consideration should be given to how to adapt the iCCM model to country health systems.

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Conflict of interest statement. None declared.

Ethical Approval

Ethical clearance was obtained from Great Lakes University of Kisumu ethics review committee and authoritative approval from the Ministry of Health. The study was exempted as not human subjects research by Johns Hopkins School of Public Health.

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