

# The path dependence of district manager decision-space in Ghana

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## Abstract

The district health system in Ghana today is characterized by high resource-uncertainty and narrow decision-space. This article builds a theory-driven historical case study to describe the influence of path-dependent administrative, fiscal and political decentralization processes on development of the district health system and district manager decision-space. Methods included a non-exhaustive literature review of democratic governance in Ghana, and key informant interviews with high-level health system officials integral to the development of the district health system. Through our analysis we identified four periods of district health system progression: (1) development of the district health system (1970–85); (2) Strengthening District Health Systems Initiative (1986–93); (3) health sector reform planning and creation of the Ghana Health Service (1994–96) and (4) health sector reform implementation (1997–2007). It was observed that district manager decision-space steadily widened during periods (1) and (2), due to increases in managerial profile, and concerted efforts at managerial capacity strengthening. Periods (3) and (4) saw initial augmentation of district health system financing, further widening managerial decision-space. However, the latter half of period 4 witnessed district manager decision-space contraction. Formalization of Ghana Health Service structures influenced by self-reinforcing tendencies towards centralized decision-making, national and donor shifts in health sector financing, and changes in key policy actors all worked to the detriment of the district health system, reversing early gains from bottom-up development of the district health system. Policy feedback mechanisms have been influenced by historical and contemporary sequencing of local government and health sector decentralization. An initial act of administrative decentralization, followed by incomplete political and fiscal decentralization has ensured that the balance of power has remained at national level, with strong vertical accountabilities and dependence of the district on national level. This study demonstrates that the rhetoric of decentralization does not always mirror actual implementation, nor always result in empowered local actors.

**Key words:** Complexity, decentralization, decision-space, district health systems, Ghana, path dependence

## Key Messages

- Point 1: Dominant administrative decentralization processes, followed by incomplete political and fiscal decentralization to local government in Ghana have generated governance tendencies towards centralized decision-making.
- Point 2: Self-reinforcing policy feedback mechanisms have given rise to similar tendencies towards centralized decision-making in the health sector, reversing early gains in the bottom-up development of the district health system and shrinking district health manager decision-space.
- Point 3: Lack of coherence in district financing, mandated managerial responsibilities and strong vertical accountabilities negatively influences the authority of district health managers.

## Introduction

Decentralization—that is, the shifting of decision-making power from national to sub-national levels—has been a common feature in many countries. In sub-Saharan Africa, decentralization processes have been viewed as major structural reforms to support district health systems; however, the pervasiveness of decentralization processes across countries has left little room to question the underlying assumptions of whether in fact they result in increased power for sub-national actors, or actually improve health service delivery in terms of efficiency and equity. The complexity of decentralization processes—the drivers, types and sequences which underpin them—further compounds the limited or conflictual empirical evidence on ‘what works’ in decentralization (Litvack *et al.* 1998). Country experiences from Kenya, Uganda and Zambia have demonstrated inconclusive effects of decentralization, with no clear influence on health service outcomes (Jeppsson and Okuonzi 2000; Awio and Northcott 2001). It has further been argued that a focus on outcomes, rather than processes of decentralization, has impaired the decentralization promise (Oyaya and Rifkin 2002).

Decentralization has largely been categorized into three types: political decentralization (devolution) shifts political decision-making to local government authorities for greater representation closer to the populace; administrative decentralization (deconcentration) transfers administration responsibilities, in accordance with national-level directives, for service delivery at lower agency levels and fiscal decentralization augments financial autonomy and decision-making of local authorities (Falleti 2005). Yet despite the interactions between overall democratic governance processes and health sector developments in a country, systematic explorations of these influences has been limited. Mills *et al.* (1990) note:

... the public administration literature makes only passing reference to health, and the literature on the organisation of health services largely neglects its relationship to broader patterns of government structure of health services as if it were not greatly constrained by its national organisational context. (p. 11)

An interest in functional district health systems is re-emerging after an extended period of less-than-desired health outcomes (Meessen and Malanda 2014). Notions that ‘district health systems cannot fully develop without commitment and support from the national level, or without some degree of autonomy and authority for planning services, for allocating resources and for managing [human resources]’, and that ‘the most important policy directive concerns the decentralization of the national health system in such a way that functional district health systems can result’ were cited nearly 25 years ago (WHO 1988) (p. 3). Yet, it is not clear that progress in this regard has advanced. The concept of decision-space is the ‘range

of choice’ local decision-makers have available to them in a decentralized context (Bossert 1998; Bossert and Beauvais 2002; Bossert and Mitchell 2011). It is particularly important because it is indicative of the scope of local decision-making autonomy that exists within institutional processes. Studies from Ghana show district health manager decision-space to be constrained (Larbi 1998; Bossert and Beauvais 2002; Mayhew 2003; Asante *et al.* 2006; Sakyi 2008; Sakyi *et al.* 2011; Kwamie *et al.* 2014, 2015), and issues of governance and managerial non-responsiveness related to decentralization negatively impacting maternal health service delivery (Ghana Ministry of Health *et al.* 2011). However, anecdotal evidence from health sector actors indicates this to have not always been the case.

Though decentralization analyses were common in the early 2000s, few papers at the time, and since, have sought to explain the interplay between political, administrative and fiscal decentralization, and its effects on the configuration of district health manager decision-space. This paper seeks to establish an explanatory theory of the sequencing of decentralization processes in Ghana, and its implications on the development of the district health system and district manager decision-space over time.

## Current decentralization context and district manager decision-space in Ghana

Since 1992, Ghana has been a multi-party democracy. Located in West Africa, Ghana is a nation of 25 million people, organized into 10 regions and consisting of 216 districts. The district health system is guided by two main pieces of legislation: the Local Government Act 462 (Republic of Ghana 1993) outlines the creation of districts, and establishment and function of district assemblies as the highest political decision-making bodies within districts; the Ghana Health Service and Teaching Hospitals Act 525 (Republic of Ghana 1996) outlines the delegation, from the Ministry of Health (MOH), objectives and functions of establishing a Ghana Health Service (GHS) at national, regional and district levels. What has emerged over time is a mixed-model of quasi devolution-cum-deconcentration, which has fostered incoherent, uncoordinated and at-times contradictory decentralization reform efforts (Ghana Ministry of Local Government and Rural Development 2003, 2010; Joint Government of Ghana and Development Partners 2007; Ahwoi 2010). Critically, Act 462 is virtually silent on health functions, while Act 525 indicates dual lines of reporting and financing between the district assembly system and the hierarchy of the GHS organization. In practice, tensions between Acts 462 and 525 have resulted in blurred vertical and horizontal accountabilities, with dominant vertical relationships, while relationships between the district health management team (DHMT) and district assembly remain *ad hoc* and personality-dependent (Agyepong 1999; Couttolenc 2012).

## Materials and methods

We developed a theory-driven historical case study to understand the historical processes and critical junctures which have led to the current constraints of decision-space for district managers in Ghana. We began with an established theory of decentralization (outlined below), and based on our emerging data, built an explanatory theory of the development of the current context of district manager decision-space.

### Analytical framework—path dependence and sequential decentralization

Path dependence, as a way of explaining (Kay 2005), is defined as the historical sequences and patterns which are deterministic in nature to events which occur later in the path (Mahoney 2000). Path-dependent sequences can contain two types of feedback mechanism: reactive mechanisms are ‘action/counter-action’ events, with each proceeding linearly after the other; self-reinforcing mechanisms reproduce institutional patterns over time with increasing returns, thus making divergence from the path difficult once initiated. Path-dependent sequences are further characterized by inertia, meaning that events which occur earlier in the sequence have greater influence on the path than those which occur later.

Falletti’s theory of sequential decentralization (2005) draws on path dependence theory to understand the sequencing of decentralization processes in Latin America. She posits that the timing, sequencing and conditions of the initial acts of political, administrative and fiscal decentralization interact to determine the actual shift of power from national to sub-national actors. The governmental level whose interests succeed at the beginning of decentralization will direct the type of initial decentralization which occurs, and the initial act of decentralization will give rise to path-dependent policy feedback mechanisms. Early political decentralization tends to empower sub-national levels, whereas early administrative decentralization tends to empower national levels and ensure vertical accountability (Ribot 2002). Insufficient fiscal decentralization to accompany shifts in decision-making authority results in empowered national levels, on whom sub-national levels become further dependent.

To investigate the current configuration of district health manager decision-space in Ghana, and without *a priori* knowledge of

the type of feedback mechanisms active in the sequencing of decentralization processes, we employed Falletti’s theory. Our analytical framework, representing the possible pathways and feedback mechanisms determined by the initial act and subsequent sequencing of decentralization processes (i.e. reactive or self-reinforcing) is illustrated in Figure 1.

### Data collection and analysis

We collected data from multiple sources to build an understanding of key episodes in broad political and more discrete health system developments. Although the literature on democratic governance in Ghana is substantial, published evidence on Ghana’s health system development is more limited. We began with a non-exhaustive review of the democratic governance literature in Ghana. We searched the following databases and bibliographies: Google Scholar, Scopus, International Bibliography of the Social Sciences, SocIndex, EconLit, CAB-Abstracts, African Journals Online, PubMed and Web of Science. Search terms included the following: ‘decentralization’, ‘devolution’, ‘deconcentration’, ‘strengthening district health systems’, ‘district development’, ‘local governance’, ‘health sector reform’, ‘sector-wide approach’ AND ‘Ghana’ OR ‘Africa’. We also retrieved articles from the reference list of published papers. Grey literature searches involved searching international organization websites, and retrieving Government of Ghana, Ministry of Health and Ghana Health Service documents: legislative documents (constitutions and Acts of Parliament) and policy documents (decentralization and health). We also searched archival print news media surrounding the passing of Act 525 for the years 1995–97. All publications were in English; there was no date limit placed on any of the searches.

We further conducted key informant interviews with high-level officials from the MOH and GHS who were instrumental to the development of the district health system in Ghana. Eleven informants were identified. Nine were interviewed; two declined due to other commitments. Interview guides were developed to elicit information on: (1) changing decentralization contexts and their influence on the health system; (2) key initiatives which supported district health system development; (3) periods of increased and decreased district managerial capacity and decision-making and (4) the evolution of the Ghana Health Service. Two or more interviews were conducted by the first author with each informant. Interviews continued until

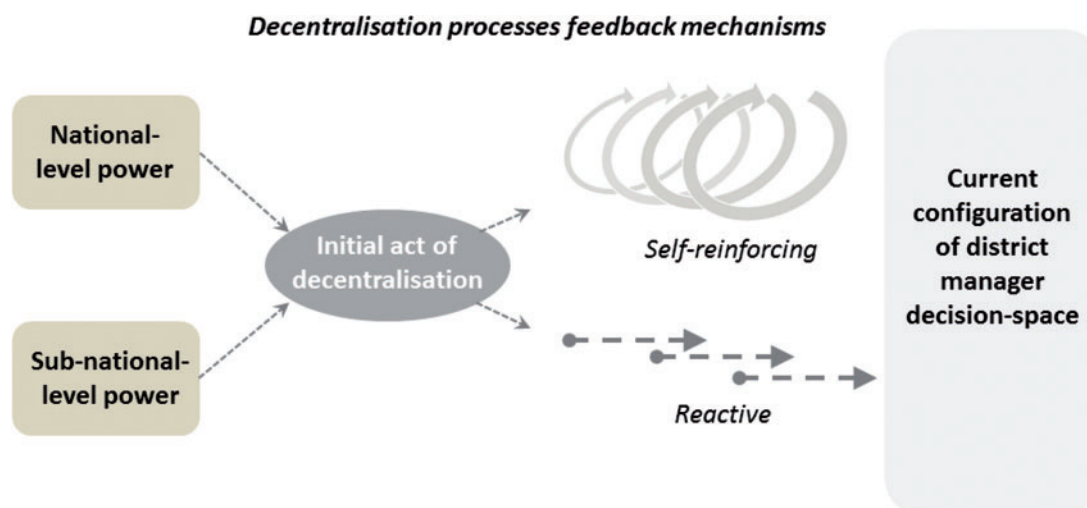


Figure 1. Analytical framework—decentralization sequencing and feedback mechanisms in district manager decision-space in Ghana.

thematic saturation was reached (Guest *et al.* 2006). Interviews took place from September 2013 to August 2014, at private venues of the informants' choosing; communication with one informant took place via telephone. Interviews were conducted in English and audio-recorded where permission was granted from informants. Hand-written notes were recorded in shorthand and converted into transcripts following each interview. To ensure rigour and quality of the data, summarized notes were shared with informants for accuracy. Transcripts were coded inductively.

### Ethics

This study was part of a larger study to identify effective ways of improving maternal and newborn health service delivery in Ghana, for which ethical approval was obtained by the authors' institute. Informed consent was sought from informants. Anonymity of respondents was upheld throughout the analysis.

## Results

### Overview of decentralization sequencing in Ghana, 1859-present

We summarize key episodes in Ghanaian decentralization in Table 1. Because of the importance of 'origins' in path dependence theorizing, whereas most of the democratic governance literature considers the trajectory of decentralization processes since the First

Republic, our analysis considers the initial act of decentralization to be indirect rule under the British colonial administrators. Briefly, prior to 1859, local councils were elected bodies of chiefs. In 1878, the Native Jurisdiction Ordinance invested British-appointed local representatives with greater powers in order to capitalize patronage and loyalty towards the colonial administration (Hoffman and Metzroth 2010). This early act of administrative decentralization consequently reversed downward accountability of councils from their communities towards the colonial authorities instead (Crawford 2009).

Independence in 1957 was followed by a 20-year period of political instability and successive military coups, often resulting in the forfeiture of policy enactments. During this time the co-existence of parallel administrative structures—better-resourced central government authorities functioning alongside smaller, weaker local authorities—thrived. Local Government Act 54 (1961) expanded local government's limited powers, while maintaining the distinction between local and central government bodies. Subsequently, Local Administration Act (1971), enacted by Local Government Amendment Act 359 (1974), sought to rectify yawning gaps in capacities between local and central government by creating a single hierarchy model, thus encouraging further centralization (Opare *et al.* 2012).

The Provisional National Defence Council (PNDC) military government came to power in 1981 on a revolutionary platform to defuse the concentration of national-level power. The 11-point

**Table 1.** Key decentralization episodes in Ghana, 1859-present

Timeline	
Political period	Decentralization processes
Colonial/pre-independence 1859–1950s	Native Jurisdiction Ordinance (1878): original administrative decentralization Weakened local government subject to centralization characterized by colonial state
Independence 1957	Ghana gains independence from Britain
First Republic 1960–66	Local Government Act 54 (1961): builds on previous ordinances to establish towns and municipalities; maintained distinction between local and central government structures; dual hierarchical structures operated in parallel with central government structures better resourced
National Liberation Council (Military rule) 1966–69	Government-commissioned report points to excessive centralization; recommends move to devolution, which does not occur
Second Republic 1969–72	Local Administrative Act 359 (1971): administrative decentralization aimed at abolishing distinction between local and central government structures
National Redemption Council (Military Rule) 1972–79	Act 359 only implemented in 1974 because of change in government; changes never take hold, hampered by lack of cooperation amongst departments; single hierarchy model to strengthen central government control at local level
Third Republic 1979–81	New Constitution (1979): calls for a Health Service
PNDC (Military Rule) 1981–92	Administrative decentralization reforms (1982) Structural Adjustment Programme begins (1983) Local Government Law 207 (1988): creates 110 districts across country with non-partisan District Assembly elections Transition to multi-party democracy—New Constitution (1992): validates 1988 reforms and three-tier sub-national government (area councils, districts, regions)
Fourth Republic 1994-present	Act 455 (1993): establishes formula-based financial allocations to District Assemblies through DACF Act 462 (1994): Local Government Act, based on PNDC Law 207 Act 525 (1996): establishes Ghana Health Service Act 650 (2003): establishes National Health Insurance

decentralization plan presented by the PNDC government in 1982 signified the first attempts at political decentralization (Awortwi 2010). This coincided with the country's structural adjustment period, the continent's first, longest and most ambitious (Bratton *et al.* 2001). In 1988, PNDC Law 207 created the non-partisan district assembly system with 110 districts and elections every 4 years, becoming the basis for the Constitution of the Fourth Republic (Republic of Ghana 1992), and ushering in a period of multi-party democracy. However, several structural elements compromised the degree of lower-level participation and encouraged a custom of centralized decision-making. While the rhetoric of political decentralization centred on local participation, empowerment, social accountability and equilibrating rural–urban divides, its actual implementation employed decentralization as an instrument to legitimize the military regime and inject the interests of central government into the local level (Mohan 1996; Ayee 1997, 2008). Evidence for such assertions appear in the exclusion of traditional chief membership from district assemblies, presidential appointments of one-third of district assembly members, including the District Chief Executive, exclusion of local government from the multi-party election processes (thereby superimposing partisan central governments onto non-partisan local government and extracting more highly qualified individuals to contest national parliamentary elections than stay at local level), and the exponential creation of districts (Ayee 2012; Fiankor and Akussah 2012; Nyendu 2012; JR Ayee, unpublished data). There is no evidence that the proportion of women appointees to the district assemblies exceeds the constitutionally mandated 30% (E Ofei-Aboagye, unpublished data). The result has been district assemblies with greater accountabilities vertically towards central government rather than towards their local constituencies. Thus, decentralization is legislatively political, but administrative in practice.

The District Assembly Common Fund (DACF) Act 455 (1994) legislated 5% of national revenues for districts, thus initiating fiscal decentralization. To date, the DACF forms ~80% of district revenue. However, in fiscal terms, only 25% of the DACF is under the complete discretion of district assemblies, the bulk being programmed centrally against National Development Planning Commission and Ministry of Local Government and Rural Development (MOLGRD) guidelines. As such, most departments and agencies as part of the district assembly maintain administrative and fiscal relationships with their parent ministries. Although intended to be politically neutral, DACF allocation formulas have been shown to vary in favour of districts with greater number of undecided voters during election years (Banful 2011).

In Ghana, such developments have been referred to as the 'politics of (de)centralization': the appearance of decentralization masking the legal, political and administrative structures which continue to serve central government interests over local democratization and empowerment (Ayee 1997; Crawford 2009). Thus, while the sequencing of decentralization processes in Ghana has followed an order of administrative-political-fiscal decentralization, a centralizing tendency towards governance has persisted.

## Decentralization in the health sector

### Period 1: developing the district health system, 1970–85

Within these shifting political contexts, significant district health system developments were occurring simultaneously. By 1970 the MOH was divided into two wings (technical and policy), and reform efforts were underway between 1970 and 1972 to create a separate Department of Health to be responsible for organizing service

delivery. The 1972 military coup interrupted interest in the reorganization of the MOH:

You see, when a new government comes in like a military government which had no idea about running a [health] service, they depended on the guidance of the technocrats. But usually they don't ask you what are the important things you are working on now. Usually when they come in they want to see hospitals, the clinical things which are glamorous as healthcare. So the creation of the Ministry of Health was put on the back burner. (Key Informant 1)

This suspension resulted in an inability to address service delivery challenges at local level. Without effective direction from national level, a more coherent approach to district management was needed. The 1970s Primary Health Care (PHC) movement in Ghana was favourable to international thinking on 'Health for All', and therefore was of international interest as a country which could deliver a working model. Strategy papers written in-country supported the move towards developing the district health system (Dovlo 1998).

Much of the impetus for district-level development was driven by the introduction of a first trained cohort of master's level public health district medical officers (DMOs) to lead teams of health professionals in charge of the district (DHMT). This represented a shift in DMO function from the hospital-based function in existence since colonial times, towards a planning role at the district level. This separated DMO functions from the medical superintendent who was subsequently in charge of the district hospital while the DMO was the medical officer at local government. The systemic effects of this first cohort would eventually resonate beyond the district level:

That was the first capacity building movement, simply getting a critical mass of MPH-qualified doctors into the system, and for them to be in critical positions, not only in district, but also eventually in regional and national levels. (Key Informant 5)

DMO/DHMT decision-space expanded at this time by virtue of a new managerial profile, a concerted increase in capacities and numbers, and support of the PHC movement. Increased decision-making discretion and authority of district managers was further supported through dedicated district health financing mechanisms, which prioritized preventive over curative services. Throughout the 1980s, DHMTs were better resourced financially from Government of Ghana (GOG) than hospitals which were dependent on user fees (Nyonator and Kutzin 1999).

Decentralization reforms up until that time were expressed in the development of the district health system in a double manner: whereas broad administrative decentralization reforms had been based on central government's vision of districts relating directly with the national level, with minimal regional intermediation (as no formal regional structures existed), historically, the health system had maintained strong regional directors from a practice of promoting very senior clinicians to regional medical officer roles. Such positions were powerful, and as a result, the health system kept to this model of operating rather than to relate directly to national level. Second, the district health system strategy preceded and was congruent with the PNDC vision of political decentralization, thus district health development could ride on political support.

Earlier aborted efforts to reform the MOH were reignited in the Constitution of the Third Republic (Republic of Ghana 1979) which specifically called for a Health Service. However, reform was again upended by military coup.

**Period 2: strengthening district health systems, 1986–93**

Formation of the district health system was followed up by efforts to strengthen decentralized management:

Even though we had decentralized to a point, what we had could not address our problem. In other words, the problems were at the district level, but we hadn't gotten there to organize ourselves to be able to address the problems. So we started a programme called 'strengthening of district health systems', and we put [it] together. (Key Informant 1)

The Strengthening District Health Systems (SDHS) approach of DHMT-based problem analysis and problem solving focused on self-identified needs, long-term working through problems, regular progress reviews and monthly feedback, with new questions arising for team-wide decision-making. Although it built on ideas which were developing within the new cohort of DMOs, a WHO-facilitated pilot formalized SDHS activities in 1987 (Cassels and Janovsky 1995). The success of SDHS was driven by its self-directedness and local-ownership: the close-knit nature of the DMO network, despite being scattered across the country, supported the development and sharing of management strengthening tools amongst themselves. Learning-oriented problem-cycles lasted 1.5 years, so that curriculum change and lesson-generation was incremental and organic.

The SDHS was critical for making DMOs/DHMTs better planners and advocates for their needs as district capacity increased, and thus increased managerial decision-space. For example, districts were able to negotiate their annual programming with national level such that national level could identify the activities to be done, but it would be up to the discretion of districts to plan the most suitable times of year to run the activities.

Increased district manager confidence resulted in districts making greater demands on the region. Regional and national levels, in turn, began to request more training for themselves to be better equipped to support newly identified district needs. This developed the regional health management team. Consequently, regional structures became formalized. In this way, the health system followed a bottom-up approach to reorganizing the national-level structures.

Momentum of the SDHS waned by the early 1990s for several reasons. First, earlier adopting regions had more rigorously applied the learned management practices compared with later adopting regions, partly because some practices had already become routinized and were thus subject to dilution effects—their novelty began to dissipate. Second, by the 1990s, financial support for the programming was shrinking due to overall resource constraints. Third, by that same time, many of the initial core of DMOs who had led SDHS were no longer in the districts, but had moved on to regional and national-level positions.

**Period 3: planning of health sector reforms and creation of a health service, 1994–96**

By 1996, a sense of political urgency to create the health service recaptured earlier efforts to restructure the MOH. Partly, this was driven by a desire to wrest power from the military/political elites at the time who were perceived to be too involved in technical issues, and frustrating the sector with highly centralized management. Second, agitation from health professional associations who sought better remuneration and improved working conditions had caused politicians to placate them by covering their concerns with the forthcoming Act 525. Health professionals did not want to be local government staff, as there was a sense of medical specialists being better educated and more qualified than local government officials.

Mission hospitals which provide services in most remote locales under the Christian Health Association of Ghana (CHAG) feared losing their identity by being subsumed under a government Service. As such Act 525 distinguishes the teaching, CHAG and security service (i.e. military and police) hospitals as being autonomous from districts—these facilities are not part of the Ghana Health Service. All these factors outweighed any of sense of health system devolution as implied by Act 462.

Part of the rationale behind Act 525 was to reinforce the district health system by formalizing DHMT structures, pay scales, qualifications and standards in the Service. Yet several operational challenges arose. First, no legislative instrument (LI) which accompany Acts of Parliament was drafted. Advice to draft the LI simultaneously as the bill was being drafted was not taken, and attempts to write the LI *post hoc* floundered. The repercussions have been lacking legal operational guidance on how the GHS should correspond with the MOH, and the functional interactions between the DHMT and the district assembly. As a result this sparked inter-ministerial concerns, with both MOH and MOLGRD. The creation of the GHS supplanted the reorganization of the MOH, and created a perception of 'hollowing out' the Ministry:

At the national level, because the MOH is not fully established... the GHS has found itself managing the MOH. The directors at national level have been performing the work of the Ministry in ways that compromise their own work as an agency charged with service provision. (Ghana Ministry of Health 2001)(p. 37)

Concurrently, concerns of MOLGRD becoming a super-ministry with the onset of full devolution were ignited. Yet, MOH had always been more powerful than MOLGRD in terms of resources and capacities. Act 525 further deepened administrative decentralization of the health system, and caused MOLGRD to maintain its distance: if the GHS could not be contained by a relatively powerful MOH, then MOLGRD would not be able to handle them (Dubbeldam and Bijlmakers 1999).

Finally, Act 525 ushered in key changes in the revision of the DMO role to a district director of health services (DDHS). This no longer limited leadership of the district to a medical qualification, but opened it up to other professionals, including pharmacists and nurses:

It neutralized their power because now they cannot challenge the higher level clinicians. (Key Informant 3)

They were now waiting for HQ to tell them what to do. That is a limitation, and made the role more administrative. (Key Informant 2)

This further erupted brewing conflicts between the clinical leadership of the district hospital vs the administrative leadership of the DHMT:

Within the health service at district level there is longstanding conflict between the Medical Superintendent and DDHS—first of all because before the person becomes Med. Sup, he must have practiced minimum 5 years, whereas DDHS maybe has 3 years' experience. (Key Informant 4)

And so, who became the head of the district became an area of contention. There was a need to manage the hospitals but also a role for wider district supervision and coordination. (Key Informant 8)

**Period 4: implementation of health sector reforms, 1997–2007**

The Medium-Term Expenditure Framework (MTEF) had been introduced by the Ministry of Finance and Economic Planning

(MOFEP) in 1988 to strengthen the national budgeting system. In 1996, financing reforms piloted in the health sector had been driven by national-level GHS and MOH leaders (many of whom were part of the original cohort of DMOs who went through SDHS) who had become dissatisfied with the proliferation of vertical programmes which were circumventing weak MOH management systems. While not referred to locally as a 'sector-wide approach' (SWAp), a holistic style of health sector development was undertaken during this period, which was a SWAp in essence. Development of the national health policy, programme of work (POW) and resources packages for medium term health plans were supported by Common Management Arrangements (CMA) to accomplish implementation and channelling/disbursing of funds, planning, budgeting and audit, procurement, monitoring, evaluation and sector review. The CMA consisted of joint MOH-donor oversight of the sector, donor-pooled funds (DPF) managed by MOH, and strategic activities guided by the Medium Term Health Strategy and the 5-year POWs 1997–2001 and 2002–2006. One of the main objectives of the CMA was to increase financing to the district health system by shifting the proportion of funds directly channelled to districts. By 2001 this had reached 42% from 34% in 1997. DPF was a major source of district financing, and was meant to be allocated quarterly. For a time DPF did increase the autonomy and adaptability of district managers to control their own planning. As part of the SWAp, the development of the concept of budget management centres at district level enabled district health managers to open DDHS accounts and manage their own budgets, rather than depend on the regional offices to manage their budgets; this further increased their decision-making space. However, DPF suffered from lower contributions than expected from donors (Addai and Gaere 2001). Moreover, there was only partial correspondence between the MTEF's 3-year cycle and the sectoral POW's 5-year cycle, thus budgeting and planning did not occur simultaneously, and annual review processes as such could not influence planning processes (Short 2003). At district level, the effects of the MTEF were constrictive. Its top-down standardization of plans:

was not very inspiring and not beneficial for creativity... [and] resulted in the loss of a sense of ownership and commitment and the loss of any opportunity for self-analysis and

self-renewal... This meant discouraging leadership (bringing change and fostering creativity and innovation) even more (Adjei *et al.* 2010) (p. 59).

Towards the mid- to late-2000s, the proportion of earmarked to non-earmarked funds for the district health system began to shift. There were several reasons for this. First, donors who had been contributing to pooled funds as part of the SWAp moved towards multi-donor budget support (MDBS) in line with the principles of the Paris Declaration on Aid Effectiveness (2005). The result was a shifting of financial resource decision-making up to MOFEP and out of the health sector. This, paradoxically, strengthened the negotiation capacity of a unified donor bloc, and thus increased upward accountability towards development partners (Wood-Pallas *et al.* 2015). GOG funding to the health sector did not increase to fill the gap created by the loss of management of DPF, which seriously impacted the district health system. Second, the Additional Duty Hours Allowance led to a rise in GOG personnel emoluments; part of the solution was to reduce allocations for recurrent expenditures and capital investments, thus resulting in a high proportion of the health budget being taken up by salaries (Agyepong *et al.* 2012). Third, the establishment of the Global Fund for HIV, TB and Malaria created parallel structures and further verticalized programme funds (Atun *et al.* 2011). At the same time as programme funding was increasing, the volume and degree of access to DPF under the SWAp was contracting due to the move of those funds into MDBS at the level of the MOFEP. This had the effect of contracting district manager decision-space at the level of the district health directorate. On the other hand, internal generated funds (IGF) which are collected by the hospitals and clinics that provide clinical care continued to rise. For a period this meant an increase in district hospital manager decision-space. However (and fourth), with the introduction of the National Health Insurance Scheme another trend emerged. Although the establishment of the National Health Insurance by Act 650 (2003) capitalized on widespread public dissatisfaction with user fees (Agyepong and Adjei 2008; Carbone 2011), its implementation shifted district financing such that as its use increased, extensive delays in fee reimbursements for services rendered (IGF) created financial shortfall at facility level. Data for the period 2004–11 from the Greater Accra Region exemplifies these trends which have had an effect of shrinking district-manager decision-space

Trends in % revenue by source for GHS in the Greater Accra Region

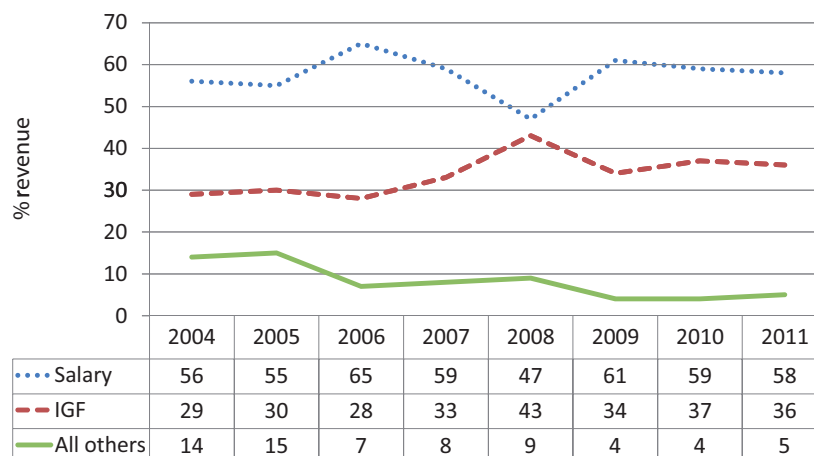


Figure 2. Trends in percent revenue for the Greater Accra Region, 2004–11.

by contracting access to funds at the district level: increases to the already-high proportions of salary and IGF relative to the reduction of other sources of funding (GOG funds for services and administration, programme funding and DPF (Figure 2).

In an effort to support district-wide budgeting and planning, a composite budget system was introduced, which was meant to collectively produce one district budget at the district assembly. However, because agencies continued to receive their budgetary allocations from their parent ministries vertically, MOFEP would reject district inputs, sending back individual budget line items to each parent ministry for explanation, thus compromising the composite budget exercise (Aye 1997). Importantly, the contraction of financial resources in the health sector led to power struggles between GHS and MOH over their control. This necessarily drew attention away from priorities of the district.

### Health system leadership: progress over time

The vitalization of the district health system over the 15-year period from late 1970s to early 1990s was consistently attributed to the strong and persistent leadership of the Director of Medical Services (DMS). This proved a critical contextual element. As a leader who had experience working throughout various regions of the country, and at different levels of the health system, the DMS believed in, and focused on a clear vision of the district, and acted as a buffer between the resistance of the old-guard health leadership, and a gradually confident young group of district managers. The initial cohort of DMOs was hand-picked and mentored, with ambitions of graduating them into regional and national-level positions. Capacities which had been strengthened through SDHS further enabled those DMOs to steward the ensuing reform processes of the 1990s (Cassels and Janovsky 1991). Although many of the original DMO cohort did move into higher-level leadership positions at regional and national level, many of the early reformers left the system altogether (through retirement or international opportunities), and the visionary leadership gains were not widely systematized:

Vision that grows with firm leadership can be ruptured when leadership changes. (Key Informant 6)

[The DMS] offered a certain type of leadership never previously offered, never offered since then. Those leaders were shown a preferred future: decentralized district health systems. They were recruited to help that vision. When they got to the top did they have a new dream? A new version of the vision, there doesn't seem to be one. (Key Informant 3)

We did not have a concrete, institutionalized performance system, so all rested on a tradition of individuals being determinants of everything. (Key Informant 5)

The lack of effective leadership replacement strategies also impacted the waning of the district health system. As those who had formative district experiences were replaced by leaders who perhaps did not uniformly have the same background, exposure or priorities to advocate for the channelling of greater funds to the district, the capacity of district decision-making diminished:

The common basket idea began to break down. The next batch of leaders was weaker than the earlier crop. Donors began to pull out money, and they were allowed to do so. (Key Informant 7)

### Discussion

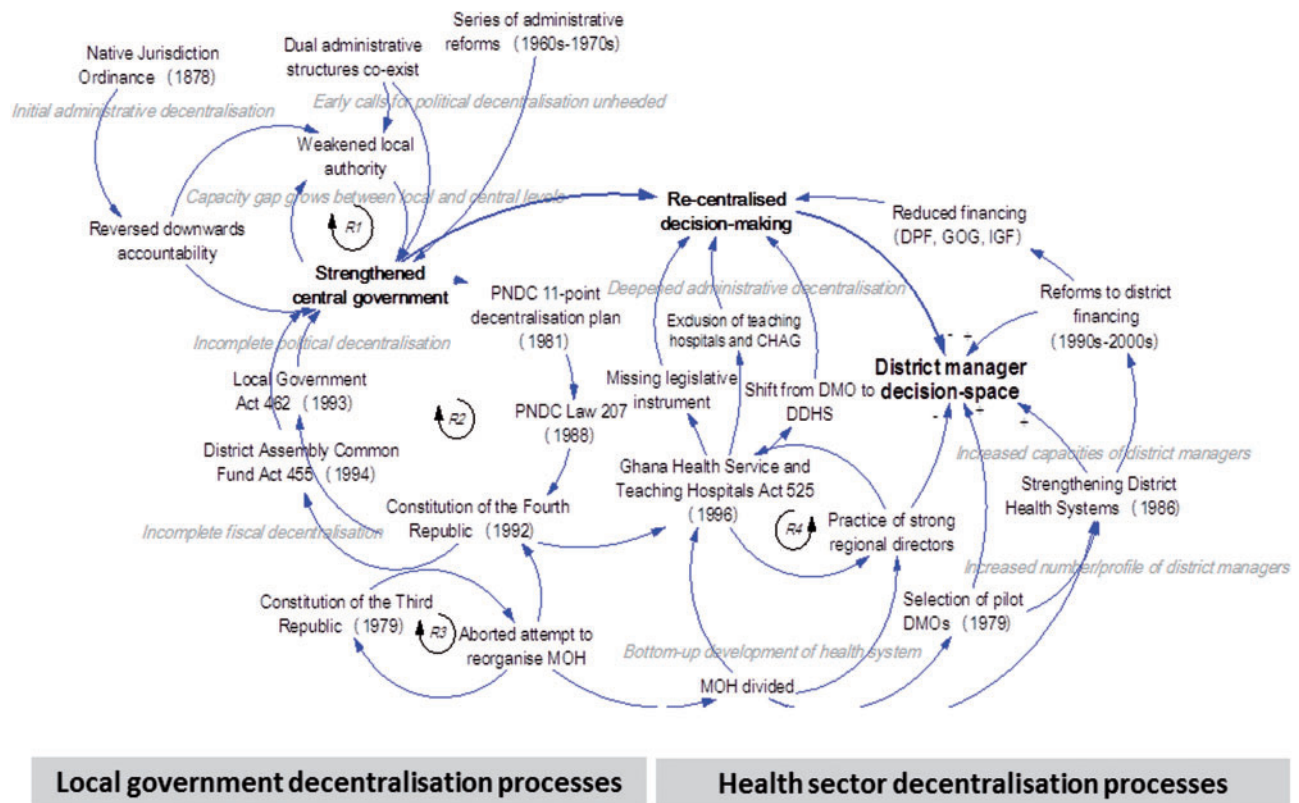
Our findings underscore the fact that not all decentralization processes empower local actors, thereby validating Falletti's sequential theory of decentralization. We demonstrate that in Ghana, an initial

process of administrative decentralization, followed by a century of administrative decentralization reforms, and incomplete and limited political and fiscal decentralization, resulted in a limited shift of power from national to sub-national levels. While the origins of district health system development were in fact bottom-up, the broader governance tendencies towards centralization destabilized it. The micro-processes of district health system development (i.e. those internal to the district health system) appear to follow 'reactive' feedback mechanisms of linear progress, whereas the macro-processes of district health system development (i.e. those which concern the district health system as a part of broader governance reforms) appear to be subject to 'self-reinforcing' feedback mechanisms of centralized decision-making. We see from our analysis that district manager decision-space expanded steadily during periods (1) and (2) of district health system development, due to concerted efforts to increase the number and profile of district managers, strengthen managerial planning and advocacy capacities and prioritize district financing mechanisms. During periods (3) and (4), a loss of agility arose out of the formalization of GHS structures. Though there was a time of augmented district financing, this was not sustained. The contracted access to financial resources and increased upward accountability has led to a steady attenuation of district manager decision-space in recent years.

We summarize these mechanisms in Figure 3 as a causal loop diagram (CLD) using Vensim software (Ventana Systems Inc, 2014). CLDs are useful visualizing tools, which represent systemic patterns, interactions between variables and the direction of causal influence. CLDs capture feedback mechanisms in a causal pathway, which can be reinforcing (R). Figure 3 displays multiple reinforcing loops. R1 shows the initial administrative decentralization of the Native Jurisdiction Ordinance led to reversals in downward accountability through a dual mechanism of weakening local authority and strengthening central government. The self-reinforcing nature of this dynamic was further driven by repeated administrative decentralization reforms over an extended period of time and the continuation of parallel administrative structures. R2 shows the strengthened central government position at the onset of political decentralization which drove the nature of fiscal and political decentralization, further strengthening central government and giving rise to a centralized decision-making tendency within government. R3 shows the earlier failed attempts to reform the MOH and create a health service which fostered political need, and informed constitutional reform and the passing of Act 525. Act 525 in itself was an administrative decentralization reform. The contextual factors surrounding its passing (historical practice of strong regional directors (R4), exclusion of CHAG and teaching hospitals, shifting DMO role to DDHS, and the missing LI) led to a centralization of decision-making within the health sector—however this tendency was also driven by an existent centralizing tendency. In the formalization of health system structures much of the bottom up development of the district health system was eroded. Gains made in district manager decision-space over the period from the late 1970s to mid-2000s—selection of the initial cohort of DMOS, increasing district-wide managerial capacities through the SDHS, and district financing reforms (represented by positive arrows)—were ultimately dampened because of a loss of fiscal autonomy and re-centralized resource decision-making.

A recent study of five countries in Asia shows that political and social episodes in a country's development do present key junctures in health system evolution (Grundy *et al.* 2014), thus underlining the importance of this kind of analysis. Especially in the case of understanding how SWAs affect the balance of district-level empowerment, several studies show SWAs to have less-than-desirable





**Figure 3.** Causal loop diagram of decentralization feedback mechanisms in development of district health system and district manager decision-space in Ghana.

effects: SWAs tend to be inherently reinforcing to national-level decision-making, particularly in allocation decisions and national management planning systems (Peters and Chao 1998); they are less effective when development partners wish to be free from instrumental constraints, or perceive national government as lacking leadership and management capacities (Buse 1999); and have even been referred to as ‘top-down development programmes’ (Natuzzi and Novotny 2014) (p. 79).

Our article is further relevant to revitalized debates on decentralization. In Ghana, there are efforts to embark on the next phase of decentralization reforms by implementing ‘full’ devolution to a Local Government Service under the authority of district assemblies, according to Local Government Service Act 656 (2003) (Ghana Ministry of Local Government and Rural Development 2003; Joint Government of Ghana and Development Partners 2007). Initiating implementation of Act 656 has not been without its contentions, as an overall policy framework is still missing to guide its operationalization in the health sector. Act 656 raises a multitude of questions about the future role and function for national and regional-level GHS structures, capacity weaknesses at district level (Kapiriri *et al.* 2003), vested interests of health professionals and requisite district financing (Francis and James 2003). As these reforms are ongoing, this line of inquiry represents future areas of research. It is clear, however, that the district health system currently reflects a systemic lack of coherence between district managerial responsibilities and accountabilities. Serious rethinking of district financing and authority is imperative in order to achieve health goals.

## Conclusions

We conclude that the erosion of early gains made from bottom-up development of the district health system, and shrinking district manager

decision-space in Ghana has emerged due to the self-reinforcing centralizing tendency of government decision-making. This is as a result of dominant administrative decentralization processes over time, followed by incomplete political and fiscal decentralization, thereby empowering national-level against district-level interests.

## Ethics

Ethical approval for this study was awarded by the Ghana Health Service Ethical Review Committee [GHS-ERC: 09/11/11].

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## References

- Addai E, Gaere L. 2001. *Capacity-Building and Systems Development for Sector-Wide Approaches (SWAs): The Experience of the Ghana Health Sector*. Accra, Ghana: Health Systems Resource Centre (HSRC), DfID.

- Adjei S, Seddoh A, de-Graft Aikins A *et al.* 2010. *Evaluation of Capacity Development at District Level of the Health Sector in Ghana (2006–2009): Evidence-Based Case Study*. Accra, Ghana: Centre for Health and Social Services.
- Agyepong IA. 1999. Reforming Health Service Delivery at District Level in Ghana: the Perspective of a District Medical Officer. *Health Policy and Planning* 14: 59–69.
- Agyepong IA, Adjei S. 2008. Public social policy development and implementation: a case study of the Ghana National Health Insurance scheme. *Health Policy and Planning* 23: 150–60.
- Agyepong IA, Kodua A, Adjei S, Adam T. 2012. When 'solutions of yesterday become problems of today': crisis-ridden decision making in a complex adaptive system (CAS)—the Additional Duty Hours Allowance in Ghana. *Health Policy and Planning* 27: iv20–31.
- Ahwoi K. 2010. *Rethinking Decentralisation and Local Government in Ghana—Proposals for Amendment*. Accra, Ghana: The Institution of Economic Affairs.
- Asante A, Zwi A, Ho M. 2006. Getting by on credit: how district health managers in Ghana cope with the untimely release of funds. *BMC Health Services Research* 6: 105.
- Atun R, Pothapregada SK, Kwansah J, Degbotse D, Lazarus JV. 2011. Critical interactions between the Global Fund-supported HIV programs and the health system in Ghana. *Journal of Acquired Immune Deficiency Syndromes* 57: S72–6.
- Awio G, Northcott D. 2001. Decentralization and budgeting: the Uganda health sector experience. *International Journal of Public Sector Management* 14: 75–88.
- Awortwi N. 2010. The past, present, and future of decentralisation in Africa: a comparative case study of local government development trajectories of Ghana and Uganda. *International Journal of Public Administration* 33: 620–34.
- Ayee JR. 1997. The adjustment of central bodies to decentralisation: the case of the Ghanaian bureaucracy. *African Studies Review* 40: 37–57.
- Ayee JR. 2008. The balance sheet of decentralisation in Ghana. In: Saito F (ed). *Foundations for Local Governance*. Heidelberg: Physica-Verlag, 233–58.
- Ayee JR. 2012. The political economy of the creation of districts in Ghana. *Journal of Asian and African Studies* 48: 623–45.
- Banful AB. 2011. Do formula-based intergovernmental transfer mechanisms eliminate politically motivated targeting? Evidence from Ghana. *Journal of Development Economics* 96: 380–90.
- Bossert T. 1998. Analyzing the decentralization of health systems in developing countries: decision space, innovation and performance. *Social Science & Medicine* 47: 1513–27.
- Bossert T, Beauvais JC. 2002. Decentralization of health systems in Ghana, Zambia, Uganda and the Philippines: a comparative analysis of decision space. *Health Policy and Planning* 17: 14–31.
- Bossert T, Mitchell AD. 2011. Health sector decentralization and local decision-making: decision space, institutional capacities and accountability in Pakistan. *Social Science & Medicine* 72: 39–48.
- Bratton M, Lewis P, Gyimah-Boadi E. 2001. Constituencies for reform in Ghana. *The Journal of Modern African Studies* 39: 231–59.
- Buse K. 1999. Keeping a tight grip on the reigns: donor control over aid coordination and management in Bangladesh. *Health Policy and Planning* 14: 219–28.
- Carbone G. 2011. Democratic demands and social policies: the politics of health reform in Ghana. *The Journal of Modern African Studies* 49: 381–408.
- Cassels A, Janovsky K. 1991. *A Time of Change: Health Policy, Planning and Organisations in Ghana*. Geneva, Switzerland: World Health Organisation.
- Cassels A, Janovsky K. 1995. *Strengthening Health Management in Districts and Provinces*. Geneva, Switzerland: World Health Organisation.
- Couttolenc BF. 2012. *Decentralisation and Governance in the Ghana Health Sector*. Washington, DC: World Bank.
- Crawford G. 2009. 'Making democracy a reality'? The politics of decentralisation and the limits to local democracy in Ghana. *Journal of Contemporary African Studies* 27: 57–83.
- Dovlo D. 1998. Health sector reform and deployment, training and motivation of human resources towards equity in health care: issues and concerns in Ghana. *Human Resources for Health Development Journal* 2: 34–47.
- Dubbeldam R, Bijlmakers L. 1999. *Sector-Wide Approaches for Health Development—Dutch Field Experiences in International Cooperation*. Den Haag, The Netherlands: Netherlands Ministry of Foreign Affairs.
- Falletti TG. 2005. A sequential theory of decentralization: Latin American cases in comparative perspective. *American Political Science Review* 99: 327–46.
- Fiankor DK, Akussah H. 2012. Information use and policy decision making by district assembly members in Ghana. *Information Development* 28: 32–42.
- Francis P, James R. 2003. Balancing rural poverty reduction and citizen participation: the contradictions of Uganda's decentralization program. *World Development* 31: 325–37.
- Ghana Ministry of Health. 2001. *The Health of the Nation: Reflections on the First Five Year Health Sector Programme of Work 1997–2001*. Accra, Ghana: MOH.
- Ghana Ministry of Health, Government of Ghana, United Nations Country Team in the Republic of Ghana. 2011. *MDG Acceleration Framework and Country Action Plan—Maternal Health*. Accra, Ghana: Ministry of Health (MOH), Government of Ghana and United Nations Country Team in the Republic of Ghana.
- Ghana Ministry of Local Government and Rural Development. 2003. *National Decentralisation Action Plan (NDAP): Towards a Sector-wide Approach for Decentralisation Implementation in Ghana (2003–2005)*. Accra, Ghana: MOLGRD.
- Ghana Ministry of Local Government and Rural Development. 2010. *Draft Decentralisation Policy Framework: Accelerating Decentralisation and Local Governance for National Development*, Accra, Ghana.
- Grundy J, Hoban E, Allender S, Annear P. 2014. The inter-section of political history and health policy in Asia—the historical foundations for health policy analysis. *Social Science & Medicine* 117: 150–9.
- Guest G, Bunce A, Johnson L. 2006. How many interviews are enough?: an experiment with data saturation and variability. *Field Methods* 18: 59–82.
- Hoffman BD, Metzroth KM. 2010. *The Political Economy of Decentralisation in Ghana*. Washington, DC: Centre for Democracy and Civil Society, Georgetown University.
- Jeppsson A, Okuonzi SA. 2000. Vertical or holistic decentralization of the health sector? Experiences from Zambia and Uganda. *The International Journal of Health Planning and Management* 15: 273–89.
- Joint Government of Ghana, Development Partners. 2007. *Decentralisation Policy Review Final Report*. Accra, Ghana: Government of Ghana.
- Kapiriri L, Norheim OF, Heggenhougen K. 2003. Public participation in health planning and priority setting at the district level in Uganda. *Health Policy and Planning* 18: 205–13.
- Kay A. 2005. A critique of the use of path dependency in policy studies. *Public Administration* 83: 553–71.
- Kwamie A, Agyepong IA, Van Dijk H. 2015. What governs district manager decision-making? A case study of complex leadership in Dangme West district, Ghana. *Health Systems and Reform* 1: 1–11.
- Kwamie A, van Dijk H, Agyepong IA. 2014. Advancing the application of systems thinking in health: realist evaluation of the leadership development programme for district manager decision-making in Ghana. *Health Research Policy and Systems* 12: 29.
- Larbi GA. 1998. Institutional constraints and capacity issues in decentralizing management in public services: the case of health in Ghana. *Journal of International Development* 10: 377–86.
- Litvack J, Ahmad J, Bird R. 1998. *Rethinking Decentralisation in Developing Countries*. Washington, DC: The International Bank for Reconstruction and Development/The World Bank.
- Mahoney J. 2000. Path dependence in historical sociology. *Theory and Society* 29: 507–48.
- Mayhew SH. 2003. The impact of decentralisation on sexual and reproductive health services in Ghana. *Reproductive Health Matters* 11: 74–87.
- Meessen B, Malanda B. 2014. No universal health coverage without strong local health systems. *Bulletin of the World Health Organization* 92: 78–8A.

- Mills A, Vaughan JP, Smith D, Tabibzadeh I. 1990. *Health System Decentralisation—Concepts, Issues and Country Experiences*. Geneva, Switzerland: World Health Organisation.
- Mohan G. 1996. Adjustment and decentralization in Ghana: a case of diminished sovereignty. *Political Geography* 15: 75–94.
- Natuzzi ES, Novotny T. 2014. Sector wide approaches in health care: do they work? *Global Health Governance* 8: 77–95.
- Nyendu M. 2012. Democratic decentralization in Ghana: the need for a policy review. *Journal of Asian and African Studies* 47: 221–35.
- Nyonator F, Kutzin J. 1999. Health for some? The effects of user fees in the Volta Region of Ghana. *Health Policy and Planning* 14: 329–41.
- Opare JA, Egbenya GR, Kaba M, Baku J. 2012. Effectiveness of Decentralisation in Ghana. *Transnational Research on Decentralisation in West and Central Africa: Learning from Local and Intersectoral Lessons*. Abidjan, Cote D'Ivoire: Editions Universitaires de Cote d'Ivoire.
- Oyaya CO, Rifkin SB. 2002. Health sector reforms in Kenya: an examination of district level planning. *Health Policy* 64: 113–27.
- Peters D, Chao S. 1998. The sector-wide approach in health: what is it? Where is it leading? *International Journal of Health Planning and Management* 13: 177–90.
- Republic of Ghana. 1979. Constitution of the Third Republic of Ghana.
- Republic of Ghana. 1992. Constitution of the Fourth Republic of Ghana.
- Republic of Ghana. 1993. Local Government Act (Act 462).
- Republic of Ghana. 1996. Ghana Health Service and Teaching Hospitals Act (Act 525).
- Ribot JC. 2002. *African Decentralisation—Local Actors, Powers and Accountability*. Geneva, Switzerland: United Nations Research Institute for Social Development, International Development Research Centre.
- Sakyi DEK. 2008. A retrospective content analysis of studies on factors constraining the implementation of health sector reform in Ghana. *The International Journal of Health Planning and Management* 23: 259–85.
- Sakyi DEK, Koku Awoonor-Williams J Adzei, FA . 2011. Barriers to implementing health sector administrative decentralisation in Ghana. *Journal of Health Organization and Management* 25: 400–19.
- Short J. 2003. *Country Case Study 4: Assessment of the MTEF in Ghana*. London, UK: Overseas Development Institute.
- Ventana Systems Inc. 2014. Vensim PLE [software].www.vensim.com, accessed 24 April 2015.
- WHO. 1988. *Strengthening District Health Systems Based on Primary Health Care*. Geneva, Switzerland: World Health Organisation.
- Wood-Pallas S, Nonvignon J, Aikins M, Prah-Ruger J. 2015. Responses to donor proliferation in Ghana's health sector: a qualitative case study. *Bulletin of the World Health Organisation* 93: 11–8.