

# The crowded space of local accountability for maternal, newborn and child health: a case study of the South African health system

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## Abstract

Global and national accountability for maternal, newborn and child health (MNCH) is increasingly invoked as central to addressing preventable mortality and morbidity. Strategies of accountability for MNCH include policy and budget tracking, maternal and perinatal death surveillance, performance targets and various forms of social accountability. However, little is known about how the growing number of accountability strategies for MNCH is received by frontline actors, and how they are integrated into the overall functioning of local health systems. We conducted a case study of mechanisms of local accountability for MNCH in South Africa, involving a document review of national policies, programme reports, and other literature directly or indirectly related to MNCH, and in-depth research in one district. The latter included observations of accountability practices (e.g. through routine meetings) and in-depth interviews with 37 purposely selected health managers and frontline health workers involved in MNCH. Data collection and analysis were guided by a framework that defined accountability as answerability and action (both individual and collective), addressing performance, financial and public accountability, and involving both formal and informal processes. Nineteen individual accountability mechanisms were identified, 10 directly and 9 indirectly related to MNCH, most of which addressed performance accountability. Frontline managers and providers at local level are targeted by a web of multiple, formal accountability mechanisms, which are sometimes synergistic but often duplicative, together giving rise to local contexts of ‘accountability overloads’. These result in a tendency towards bureaucratic compliance, demotivation, reduced efficiency and effectiveness, and limited space for innovation. The functioning of formal accountability mechanisms is shaped by local cultures and relationships, creating an accountability ecosystem involving multiple actors and roles. There is a need to streamline formal accountability mechanisms and consider the kinds of actions that build positive cultures of local accountability.

**Keywords:** Maternal, newborn and child health, accountability, district health system, informal accountability

## Introduction

Since the advent of the Millennium Development Goals (MDGs), there has been major global interest in furthering maternal, newborn and child health (MNCH; [United Nations General Assembly, 2015](#)),

which is set to continue in the era of the Sustainable Development Goals (SDGs; [United Nations Secretary-General, 2010](#)). Despite significant achievements, preventable maternal, neonatal and child mortality remains unacceptably high, particularly in low- and

### Key Messages

- Frontline health managers and providers are subject to multiple accountability processes designed nationally and practiced locally, in addition to locally emerging accountability mechanisms.
- There may be duplication, overlap, conflict or synergy among these multiple accountability mechanisms at local level, which often involve the same groups of actors.
- Formal accountability mechanisms operate within local cultures of informal relationships, networks and underlying norms, some of which may become formalized over time.
- The informal dimensions of the accountability ecosystem provide a significant backdrop to formal mechanisms and may be key to understanding local variation in maternal, newborn and child health outcomes.
- A more holistic systems perspective to accountability is needed, rather than the current siloed approach of multiple individual accountability mechanisms.

middle-income countries (United Nations Secretary-General, 2014; WHO, 2018). The vast majority of deaths can be attributed to health system failures often in the context of severe resource constraints and poverty. These failures include, amongst others, insufficient or inadequate distribution of healthcare facilities to ensure coverage, the dearth of skilled health providers and ‘know-how’, drug stock-outs, lack of essential life-saving equipment, and inadequate referral, emergency transport, and monitoring and supervision systems (Sundari, 1992; UN Millennium Project, 2005; Ross and Mukumbuta, 2009; Mabaso *et al.*, 2014).

In response to these system failures, the need for greater health system ‘accountability’ is increasingly invoked as critical to addressing the ongoing problem of maternal, neonatal and child mortality and morbidity, not only at global level (United Nations Secretary-General, 2015), but also at national and local levels (Freedman and Schaaf, 2013; Mafuta *et al.*, 2015; Lodenstein *et al.*, 2017; Nxumalo *et al.*, 2018a).

In a review of studies on accountability for MNCH in Sub-Saharan Africa, Hilber *et al.* (2016) proposed that ‘accountability exists when an individual or body, and the performance of tasks or functions by that individual or body, are subject to another’s oversight, direction or request that they provide information or justification for their actions’. According to Brinkerhoff (2003), drawing from Schedler (1999), accountability encompasses two inter-related key processes: answerability and enforceability. Answerability refers to the obligation to inform about and explain actions or decisions taken; while enforceability relates to the capacity to impose sanctions (or apply remedial action) in case of violation of key mandates (Schedler, 1999). Answerability and enforceability can operate at the individual or the collective levels (Schedler, 1999). One common way in which answerability is operationalized in health bureaucracies is by setting targets for performance (Roberts, 2009). These targets are often associated with performance audits, and the use of incentives and sanctions when targets are met or not, respectively. Accountability in healthcare thus implies a contractual relationship between providers and organizations that entails a certain level of answerability and enforceability that would result in a certain level of performance (Schedler, 1999).

Brinkerhoff further distinguishes between the following three types of accountability in healthcare organizations: financial, performance and political/democratic accountability (Box 1; Brinkerhoff, 2003, 2004). Formal accountability relationships can thus be either internal, within the health management and bureaucracies (for instance, between peers, managers at various levels and health service providers and district health managers); or external, between health providers and the health beneficiaries or a community (Cleary *et al.*, 2013; Nxumalo *et al.*, 2018a).

In practice, however, there are challenges in applying the ideal type approaches to accountability described above. In the first instance, they do not take into account the complexities underlying the daily practices and the inherently relational nature of accountability (Moncrieffe, 2011; Halloran, 2015, 2016; Van Belle, 2016; Nxumalo *et al.*, 2018a). These complexities are referred to as an ‘accountability ecosystem’, consisting of multiple actors with a range of roles, responsibilities and interactions across levels of the system, and embedded in micro-social and political contexts (Halloran, 2015; Van Belle *et al.*, 2018). Accountability ecosystems include formal and informal pathways and forces together grounded in a local accountability ‘culture’ (Halloran, 2015).

Secondly, performance targets may become ends in themselves rather than a means to improve performance (Roberts, 2009). Poor performance may, in fact, emerge from a performance culture excessively focusing on targets and not on the processes to get there, continuously defining new intervention targets, ignoring the importance of human capital and relationships (Koppell, 2005).

Thirdly, in practice, multiple and often conflicting demands for accountability are often imposed on frontline managers (Messner, 2009). These accountability overloads, coupled with increased expectations from health system bureaucracies, often result in reduced efficiency and responsiveness for patient care (Halachmi, 2014; Erickson *et al.*, 2017; Nxumalo *et al.*, 2018a). This phenomenon has been described by organizational theorist Koppell (2005) as ‘Multiple Accountabilities Disorder’ (MAD). It can undermine the effectiveness of an organization resulting in accountability losing its significance and evolving into a culture of empty compliance (Koppell, 2005).

Fourthly, there is an assumption of a one-way direction in formal accountability mechanisms, upwards or outwards, whereas accountability is better framed as a two-way relationship, referred to as reciprocal accountability (Elmore, 2006; Moncrieffe, 2011). According to Elmore (2006), reciprocity implies that ‘for every unit of performance I require of you, I owe you a unit of capacity to produce that result’. This infers that, in healthcare organizations, accountability for performance requires investing in improving the capacity of frontline professionals and in provision of resources and equipment as a prerequisite. Yet, typically, accountability relationships in healthcare organizations are experienced by frontline health professionals as a one-way answerability (Radin, 2011; Nxumalo *et al.*, 2018b), involving sanctioning and punitive responses to problems, rather than a range of instruments encompassing both proactive and reactive, positive and negative, and individual and collective approaches (Nxumalo *et al.*, 2018a).

Provoked in part by the MDGs (South African National Department of Health, 2016), a number of policies and strategies to

**Box 1: Typology of accountability (Source: Brinkerhoff, 2004, 2003); Excerpts of reflective notes**

- 'Financial accountability' refers to tracking and reporting on allocation, disbursement and utilization of financial resources using auditing, budgeting and accounting tools.
- 'Performance accountability' refers to demonstrating and accounting for performance in light of agreed-upon performance targets.
- 'Public accountability (political/democratic)' refers to procedures, and mechanisms that seek to ensure that government delivers on promises, fulfils the public trust, aggregates and represents citizens' interests, and responds to ongoing and emerging societal needs and concerns.

**Excerpt of reflective note 1**

The extended management meeting took place in a family-like atmosphere in which all participants were given an opportunity to add any item to the suggested agenda before its adoption. It was a platform where the executive management reported back to other (operational) managers on key strategic issues and information from the district and provincial offices. The extended management meeting observed was 2.5 hours in duration and had fruitful, work-related discussions that resulted in setting up key actions for the sub-district. Open discussion, distributed, collective accountability and delegation of decision-making were evident throughout the meeting as a variety of senior managers took charge of specific items and in the allocation of key actions. Despite the fact that all participants had equal opportunities for participation, some members (especially from PHC services) were observed to be quiet, suggesting the existence of implicit hierarchies in the district.

**Excerpt of reflective note 2**

The general staff meeting was a platform where all hospital staff, all disciplines and all levels came together to discuss mostly operational issues and challenges. The meeting observed was attended by approximately 40 people and lasted 5 hours. It was chaired by the CEO who introduced the purpose of the meeting as strengthening individual relationships and working together for the benefit of the community, invoking the slogan '...united we shall stand'. After presentation of the suggested meeting agenda, seven additional items were added by the staff before adoption.

At this meeting staff presented their issues of satisfaction and complaints, requesting their direct unit managers or supervisors to respond. The role and voice of the local trade union representatives was particularly notable in this meeting. On the one hand, they provided a strong voice for more accountability from managers to staff members, in terms of ensuring resources and skills for quality health service delivery, and from staff members to the community in terms of providing quality services. On the other hand, they acted to contain anger of staff towards managers, with a union shop steward actively mediating during an open discussion, when some managers/supervisors felt they were personally attacked, by saying 'intimidation is not allowed in the staff meeting'. The rules of participation were also regularly reiterated by the Chair (CEO), stating 'Everyone's opinion is accepted in this house'; 'we are discussing work-related matters, not personal issues'. Participants collectively acknowledged the District EMS manager who had 'come down' to a sub-district meeting to account and answer questions related to grading and uniforms of EMS staff.

address maternal, neonatal and child mortality have been introduced in South Africa, many of which rely upon greater local accountability. In this article, we review formal accountability mechanisms and describe local accountability practices for MNCH in one health district (Mpumalanga Province) of South Africa. We begin by mapping and categorizing all formal accountability mechanisms directly or indirectly addressing MNCH, locating these in an evolving policy context. We then describe the 'accountability ecosystem' of the study district, examining both the practices of formal accountability and the informal accountability relationships observed in one sub-district. Finally, we explore the implications of a 'crowded' local accountability ecosystem for strengthening local practices of accountability for MNCH.

## Methodology

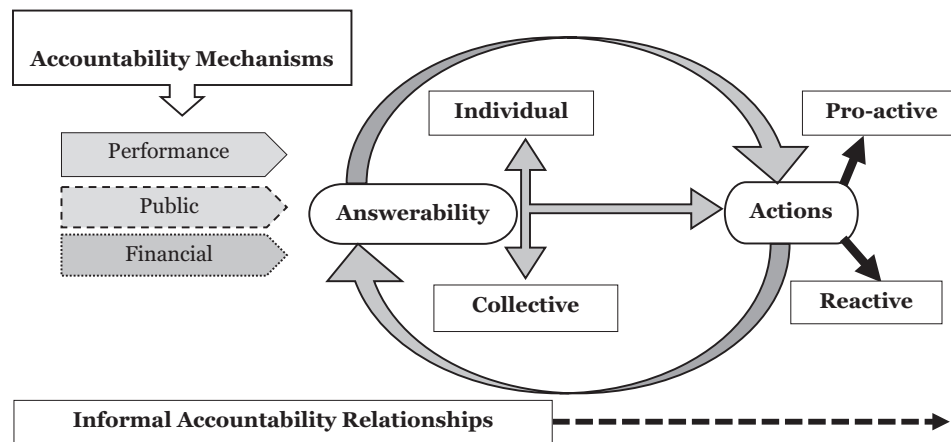
### Study design and case definition

We undertook an exploratory case study, with the case defined as the accountability ecosystem for MNCH at local (district) level, consisting of a range of direct and indirect formal accountability mechanisms. The term 'accountability mechanism' refers generically to the range of broad and specific accountability strategies, interventions and instruments. Direct mechanisms are those whose prime target is MNCH care; mechanisms that are linked to MNCH through other

processes are referred to as indirect accountability mechanisms. Informal accountability relationships consist of social norms, behaviours and local cultures that shape collective responsibility and actions towards MNCH outcomes, as well as the functioning of formal mechanisms.

### Study setting

South Africa is a middle-income country with a quasi-federal political system consisting of the national sphere, 9 provincial governments and 52 health districts. South Africa has been regarded as a poor performer with respect to maternal and child health outcomes. On the eve of the MDGs, the maternal mortality ratio was 141 per 100 000 live births (Statistics South Africa, 2015b) and the under-five child mortality rate was 40 per 1000 live births (Statistics South Africa, 2015a). The organization and delivery of health services is a competence under the provincial government. The empirical component of this study was conducted in Gert Sibande District, one of three districts of Mpumalanga Province, situated in the north-east of South Africa. The district has a population of about 1.1 million, with the vast majority (61%) living in rural areas (Massyn *et al.*, 2017). Gert Sibande was targeted by the National Department of Health as one of the districts with high maternal and child mortality, holding back the achievement of the national MDG targets. The



**Figure 1** Accountability framework for MNCH at local DHS.

district was also 1 of the 11 selected sites to pilot the new National Health Insurance (NHI) Strategy in 2012; and one of the four districts to receive (in 2014) a health system strengthening and quality improvement intervention to reduce maternal and child mortality, involving a new accountability structure (referred to as the Monitoring and Response Unit—MRU) and processes (real-time death reporting). The district comprises 8 district hospitals, 1 regional hospital and 76 primary healthcare facilities, distributed among seven sub-districts.

### Analytical framework

The health system is understood as a complex adaptive system (Paina and Peters, 2012) in which accountability, as part of overall health system governance, is identified as a key crosscutting property of the system as a whole (Mikkelsen-Lopez *et al.*, 2011). Within this system, multiple actors engage through various accountability relationships, which can be distinguished with respect to their intended purpose, their form and the way they operate.

Based on their main purpose, formal accountability mechanisms can be categorized into the following three main groups (Box 1): performance accountability, financial accountability and public accountability (Brinkerhoff, 2003, 2004). These formal mechanisms are embedded in, and interact with, a complex system of informal accountability relationships that enable or constrain the ability of frontline managers and healthcare providers to accomplish their daily tasks. The informal accountability processes are expressed through collective, spontaneous and unofficial action, peer support and communication in local health systems (Figure 1).

We approached accountability as encompassing the two interacting dimensions of answerability and responsive actions (widening the approach from a narrow focus on ‘sanction’), that can be addressed at individual and/or collective levels (Schedler, 1999). The resulting actions can be either pro-active (i.e. actions and planning before and preventing the occurrence of an event), or reactive through remedial action or strategies for redress (i.e. actions in response to a situation that has already occurred).

### Data collection

The study had two main components: a documentary review and an in-depth study of one district, in which two sub-districts were purposefully selected as embedded cases representing different levels of buy-in to the District MRU, identified in a previous evaluation by the authors (Schneider *et al.*, 2017). We used the following three methods of data collection: (1) document review of policy

documents, reports, programme descriptions, and published literature addressing accountability mechanisms directly or indirectly related to MNCH at local (district) level in South Africa and the district under study; (2) non-participant observation, most intensively in one sub-district, in order to gain an understanding of the accountability ecosystem including its informal dimensions; and (3) in-depth interviews with 37 health managers and frontline health workers involved in MNCH activities, some of whom were also active in local trade union structures.

### Document review

A variety of sources were searched, including Google search engine, the South African Government ([www.gov.za](http://www.gov.za)) and the Department of Health ([www.health.gov.za](http://www.health.gov.za) and [www.idealhealthfacility.org.za/](http://www.idealhealthfacility.org.za/)) websites, publications such as the annual South African Health Review ([www.hst.org.za](http://www.hst.org.za)) and PubMed. We limited the search to South Africa and to health facility, sub-district, district and national strategies (as opposed to global mechanisms), including terms such as: mortality audit, clinic committee, Perinatal (or Child) Problem Identification Program (PIIP or CHIP), District Clinical Specialist Team (DCST), health facility norms and standards related to MNCH, adverse event reporting, Ideal Clinic, district (sub-district and health facility) planning and review. We also searched for peer-reviewed papers and grey literature from non-governmental organizations fostering accountability in South Africa. Additional relevant literature was identified through the reference lists of documents. Finally, we reviewed local documents and minutes of mortality surveillance and response structures such as the MRU.

### Non-participant observation

The first author spent 3 weeks in one of the two sub-districts conducting field observation and interviews. During this period, the researcher engaged in the actors’ daily activities (such as supervisory visits, ward rounds), attended meetings and held informal conversations in the district office, first-level community health clinics and district hospitals. The actors observed were senior district and hospital managers, facility and hospital operational managers, professional nurses, medical officers, allied health workers, facility data managers, trade union representatives, receptionists and security guards at the entrance gates. We observed both formal accountability processes (such as morbidity and mortality audits, staff meetings) and empirical expressions of informal accountability relationships, directly or indirectly related to MNCH (such as interactions between staff, and between management and trade

unions). Three clinics designated as ‘Ideal Clinics’ by a national accreditation system requiring compliance to various standards were visited, observing the organization of work and patient flow in order to grasp the reality of primary healthcare facilities in the sub-district. Finally, the researcher joined a home visit led by a social worker and a dietitian.

This period of intensive observation in the first sub-district was supplemented by observations of meetings in the second sub-district as well as the district office. All in all, from April to July 2018, we observed a total of 22 meetings in the district.

The observations were conducted mostly by the first author who is familiar with the South African health system. The observations were framed by the previous evaluation in the district, and by his understanding of accountability. The day-to-day operations of the local health system are conducted in English, and he was thus able to follow conversations. Observations were guided by a piloted field observation sheet ([Supplementary Appendix SA1](#)). Detailed notes were taken (where appropriate) during observations, followed by reflective notes after the fieldwork and in subsequent debriefing processes with the research team.

### In-depth interviews

Using an interview guide based on the study framework ([Supplementary Appendix SA2](#)), we conducted 37 semi-structured, in-depth, face-to-face interviews and one focus group discussion of nine PHC facility managers. Key informants involved in MNCH care were purposely selected for interviews. They included district programme managers, members of the DCSTs, hospital CEOs, PHC and hospital mid-level ‘operational’ managers, clinicians, emergency service personnel, dietitians, members of community-based outreach teams, trade union representatives and hospital board chairpersons.

### Analysis

Based on the study framework, a data extraction form was designed for the document review ([Supplementary Appendix SA3](#)), and a policy timeline of formal mechanisms was constructed. Interview recordings were transcribed, observation and reflection notes compiled, both were coded using Atlas.ti version 8, and a thematic analysis conducted. Codes were developed using both a deductive approach based on a preset list of themes and inductively where new ideas were identified. Finally, the network of formal mechanisms was mapped using Vensim<sup>®</sup> PLE software (Version 7.0).

### Rigour, reflexivity and ethical considerations

Entry in the field was facilitated by our previous engagement in the study setting, evaluating an intervention to reduce maternal and child mortality. The topic of accountability emerged as a primary issue of concern from this evaluation, facilitating agreement on the study by the health authorities at various levels. We presented the study protocol and distributed pamphlets summarizing the project to a range of audiences during meetings and site visits at the district office, the sub-districts and at facilities. This process allowed us to establish clarity on our purpose, and trust and rapport with the potential informants ([Li, 2008](#)).

Participant observation can face ethical challenges given the sensitive nature of accountability as a research topic, potentially exposing hidden realities ([Li, 2008](#)). The first week of field observation was spent attending meetings and actively participating in different discussions without imposing any judgement. This process facilitated breaking the perception of the researcher as an outsider coming to ‘hold people accountable’, and reaffirming the purpose as

seeking to develop an understanding ([Maanen, 2011](#)). As a result, some informants who seemed reluctant to talk during the first week were subsequently prepared to be interviewed during the following weeks.

Regular feedback and discussion on the findings were presented to district and sub-district actors at follow-up meetings, ensuring accuracy of processes observed. In these ways, the researchers sought to minimize descriptive and interpretive biases.

This article is part of the first author’s PhD project that was approved by the Biomedical Science Research Ethics Committee and Provincial Health Research Committee. All interviews proceeded with signed informed consent.

## Results

This section begins by describing the evolving policy context for MNCH in South Africa giving rise to local accountability mechanisms for MNCH. Guided by the analytical framework ([Figure 1](#)), we then describe the formal accountability mechanisms identified through the review of the official documents and how the mechanisms were reflected in local practices (or not). Furthermore, we provide a conceptual map depicting the various relationships between the accountability mechanisms as observed in local practices. We then report on what we were able to discern regarding the informal relationships and cultures of accountability at play in the ‘accountability ecosystem’.

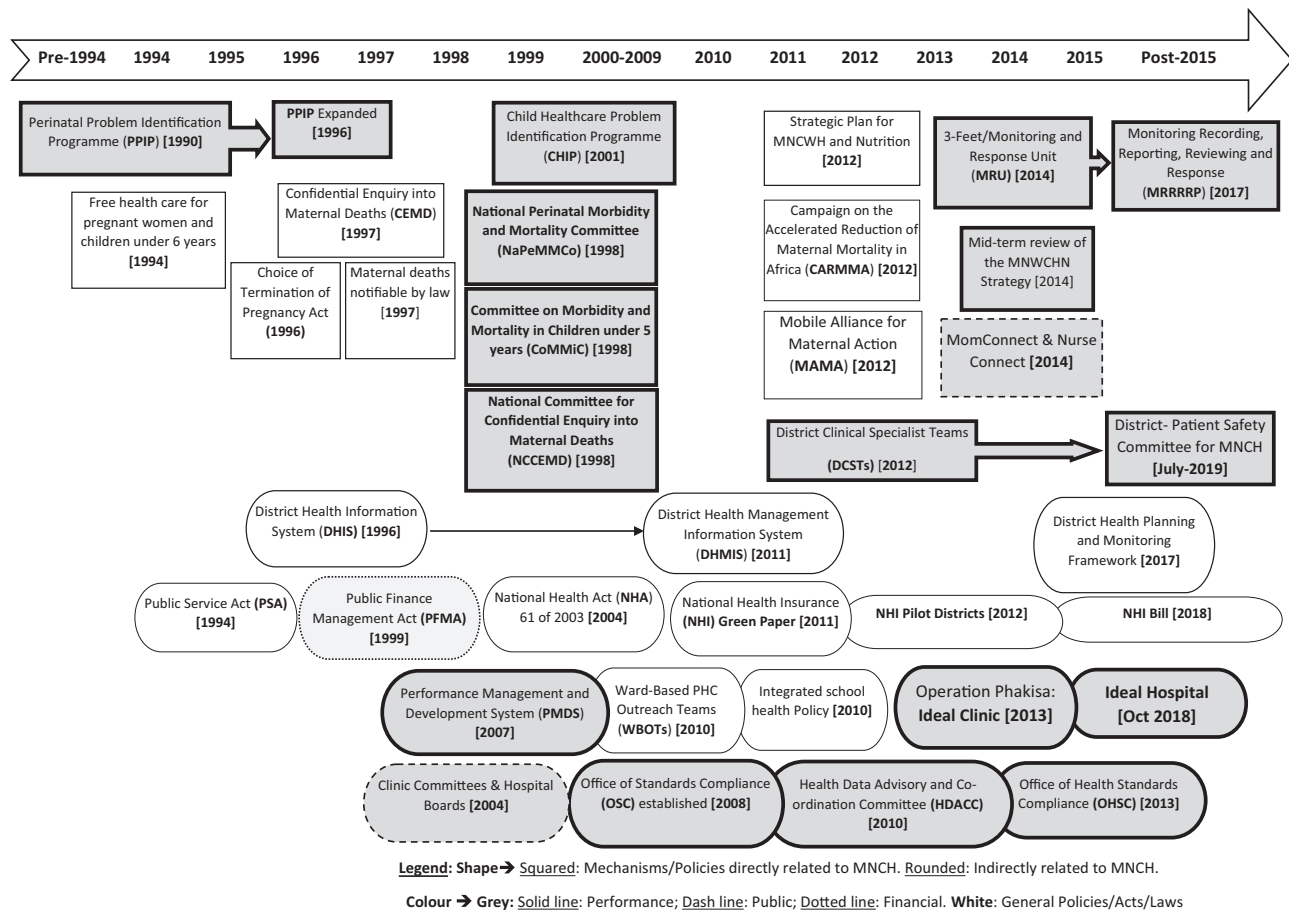
### Policy context of accountability mechanisms for MNCH in South Africa

[Figure 2](#) presents the timeline of implementation of various policies directly and indirectly impacting on MNCH. We delimited this timeline from 1994 (installation of democratic government in South Africa) through to the MDG endpoint (2015) and the subsequent start of the SDG era in 2016 ([United Nations Secretary-General, 2010, 2015](#)).

In the immediate post-1994 period, national mortality review committees and local audit tools and systems were established for maternal, neonatal and child health ([National Department of Health, 1999, 2010, 2011a](#)). This was followed by a relatively silent period (2000–2009) regarding new policies or interventions addressing MNCH as the preoccupation with the HIV/AIDS epidemic took centre stage. However, leading up to the end of the MDG period, a succession of policies, plans and strategies, and associated accountability mechanisms emerged to address both the ongoing high maternal and child mortality rates, as well as the local health system more generally. These policies and strategies include among others the Strategic Plan for Maternal, Newborn, Child and Women’s Health (MNCWH) and Nutrition, and the appointment of DCST playing key roles in clinical governance, clinical mentorship and oversight.

### Formal accountability mechanisms for MNCH

[Table 1](#) provides a summary of the 19 formal accountability mechanisms identified through the document review. Nine of them were directly related to MNCH, mostly focusing on mortality auditing, including three mechanisms [Perinatal Problem Identification Programme (PPIP), Child Problem Identification Program (CHIP) and Confidential Enquiry Into Maternal Deaths] that have a special focus on continuously reviewing maternal, perinatal and childhood deaths in South Africa. An additional nationally designed mortality reporting and response mechanism, referred to as the MRU was also



**Figure 2** Timeline of national policies directly and indirectly related to MNCH.

being piloted in the study district. Seven indirect mechanisms fostered accountability for MNCH through their effects on overall health system functioning. They included quality auditing and improvement through periodic reviews and accreditation process, and a performance management system.

In practice, the following were the dominant mechanisms observed: the mortality and morbidity review meetings such as the perinatal (PIIP) and child mortality (CHIP), the MRU, the Confidential Enquiry into Maternal Death (CEMD), the Ideal Clinic process and the system of Periodic (quarterly) Reviews based on the data from the routine District Health Information System (DHIS).

Perinatal meetings typically took place monthly and brought together clinical stakeholders from hospitals and primary healthcare facilities. Monthly meetings for child mortality reviews (CHIP) took place concomitantly with the perinatal meetings but focused on under-five mortality and morbidity. These meetings allowed for the identification of gaps in clinical knowledge and skills, and response through in-service training such as the Essential Steps in the Management of Obstetric Emergencies (ESMOE) 'drills'.

The MRU convened at sub-district and at district level and brought together a multidisciplinary team of stakeholders, including managers (PHC, hospital, community), clinicians, information officers and other sectors (such as the Social Security Agency of South Africa), NGOs, partners and community representatives to address maternal and child health. The MRU followed the '4R's' approach i.e. 'Report, Review, Record, Respond' to an event of maternal or child death. The key feature of the MRU was the focus on responsiveness entailing pro-active actions to address the modifiable

factors through teamwork and skills building, and preventive action through the primary healthcare system.

In the event of maternal death, a report was submitted to the district office within 24 hours with the provisional cause of death. Within 48 hours, the DCST together with the hospital stakeholders met to audit and review the patient file, and identify and record the causes of death with a final diagnosis, as well as any modifiable factors. The process ended with the setting up of an adverse event process (mandated by an additional mechanism, the Office of Health Standards Compliance) and a formulation of an improvement plan for skills upgrading, provision of extra resources, or community engagement as a response to the adverse event.

At the time of our fieldwork, following a rising concern with poor performance of the HIV/TB programmes, a new mechanism namely the 'Nerve Centre' was established to monitor and ensure compliance with guidelines and targets set for HIV and TB treatment. Attending the Nerve Centre were the primary healthcare managers, nursing managers from hospitals, and the district coordinators for MNCH, Prevention of Vertical Transmission (PVT) and Quality Assurance. The Nerve Centre met weekly at facility (Friday) and at sub-district levels (Monday), in addition to the established Comprehensive Care, Management and Treatment of HIV/AIDS and the Prevention of Vertical Transmission (CCMT/PVT) cluster meetings that were taking place monthly at sub-district level.

Some of the mechanisms identified were explicitly designed as strategies and tools to reinforce accountability with linkages to other accountability mechanisms. For instance, the information and data review meetings at facility and sub-district levels were linked to

**Table 1** Description of formal MNCH accountability mechanisms identified

Accountability mechanism	Purpose	Direct		Indirect		Type	Mode
		National	Local	National	Local		
		Performance (Pe)/ Public (Pu)/ Financial (Fi)					
Committee on Morbidity and Mortality in Children under 5 years (CoMMiC)	Clinical governance, standards monitoring	x				Pe	Audit/oversight
National Perinatal Morbidity and Mortality Committee (NaPeMMCo)	Surveillance of perinatal health problems	x				Pe	Audit
National Committee for Confidential Enquiry into Maternal Deaths (NCCEMD)	Recording and analysis of maternal deaths	x				Pe	Audit
Perinatal Problem Identification Programme (PPiP)	Surveillance of perinatal health	x	x			Pe	Audit
Child Healthcare Problem Identification Programme (CHIP)	Surveillance of under-five child health	x	x			Pe	Audit
Comprehensive Care Management and Treatment of HIV/AIDS; Prevention of Vertical Transmission (CCMT/PVT)	Monitoring compliance with HIV/TB treatment guidelines and targets	x	x			Pe	Audit
District Clinical Specialist Team Monitoring and Response Unit	Clinical governance, mentorship and oversight	x	x			Pe	Oversight
Office of Health Standards Compliance (OHSC)—Quality Assurance (QA)	Ensure compliance with health standards	x	x	x		Pe	Audit/oversight Quality management
Performance Management Development System (PMDS)	Performance evaluation			x	x	Pe	Quality management
Periodic reviews (DHIS)	Monitoring and evaluation				x	Pe	Performance management
Budget Review Committee	Advise on and ensure a transparent budget process				x	Fi	Performance management
Ideal Clinic	Standards performance accreditation; QA; service rating			x	x	Pe/Pu	Complaints/compliance
Ideal Hospital	Standards performance accreditation; QA; service rating			x	x	Pe/Pu	Complaints/compliance
MomConnect	Mobile phone use for complaints and QA for MNCH	x	x			Pu	Complaints/feedback
District Health Council	Co-operative governance; co-ordination of planning, budgeting, monitoring health services				x	Pu	Public oversight
Clinic Committee	Community participation in planning, delivery and organization of care			x		Pu	Public oversight
Hospital Board	Set up and maintain standards for education, training and practice.			x		Pu	Public oversight
Health Professional and Nursing Councils of South Africa (HPCSA and SANC)				x		Pe	Performance management

many other mechanisms fostering compliance with performance targets. In particular, the DHIS formed the basis of many other meetings, as well as the system of performance targets and periodic performance reviews (National Department of Health, 2011b).

Another was the Office of Health Standards Compliance (OHSC), established to enforce compliance with health standards as well as to ensure necessary investigation and action regarding complaints related to healthcare. In addition to the OHSC was the 'Ideal Clinic', a primary healthcare accreditation strategy whose essence was to improve the quality of health services delivery at local level, integrating compliance with a range of health provision standards ('upward' accountability), with a process of complaints management for improved quality health service delivery to communities ('outward' accountability) (National Department of Health, 2017). For a clinic to reach the status of Ideal Clinic, it must comply with a certain number of core standards covering administration, clinical services management, pharmaceutical services, human resources, infrastructure, or health information and communication (National Department of Health, 2016). The Ideal Clinic accreditation process integrates data from a number of sources, including its own audit tools, the DHIS and complaints mechanisms.

Thirteen of the 19 accountability mechanisms identified (Table 1) were principally oriented towards performance accountability with a strong emphasis on a reactive approach through audits, accreditation and quality assurance. Proactive mechanisms included the MRU, which was oriented towards preventive action, clinical governance, training and improvement cycles. Only one mechanism targeted financial accountability (periodic budget reviews), possibly because of the narrow financial decision space at this level. Three mechanisms were specifically related to public participation and accountability mandated by the National Health Act (NHA). They included the District Health Councils involving political representatives across spheres of government and structures of community participation such as Clinic Committees and Hospital Boards.

### Informal accountability relationships

In the sub-district observed more intensively, a number of instances of informal accountability were identified, often in parallel to the formal accountability mechanisms. For example, we observed a parent telephoning a Member of the Executive Council (MEC) for Health (Health Minister in the Provincial Government) to complain about the poor quality of child health services in relation to the treatment of his child. The open-door policy of a hospital CEO allowed trade union representatives to walk in unannounced to complain or get feedback regarding lack of equipment or resources, or discuss any issue pertaining to the union members in the staff. There were instances where the hospital board chairperson was stopped on the road by community members to complain or to get feedback on health-related issues.

In addition to these, we observed a number of instances involving both professional and administrative staff, which illustrated the nature of informal accountability relationships at play in the sub-district.

The first two examples relate to two meeting structures in the sub-district, convened by the hospital CEO to develop relationships and create a local culture of co-operation and trust between the executive management, the operational managers and the general staff within facilities and across levels of care. They were (1) an Extended Management Meeting involving 27 managers from hospital, PHC facilities and trade union representatives that met monthly (Box 1:

Excerpt of reflective note 1) and (2) The General Staff Meeting, that met four times a year and where the trade union was a central player (Box 1: Excerpt of reflective note 2).

These participatory mechanisms were playing a key role in fostering a system of reciprocal accountability in this sub-district. In this instance, the trade union was an important broker, pushing their members to comply with the rules for delivering quality services, while continually engaging with the executive managers holding them accountable for the provision of resources and skills. The negotiations involving trade unions were related to operational and staffing issues, complex issues not necessarily under the immediate control of local managers. The interventions by trade unions counterbalanced the ongoing requests for more performance that providers were subjected to, despite a chronic shortage of staff and resources.

*There is an impact... it's difficult to point at one another because we create a centre of accountability... And when we raise our issues, like issues of recruitment, the shortage of staff, like now they do replace [staff or equipment] in time when you [the trade union representative] hold the executive to be accountable. Replacement of posts, and in terms of the equipment the hospital must be well equipped (KII, Trade Union Shop Steward).*

However, the interactions were not necessarily always smooth:

*... [As trade union] You must be ready to confront difficult questions. You know when you're confronted with difficult questions it's where you touch the heart of the person... You must be ready [for the risk] of being hated. I like a person when he's hating me based on the truth not based on lies. Because I make sure I hold the executive to be accountable for the interest of workers (KII Trade Union Shop Steward).*

The third example illustrates the informal side of a formal accountability mechanism that was observed in the implementation of the Ideal Clinics where the mid-level operational managers had developed a set of informal collaborative arrangements for mutual support during accreditation processes. For instance, elements from the Ideal Clinic manual assessed the consistent availability of essential PHC medicines. If an essential medicine was missing in clinic A due to a delay with supply, it could be borrowed from clinic B or hospital C where it was available, not only to make sure that patients received their medications but also when assessors were visiting the clinic for auditing and rating.

According to (formal) regulations, any stockout must be declared to the district/province unit and the facility must then wait for the next delivery of supplies to issue medication again to patients. During the wait, patients may not receive medication in time, which means that the facility is in breach of service delivery guidelines regarding treatment continuity. Through informal systems of peer support and solidarity, providers thus prioritized clinical accountability to patients. It could also be seen as a form of compliance to conform to national priorities through a local coping mechanism.

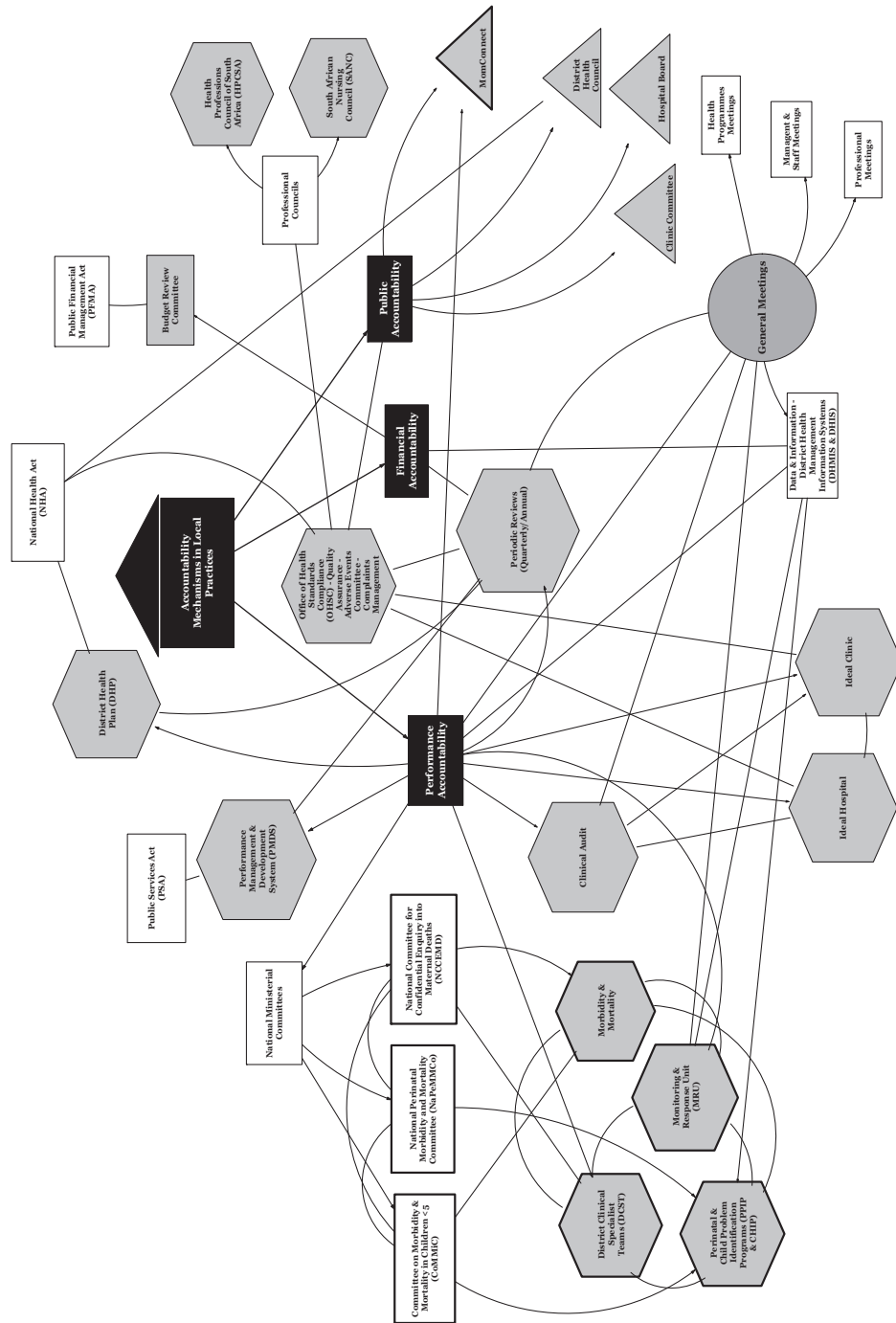
All these cases illustrate how building informal relationships of trust can be influenced by reciprocal mechanisms, in turn shaping the informal environment within the accountability ecosystem.

### The crowded space of local MNCH accountability

Figure 3 maps the direct and indirect formal MNCH accountability mechanisms and their relationships that we observed in local practice. This illustrates performance accountability (Hexagon shape) as the dominant mode of local accountability, while there



**National Mechanisms**      **District/ sub-district mechanisms**



**Legend** → Grey Colour=Formal accountability mechanisms; Hexagon= Performance; Square= Financial; Triangle= Public; Circle=Formal meetings with mixed types of accountability → Boxes with thick line= Mechanisms direct to MNCH; others = Indirect to MNCH.

**Figure 3** Forms and relationships between formal accountability mechanisms in practice at local level.

**Table 2** Meeting and reporting demands of frontline managers and providers

Meetings	Frequency	Hospital	PHC facility
Adverse Events meeting	Monthly	x	x
All Nurses meeting	Bimonthly	x	x
Budget Review	Monthly	x	
CCMT/PCV, Health and Safety	Monthly	x	x
Clinic Committees	Monthly		x
Clinical Audit	Monthly	x	
Data/Information Review	Monthly	x	x
Disaster Management (Hospital/ Clinics/Police/Fire/Community)	On request	x	x
District and Province meetings	On request	x	
Doctors meeting	Weekly	x	
ESMOE Drills	Monthly	x	x
Executive Management	Monthly	x	
Extended Management	Monthly	x	x
General staff meeting	Quarterly	x	
Hospital Boards	Quarterly	x	
Medical and Allied Health	Monthly	x	x
Mortality and Morbidity	Monthly	x	x
MRU (District)	Monthly	x	
MRU (Sub-district)	Monthly	x	x
Nerve Centre	Weekly	x	x
Nursing and Health Professions Councils (SANCA/HPCSA)	On request	x	x
Operational Managers meeting	Monthly	x	x
Perinatal (PPIP/CHIP)	Monthly	x	x
PHC Meetings	Monthly	x	x
PMDs Quarterly Reviews	Quarterly	x	x
Quality Assurance	Monthly	x	x
Sub-district Information Team	Monthly	x	x

is a relatively little emphasis on public accountability (triangle shape) expressed mainly through Hospital Boards and Clinic Committees (where the chairperson was a community representative), and in the complaints mechanisms in which clients are encouraged to submit any complaint or compliment using SMS messaging system (MomConnect), or in writing through complaints boxes found in all health facilities. The different mechanisms are interconnected in their respective purposes. The resulting effect is that, in practice, the same actors are involved in multiple sets of accountability mechanisms. For instance, in one sub-district, there were 258 meetings scheduled in the annual calendar associated with accountability mechanisms at facility, sub-district, district and/or provincial level (average of 22 meetings per month). Table 2 shows the multiple meetings where frontline managers and providers have to account either in the form of submitting a report or receiving feedback. In our observations, it could happen that two or more important meetings were scheduled on the same day and time which involved the same managers (or providers). They, therefore, had to choose which one to attend. And because the manager was absent in one of the meetings, information related to her/his participation was not reported, nor was there any feedback given, with potential implications for the continuity and functioning of the system.

*Last week we saw the in-charge of all the PHCs, she was saying that there are a lot of meetings you know, sometimes they are coming here, in the clinics there is shortage [of staff], that's why in some of the meetings we are not going to release them, maybe one will come and after then the one who's attending will come and give feedback to the others. Sometimes feedback is fine but sometimes you need to listen by yourself, to ask questions so that*

*you can improve. So that is really our problem (KI, Medical Manager).*

The density of the Figure 3 is an indication of the complex and crowded nature of accountability mechanisms related to MNCH at local level and its fragmented nature. At the operational level, this boils down to an abundance of meetings involving managers.

*It is a lot of meetings... Even outside we have a lot of meetings also. There's a schedule of meetings, monthly. Twelve to fifteen meetings within the institution... So most of the time I'm outside and inside for the meetings (KII, EMS Manager).*

Interview data suggest that a shortage of frontline healthcare providers, coupled with higher demand for more accountability from a large number of vertical programme managers, can lead to frustration and a dysfunctional accountability system for MNCH:

*...They will tell you that we are having a lot on our plate. Next time they want this from Ideal Clinic, next time they want this from National Core Standards, next time they want this from Nutrition; and who is the accounting officer... It will be the operational manager who has to be Jack of All Trades. So, we are having gaps because of staff shortage (KII, Manager District Office)*

Frontline managers also complained against the expectations of accountability from multiple higher-level managers (at the district or provincial department of health).

*...It's not good to have a lot of managers than the actual providers, because if we are having a line of managers of 10 or 20, ..., but we are only having 5 people down there to work, I don't see it being working (KII, Operational Manager).*

*...How can you hold a person accountable if he is... she is alone, looking after four units, admission, labour ward, antenatal and postnatal department (KII, Operational Manager).*

A branch of the national advocacy organization, the Treatment Action Campaign (TAC) was also active in the District, implementing a community monitoring and advocacy programme. The TAC aims to build capacity for local activism, participating in setting up local governance structures (clinic committees and hospital boards), engaging the public to take ownership of the health system, monitoring and raising concerns regarding the quality of health services provided, and ensuring accountability at local level. As they indicate, 'We believe that with well-informed and rights-based local activism we can create accountability at the frontline of healthcare service delivery which will, in turn, lead to better quality healthcare services' (<https://tac.org.za/>).

## Discussion

Frontline health managers and providers are targeted by a plethora of accountability mechanisms addressing MNCH both directly and indirectly. While some mechanisms, such as perinatal audits have a long history, many of the direct MNCH mechanisms were designed and implemented during the MDG 'Countdown' period as a way of meeting targets related to the reduction of maternal and child mortality. The MNCH mechanisms exist alongside a range of indirect mechanisms involving district and frontline managers, resulting in the multiplication of accountability initiatives at the local level.

These multiple accountability mechanisms are not mutually exclusive in their mandates (Van Belle *et al.*, 2018) and are sometimes prone to conflicting demands especially in terms of the numbers of meetings. This process is described by Gilson and Daire (2011) as an

'inverted pyramid' where frontline managers and providers face a 'top heavy and rigid management hierarchy' reinforced by top-down vertical programmes. As pointed out by Nxumalo *et al.* (2018a), the conflicting demands for accountability may push frontline managers to prioritize and make selective choices with potentially negative implications for health service efficiency, effectiveness and responsiveness. Referring to 'Multiple Accountabilities Disorder (MAD)', Koppell (2005) argued that multiple demands for accountability with conflicting expectations imposed on the actors within an organization result in a dysfunctional system that tends to shift the core of accountability to performance compliance. Halachmi (2014) referred to 'accountability overloads' that result from unco-ordinated efforts to ensure accountability at all costs which end up undermining effectiveness and efficiency.

The emphasis of accountability initiatives was on performance rather than other forms of accountability, mostly conducted in the form of audit processes. These typically target individual level answerability and sanctioning rather than seeking to develop a pro-active and wider collective organizational or even, ecosystem response. This was most evident in the individual performance management development system, the quality assessment and accreditation processes, the quarterly reviews, and in the 'adverse event' responses. While there were exceptions (such as in some mortality audit processes and the MRU), the dominant mode of accountability was one of the seeking compliance with standards and progress towards achieving targets through multiple lines of answerability.

Typically autocratic managerial approaches to performance assessment do little to build the management skills of frontline managers (Nxumalo *et al.*, 2018b). The consequence of a culture of compliance is a disconnect with the real purposes of accountability. One such instance observed was that of the Ideal Clinic. As an example of its implementation in practice attests, audit systems can easily lead to a form of compliance, decoupled from their true purpose. This occurs when frontline workers are forced to meet multiple demands for answerability from above. As noted by Roberts (2009), this kind of 'transparency' can become a representation of performance that is manufactured for others, rather than actual performance.

In the plethora of accountability processes, we found relatively little space for public accountability. This was expressed mainly through Hospital Boards and Clinic Committees, and in the complaints mechanisms. Hospital Boards and Clinic Committees, which include community representatives as chairpersons, are mostly involved in complaints management and redress processes; they also hold public meetings to receive and share views regarding the health problems in the community. However, the governance role of clinic committees tends to be limited to conflict resolution between the community and the health facilities with few other oversight roles in health facilities (Padarath and Friedman, 2008).

In the sub-district studied, trades unions played an important role in advocating not only for more outward accountability, but also for fairness, transparency and provision of resources for quality health services. This generally positive role was made possible by structures of participation and dialogue introduced by the ward councillor and the sub-district leadership. This experience was in contrast to what was described in the earlier evaluation (Schneider *et al.*, 2017) regarding the role of trade unions, where they were perceived by some as disruptive and as expressing narrow interests.

While the formal accountability mechanisms are well described in the official documents, in practice these formal mechanisms are embedded in a context of local cultures of informal accountability

that vary from one sub-district to another. These informal mechanisms are expressed through meeting processes and social interactions (spontaneous and reciprocal), informal relationships and emergent managerial strategies observed locally. The instances provided illustrate the functioning of accountability mechanisms, and the central role of relational capabilities in fostering accountability for MNCH.

It may be difficult to establish the causal effect of the informal dimensions of the accountability ecosystem. However, when formal mechanisms were embedded in informal norms, culture or relationships where providers and managers were able to engage fruitfully in negotiated spaces, these appeared to enable the success of the formal mechanism. This was achieved by creating the possibility of reciprocal accountability (Elmore, 2006) within vertical accountability relationships, and enabling horizontal forms of collaboration between managers. These phenomena may be key to understanding variation in MNCH outcomes between local areas.

## Conclusion

In this article, we explored accountability mechanisms for MNCH at district level in South Africa. Frontline health managers and health-care providers are subject to a plethora of accountability mechanisms. In some instances, there is duplication or overlap in these mechanisms, whereas in others there are potential synergies. In practice, formal accountability strategies are embedded in a web of informal relationships and norms that are rooted in daily routines. These informal mechanisms are operationalized in various ways depending on the managerial approach and local context in which accountability is exercised. In the growth of accountability strategies, emphasis has been on performance accountability and an auditing style of accountability. In order to improve maternal and child health outcomes and reduce mortality, a systematic understanding of local practices of accountability is required, seeking to enable context specificity, developing synergies in mechanisms while also actively engaging the informal accountability norms. This process should consider the multiple actors and relationships across various levels within the local health system with the formal accountability mechanisms being practiced in order to build a functioning accountability ecosystem.

## Supplementary data

Supplementary data are available at *Health Policy and Planning* online

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