

Cultivating health policy capacity through network governance in New Zealand: learning from divergent stories of policy implementation

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Abstract

Wu, Howlett, and Ramesh's understanding of policy capacity has been used to identify generalizable strengths and weaknesses of specific jurisdictions and policy sectors such as health. In an extension of this work, Howlett and Ramesh have argued that the mode of governance of a policy sector accentuates the importance of specific elements of policy capacity. In this paper we focus on the implementation of the System Level Measures Framework (SLMF) in New Zealand that has been specifically focused on health systems improvement and which aimed to do so by fostering network governance at the local level. However, this policy is introduced in a context in which there has been significant contestation regarding which mode of governance—network or hierarchy—is dominant in New Zealand health policy. By exploring three divergent local cases of implementation of the SLMF we develop three arguments that contribute to the literature on policy capacity and health. Firstly, local histories of interorganizational play a crucial role in shaping health policy capacity. Secondly, it is crucially important to understand the dynamics and feedback loops between operational, political, and analytical policy capacity. Network and hierarchical governance are characterized by distinct and contrasting understandings of the content of policy capacity elements and of the way in which they are dynamically related. Thirdly, the key challenge in developing policy capacity compatible with network governance is how to facilitate this capacity when connections between operational, political, and analytical policy capacity fail to fire.

Keywords: policy capacity; health system improvement; New Zealand; network governance; implementation

The concept of policy capacity has emerged from within policy studies and public administration scholarship as an important area of both theoretical and empirical enquiry. The concept has been used to identify generalizable strengths and weaknesses of specific jurisdictions and policy sectors such as education, transport, or health (Gleeson et al., 2011; Painter & Pierre, 2004; Tiernan, 2011; Wu et al., 2015). Wu, Howlett, and Ramesh have provided a holistic and integrated conceptual formulation of policy capacity that identifies three elements of capacity (analytical, operational, and political) at three levels (individual, organizational, and systemic). Since its publication, Wu, Howlett, and Ramesh's unpacking

of policy capacity has enabled the development of even more sophisticated qualitative evaluations and comparisons which can be applied to jurisdictions, and sectoral domains.

Health system strengthening is defined by the WHO as “any array of initiatives that improves one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality or efficiency” (Witter et al., 2019, p. e1981). This definition is broad enough to cover large swathes of the domain of health policy in any jurisdiction. Most health policy initiatives are easily characterized as relevant to one or more of these broad objectives (Roberts, 2008), whether they be redesign of payment systems, attempts to reduce waiting times for services, or introducing a new cancer screening process.

Within this very broad ambit, there is an important sub-domain of health policy—health system improvement—which focuses more specifically on selecting, gathering, interpreting, and acting upon information about key indicators in order to enhance the steering capacity of a health system (Papanicolas & Cylus, 2015). Health system improvement is becoming increasingly important in attempts to move health systems to a stronger focus on population health outcomes (Steenkamer et al., 2020). In terms of the policy capacity framework, health system improvement appears at first glance to be relevant specifically to analytical policy capacity. However, the other key components of policy capacity—operational and political—are also crucial to the success of health system improvement, as political capacity is required to define health system improvement priorities and operational capacity is essential in mobilizing and utilizing knowledge (Lawrence et al., 2020).

In this paper we focus on the implementation of a specific policy framework in New Zealand that has been specifically focused on health system improvement. The System Level Measures Framework (SLMF), introduced by the Ministry of Health in 2016, is a broad-based policy designed to facilitate health system improvement at the local system level. This policy setting serves as a useful focus for three reasons.

Firstly, the evolution and implementation of the SLMF requires policy capacity. Secondly, the SLMF is a concerted attempt to develop and foster health policy capacity at the local level. Thirdly, the SLMF requires the mobilization of network governance at the local level. This is significant because Howlett and Ramesh (2016) have developed further arguments suggesting that the type of policy capacity that is most important in any policy sector is strongly shaped by institutional factors, specifically the type of governance (legal-hierarchical, corporatist, market, or network) that predominates in that sector. A key feature of their argument is that the critical component of policy capacity for network governance is operational capacity at the organisational level.

The paper is structured as follows. In the first section we outline how Howlett and Ramesh link the components of policy capacity to modes of governance and we discuss the application of this to the domain of health policy. In the second section we provide a broad descriptive analysis of governance and health policy capacity in New Zealand. In the third section we describe the SLMF and how it has been designed to foster health system improvement and strengthening through network governance at the local level. In the fourth section we briefly outline three local case studies of SLMF implementation that have had contrasting degrees of success in fostering health system improvement, as a way of testing Howlett and Ramesh’s contention. Our final section pulls together these threads and develops some implications for the study of health system governance and policy capacity.

Policy capacity and health policy, institutions, and governance

For Howlett and Ramesh (2016), the overall nature of policy capacity in any policy domain is strongly shaped by the governance contexts in which state and non-state actors interact. They suggest that the critical dimensions are, firstly, the degree of state involvement in governance and, secondly, the degree to which the coordination relationship between state and non-state actors is hierarchical (See Table 1). Their argument is that the predominant type of governance characteristic of a policy area defines the key institutional parameters.

This typology can be used to compare and contrast health governance between jurisdictions, as it maps on to typologies of health system institutions. Corporatist governance has been a defining characteristic of social insurance systems such as Germany, while market governance remains a central feature of health systems such as the USA’s that were more reliant on private insurance. In tax-funded systems, the state is more central because it funds health services directly. Howlett and Ramesh’s

Table 1. Mode of coordination (governance) and significance of role of the state.

Mode of coordination between state and non-state actors	Significance of state role	
	Higher	Lower
Hierarchical	Legal Governance	Corporatist Governance
Plurilateral	Network Governance	Market Governance

Source: [Howlett and Ramesh \(2016\)](#).

matrix provides an useful map, but the mode of governance in specific countries is not set in stone and is itself often the object and focus of contestation and health policy reform ([Tuohy, 2018](#)).

Howlett and Ramesh then argue that the predominant mode of coordination helps define the potential “Achilles heel” of policy capacity. For “legal” governance (we prefer the term “hierarchical” here because health services policy is rarely “legalist”), the critical capacity is *operational capacity* at the system level. Here, the onus is on state sector managers in central government to operationalize the policy and public management accountability requirements as defined by the state ([Howlett & Ramesh, 2016](#)). This entails ensuring that non-state actors funded by the state are accountable for the public money they spend and the services they deliver. For network governance, however, the critical component of policy capacity is *operational capacity* at the organisational level. This means that the onus is on health-care managers, generally at the local level, to develop collaborative relationships based on trust with non-state actors ([Howlett & Ramesh, 2016](#)).

In tax-funded health systems, therefore, the key question then becomes whether relationships between state and non-state actors are hierarchical or pluralistic. On the one hand, a hierarchical understanding of governance treats non-state actors as instruments of the state and views independent power, knowledge, and operational knowhow (i.e., political, analytical, and operational capacity) as things that should be subjugated to the state. On the other hand, a network understanding of health policy governance treats the power, knowledge, and operational knowhow of non-state actors as resources that should be utilized to increase the effectiveness of policy.

Hierarchical and network logics of governance also differ as ideal types in terms of the content of health policy capacity and in terms of how the elements of policy capacity relate to each other. While political capacity in hierarchical governance is the capacity to “carry the day” in the face of political opposition, political capacity in network governance is more about winning over those with divergent views and building winning coalitions. Operational capacity in hierarchical governance involves skills associated with top-down and command-and-control models of implementation, whereas it involves collaborative skills under network governance. Analytic capacity in hierarchical governance is more tightly wedded to measurement and instrumental rationality, whereas a broader range of knowledge underpins analytical capacity in network governance.

Finally, hierarchical and network governance differ regarding the question of how to create “virtuous circles” of policy capacity. For hierarchical models of policy processes and public management, analytical capacity (use of evidence) underpins authoritative policy commitments (policy capacity) which then harness operational capacity (implementation of authoritative choices). This “clockwise” direction is a feature of rationalist versions of the policy cycle ([Davis et al., 2012](#)). For network governance, the direction of connections between components is an anti-clockwise cycle in which operational capacity (management of collaborative processes) builds political capacity (stakeholder buy-in), which then fosters analytical capacity (pooling of information and analytical expertise), which then supports operational capacity.

[Figure 1](#) shows how these contrasting dynamic understandings of policy capacity can be represented graphically, based on Wu et al.’s original formulation.

New Zealand health policy context and policy capacity

The issue of whether New Zealand’s health-care system is founded on hierarchical or network institutional logics is one that lies at the heart of the evolution of health policy in New Zealand over the last

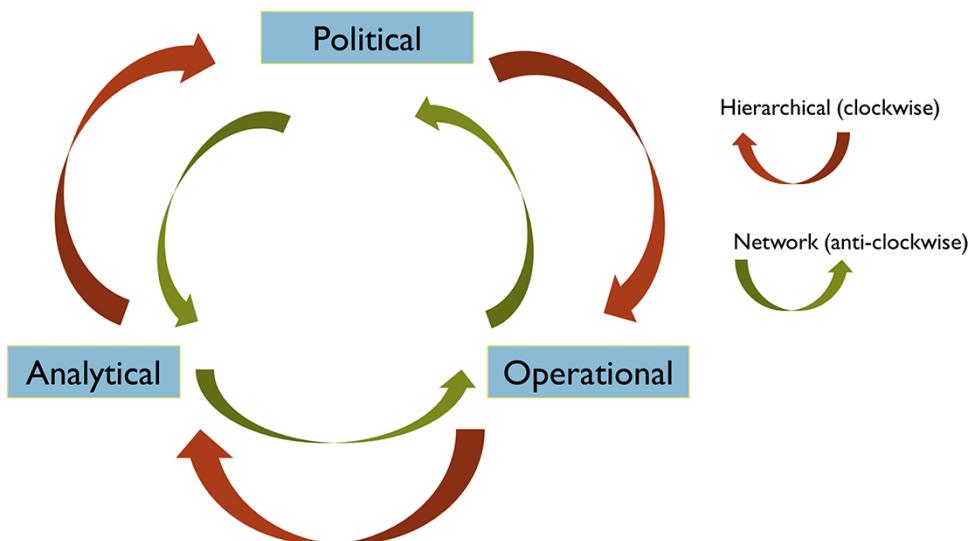


Figure 1. Modes of governance and logics of policy capacity development.

30 years. New Zealand is a small country of five million inhabitants and has a predominantly tax-funded health system and a relatively high level of public provision of health services.

The content of the health policy agenda is broadly similar to other high-income countries (Blank et al., 2017), with some notable local inflections. Long-term policy concerns include reducing barriers to accessing health services and the efficiency of the system. In international terms, New Zealand was an early adopter of population health policy objectives pertaining to health services (Health and Disability System Review, 2020), based on the recognition that some population health outcomes can be influenced by the ways in which health services are funded, designed, and delivered (Nolte et al., 2010).

The reduction and elimination of inequities of outcomes and access, particularly between the indigenous Māori population (16% of the population) and the predominantly European majority, has been a strong health policy priority since the late 1990s (Chin et al., 2018), and there is also a very strong normative imperative for addressing indigenous health based on governmental obligations under the Treaty of Waitangi and historical shortcomings in upholding these obligations (Came et al., 2018; Sheridan et al., 2011).

From 2001 to 2022, the responsibility for service planning and delivery in New Zealand's publicly funded health system has been devolved to twenty District Health Boards (DHBs). This devolved approach to planning and delivery has been counterbalanced by strong central government control in financial management and service specifications. At the local level, DHBs contract with a large range of nongovernment providers in services including primary care, mental health and addictions, and health promotion. The other key organizational players at the local level have been 30 Primary Health Organisations (PHOs) which are composed of smaller, primary care (general practice) services. PHOs are nongovernment organizations and many, but not all PHOs, are geographically based. Their boundaries are often not contiguous with DHBs. Most PHOs have developed considerable management and administrative infrastructure since 2005 (Cumming & Mays, 2011).

With this background in mind, there are some challenges in applying Howlett and Ramesh's governance typology to the New Zealand case. There are plausible arguments to suggest that the predominant governance mode is hierarchical/legal quadrant, given the extent of state involvement in the funding and provision of healthcare around 80% of total health-care expenditure (Goodyear-Smith & Ashton, 2019). However, there is still significant reliance on non-state actors in the delivery of non-hospital services, and it is far from clear that the state can steer effectively without significant participation of non-state actors, either in the formulation of policy, its implementation, or both.

The central dilemma of health policy governance in New Zealand—whether it is hierarchical or networked—concerns the nature of the relationship between the funders of health services (state actors—the Ministry of Health and DHBs) and the providers (non-state actors in primary and community care). The nature of this relationship—both what it is and what it should be—is something that is fiercely contested in the sector.

On the one hand, many Ministry and DHB officials are of the clear view that government funding requires hierarchical accountability relationships organized predominantly by contract. This view pervades the recent comprehensive report reviewing New Zealand's health and disability system levels ([Health and Disability System Review, 2019, 2020](#)). Consistent with a hierarchical framing of the governance of health policy, the review identified that significant gaps were identified in the capacity to steer the publicly funded health sector and in the types of data and information capacity necessary to inform a coherent, rationally planned approach to health services.

By and large, non-state actors (and some within the state) challenge this characterization and prefer to define the relationship in terms of partnership and collaboration. Over the past 30 years, the evolution of health policy institutions has reflected this fundamental tension. A highly transactional approach between state and non-state actors is embedded in New Zealand's version of New Public Management. Since the late 1990s, this has prompted a counter-reaction emphasizing the need for collaborative partnerships at the heart of governance ([Ryan, 2011](#)). In the health sector, the transactional practices have been more thoroughly institutionalized, even though they are often experienced as counterproductive and ineffective as tools of governance. On the other hand, institutionalizing network relationships at both local and national levels has proven to be arduous work and the results are often fragile because they are dependent on key individuals ([Tenbensel, 2018](#)).

Political capacity

New Zealand does not have a tradition of corporatist stakeholder management in which conflict between interests is mediated and managed ([Blank et al., 2017](#)). The central political tension has become institutionalized in the split between public funders and private providers, creating an overarching political challenge of reconciling these diverging imperatives at the local level. Overlaid on this basic political challenge has been a tension at both national and local levels about how to manage it. In some districts, DHB and PHO leadership have successfully fostered and developed a collaborative approach to health system governance. However, many other districts exhibit more conflictual relationships ([Tenbensel, 2018](#)). The Ministry of Health during the 2010s simultaneously fostered a highly transactional approach and a collaborative approach that focused on the local level. Supporters of more transactional approaches have been skeptical of the merits of the collaborative approach, whereas those wishing to foster collaborative approaches have attempted to build on these perceived successes. This tension between funders and providers, and the contrasting ways of addressing it, is also manifest within DHBs. In some DHBs, the relationship between senior managers and hospital clinicians is more collaborative, while others display more distant and conflictual patterns of interaction ([Gauld & Horsburgh, 2014](#)).

Operational capacity

The structure of the system and the roles of organizations within it have been stable for the past 20 years, and over that time some strengths and weaknesses have become apparent. New Zealand health sector organizations are arguably highly skilled in developing planning documents at all levels of the system. DHBs have developed strong competencies in the design and management of contracts. PHOs have developed expertise in clinical quality improvement and in facilitating more integrated, population health approaches to primary care. An important development in the 2010s has been the growth of District Alliances between DHBs and PHOs. These engage in joint planning of services, and some districts have developed more sophisticated approaches to service development in areas such as rural health services or child health. The alliance approach has been modeled on the experience of the Canterbury region which developed an integrated “one system, one budget” approach to health sector decision-making ([Gauld, 2017; Timmins & Ham, 2013](#)). However, the degree to which planning, decision-making, and service delivery are aligned across public and private health service organizations varies substantially across the country.

Analytical capacity

Analytic capacity has focused on collection of indicators for accountability/performance purposes. The collection of intelligence for health system improvement gained significant momentum during the first decades of the 2000s. Nevertheless, a commonly articulated complaint is that while DHBs and other health sector organizations are required to collect and collate significant amounts of data, much of these data are rarely analyzed or used to inform decision-making about resource allocation and service design (Tenbensel et al., 2008).

In the early 2000s, there was considerable focus on the development of a population health approach to data generation and analysis, but this impetus was considerably constrained by broader features of the health sector and ultimately bore little fruit (Coster, 2004; Tenbensel et al., 2008). In the 2010s, information about health system performance largely became focused on financial and health target performance for political accountability purposes, but this regime only weakly supported the development of policy analytic capacity.

An important development since 2010 has been the Health Quality and Safety Commission, which has been developing significant analytical capacity around variations in access to services, quality of services, and health outcomes (Kerr et al., 2020). At the time of writing, the connection between the HQSC data and decision-making at the national and local levels is in its infancy.

Connections between elements of policy capacity

There have been a number of characteristic weaknesses in the way in which the three elements of health policy capacity are linked together. Data collection has been poorly integrated with operational capacity despite the emphasis on planning. In general terms, political capacity has been weak as government has struggled to engage key stakeholders in generating substantive change in a number of domains (Health and Disability System Review, 2020). While governments have had substantial autonomy when formulating health policy, many key policy initiatives have not been implemented as intended because of weak buy-in from key stakeholders (Gauld, 2008).

Stimulating local health policy capacity: the SLMF

One important episode in the evolution of health policy governance in New Zealand was the introduction of a concerted attempt in 2016 to foster and deepen network governance. The SLMF is a policy approach to health system improvement that emerged from those parts of the Ministry of Health that advocated a relational and collaborative approach to interorganizational relationships instead of the dominant transactional approach. The core of the SLMF is a set of nationally defined health system measures (headline measures) which serve as the focus for health system improvement at the local level (New Zealand Ministry of Health, 2016). Examples of headline measures are a mix of population health indicators such as "Ambulatory Sensitive Hospitalization (ASH) rates for 0–4-year olds" and health service process indicators such as "acute hospital bed days per capita" (New Zealand Ministry of Health, 2016).

Improvement in these indicators requires contributions from multiple organizations. District Alliances of DHBs and PHOs are required to choose contributory measures appropriate to their district and to use these to underpin quality improvement initiatives. As such, the framework is designed to support the DHBs and local alliances to drive health system improvement efforts collaboratively. Continuous quality improvement and health system integration are the central tenets of the framework, and the process of selecting contributory measures is supported by the provision of district-level data on a range of indicators provided by the Health Quality and Safety Commission. In turn, the contributory measures help define specific activities and programs that District Alliance members agree to undertake. The Ministry of Health describes the aims of the SLMF in the following terms:

The System Level Measures Framework aims to improve health outcomes for people by supporting DHBs to work in collaboration with health system partners (primary, community and hospital) using specific quality improvement measures (New Zealand Ministry of Health, 2016).

The introduction of the SLMF in 2016 marked a significant departure from the prevailing emphasis on the accountability of single organizations for achieving process- and output-based targets. Instead of emphasizing accountability, the SLMF emphasized collaborative learning at the district level. District

Table 2. Unpacking organizational policy capacity at the local level for SLM implementation.

	Analytic	Operational (Managerial)	Political
SLM-Specific	DHB and PHO competence and capability to gather, combine, analyze, and interpret data	Competencies and capabilities relevant to designing SLM IP processes	Capability to generate local stakeholder buy-in and participation in SLM IP processes
Local System	Capacity and competency at District Alliance Level to gather, synthesize, analyze, and interpret information relevant to resource allocation and service design	Capacity and capability to run District Alliance (governance, planning, and system of Service Level Alliance Teams)	Capacity to manage relationships between stakeholders, generating consensus, and managing conflict

Alliances are pivotal to the SLMF. The SLM Improvement Plans (IPs) should be signed by each of the alliance members, and the Ministry of Health approves the plan. Besides leading the development of the SLM IPs, the alliances are also responsible for effective implementation of the plans driving the health system integration at district level applying the alliance principles.

The SLMF, therefore, is clearly a concerted attempt to build health policy capacity in a particular way. Consistent with Howlett and Ramesh's characterization of network governance, the critical component of policy capacity—the “start here” point on the map of policy capacity for the SLMF—is operational capacity at the local, organizational level.

Investigating health policy capacity at the local level

The policy capacity “map” can be used as a diagnostic tool and as an analytical framework for understanding the dynamic nature of policy capacity development. However, it also may support more sophisticated theorizing about dynamic processes, specifically about how policy capacity is built up and enhanced over time and also how it erodes and deteriorates.

In [Table 2](#), we adapt Wu et al.’s framework in order to focus specifically on organizational policy capacity at the local level. For the purposes of our investigation, it makes sense to distinguish between two levels within the domain of organizational policy capacity.

Local system policy capacity refers to the domain of steering/governance of the whole health system at the local level. In a health system context we can think of the system level as analogous to the local health economy ([Peckham et al., 2008](#)). The central actors in this system are the organizations that fund and provide health services.

The SLM-specific level refers to the specific competencies and capabilities held within and between the local organizations involved in implementation of the SLMF. This covers the capacity of middle-level functionaries of local organizations and networks regarding planning (operational), fostering task-focused interorganizational spaces and fora (political) and collecting, sharing, analyzing, and interpreting information (analytical) as part of the SLMF. Both the local system and SLM-specific levels of policy capacity therefore have an interorganizational component.

We also posit that these various elements of local organizational policy capacity should be understood in terms of interconnections. There are important interconnections between pairs of “sub-capacities” at the organizational level ([Lawrence et al., 2020](#)). This can help to diagnose successes and failures in policy capacity in terms of the presence or absence of connections and dynamic flows between elements.

The policy documentation behind the SLMF reflects the Ministry of Health’s emphasis on organizational, operational capacity and also suggests an anti-clockwise flow of interconnections based on the logics of network governance. Operational capacity is fostered through the processes of bringing different organisations together to develop SPM IPs. This then is meant to stimulate political capacity (interorganizational commitment and buy-in) which can then facilitate interorganizational analytical capacity by bringing a wider range of information sources to the table. In turn, this enhanced analytical capacity may serve to strengthen collaborative problem-solving among stakeholders (operational capacity). Better information about local health needs and services, and performance on key indicators

can then inform the next round of SLM IPs. In this way, there should be a reinforcing dynamic (a positive feedback loop) between the sub-components of policy capacity.

Policy capacity through network governance: varying degrees of success

In this section, we investigate whether these network governance dynamics at the local level actually materialized in the implementation of the SLMF. In 2018 we conducted research into the SLMF implementation across 18 of New Zealand's 20 districts. We conducted 2–4 interviews per district (50 in total) and collected two or three annual SLM IPs from each district. Throughout the broader research project, districts were anonymized so that adverse findings would not be attributed to named districts.

In a related article, we judged the relative success of implementation at the district level based on the “programme logic” of the SLM policy (Tenbensel et al., 2021). We used two measures of success—“maturity of SLM improvement plans” which evaluated the success of the SLM IP process in terms of inclusivity and effective involvement of multiple stakeholders and “data sophistication and use” which evaluated the degree to which data and information could be effectively used (Tenbensel et al., 2021). Although we were not using the policy capacity framework when we defined these criteria of success, they are equivalent to political (maturity of IPs) and analytic (data sophistication and use) policy capacity.

Based on this definition of successful implementation and the results reported elsewhere (Tenbensel et al., 2021), we explore the dynamics of health policy capacity at the local level. We devised a scoring system to evaluate degrees of implementation success. We then selected three districts with different degrees of success (details of case selection are outlined in Appendix A). District E demonstrated clear success in both dimensions of SLMF implementation and therefore in the enhancement of policy capacity. District G was a clear example of lack of success, and District P was relatively successful on one dimension (political capacity) but not the other (analytical capacity). These districts each covered a geographic territory that included a regional urban center with a population between 80,000 and 170,000 and an extensive rural hinterland.

Success case: District E

District E is an excellent example of a relatively successful case of SLMF implementation. In this district, where there was only one PHO, there were substantial energy and resources that supported operational policy capacity. The initial priority of DHB managers was to establish a broad-based coalition of health service organizations who could develop the SLM IPs collaboratively. In this way, operational capacity was used to facilitate political capacity.

So, through the planning process, we've had more clinical staff involved, including nursing staff, who were hospital-based. And the clinical doctors who are part of that through the planning process (DHB).

The DHB and PHO interviewees both regarded this process as successful, although the Māori health provider respondent felt their organization was more peripheral than mainstream providers of medical and health services. In turn, this enhanced political capacity underpinned the development of collective analytical capacity as DHBs, PHOs, and (again to a lesser extent) Māori providers were able to share and collate the various sources of data that each has at their disposal.

The PHO interviewee described how a senior DHB manager helped facilitate a two-way flow of utilization data between the DHB and PHO.

They (DHB manager and PHO health intelligence analyst) collectively, ... work together and get the data and show what's been happening over the last year (PHO).

The DHB and PHO respondents also identified specific examples of being able to use combinations of primary and hospital service utilization data and population-level indicators to drive subsequent operational priorities. Examples included developing pharmacy-led rehydration programs to treat gastroenteritis in children, identifying the population of Māori men working in a local meat freezing works for targeting for cardiovascular disease risk assessment, and introducing case management for an identified group of patients with respiratory conditions. In this way enhanced analytical capacity fed

back into the enhancement of operational capacity. The identification of operational priorities also stimulated deeper engagement with existing networks of practitioners, which in turn helped generate improvements in other areas such as cancer screening and suicide prevention.

According to all interviewees in this district, this virtuous circle was founded on long-established traditions of networking in the district. At the local system level, substantial political capacity had been developed over the previous decade, and this clearly underpinned local system operational capacity.

So we've had a very long association in terms of our relationship with the PHO. And as I say in our annual plan, their annual plan pretty much reflects our annual plan (DHB).

I suppose the DHB and the PHO have had a pretty close relationship for a long time. And that goes back to the development of the alliance leadership team. so they have had an alliance agreement for a very long time (NGO).

This synergy between DHB and PHO planning (operational) processes clearly enabled the development of operational capacity specifically for SLM implementation. The PHO respondent reflected that the SLM way of working was simply an extension of what was already happening.

So, we went through the PHO annual plan and the DHB one, and really took elements out of that to fill in the System Level Measure component. A good part about that work though, it was a relatively easy exercise to do. So, the work that we were really gonna do, we didn't need the System Level Measure framework in order for us to do [it] (PHO).

The development of analytical capacity at the local system level was also in place prior to SLM implementation, and this directly enhanced organizational operational capacity. As such, in this case study, local system policy capacity was well-developed across all three components, and the introduction of the SLM framework served to sharpen the focus.

Lack of success: District G

This district had a more complex interorganizational environment. The DHB interacted with three PHOs, two of which also operated in other districts. Where there are multiple PHOs in the same geographic area, there is often competition between them for member practices (which determines the PHO's revenue) and also for competitive contracts tendered by the DHB.

From the beginning, SLM implementation was plagued by the issue of who should take the lead—the DHB or the PHOs. The DHB argued that because the funding attached to SLM implementation only went to the PHOs, the PHOs should lead the process. The larger PHO only wanted to do this if they could develop a plan across the multiple districts that they were part of. As this multi-district approach was not supported by the relevant DHBs and the Ministry, DHB managers stepped in, somewhat reluctantly. Although these managers engaged in similar activities to those in other districts, these processes were largely unsuccessful in generating political capacity required to implement the SLM program. The DHB managers found secondary clinicians within the DHB (hospital) service to lead many of the working groups but primary care managers were not as involved.

The view from the largest PHO's interviewee reflected this incomplete development of political capacity at the local level.

I'm OK with co-design, I'm OK with co-leadership. I'm OK with one plan. As long as there's respect and understanding of all parties into how you develop that plan. You know, DHB was to design how the plan was gonna be delivered, who was gonna lead it, what were the measures going to be. We felt like spectators and people on the bus, rather than people designing the programme (PHO 1).

Without having established or fostered the political capacity necessary for implementation, collective analytical capacity at the district level was absent. Unlike the other two districts, there was no reference in interviews to the use of district-level data, let alone any reference to data sharing. One of the PHOs was able to use the SLM process to develop its own internal analytical capacity and identify

its priorities that were relevant to SLM, but this was not an outcome of a collective analytic process across the district.

In District G, therefore, SLM implementation following a network governance logic did not get off the ground. The explanation for this failure lies in the unsupportive policy capacity conditions at the local system level, with the key weakness being political capacity.

All respondents in District G commented on the low level of trust and difficulty in building collaborative relationships in the district. The DHB respondents noted “strained DHB-PHO relationship” and explained this in terms of the recent history of “two CEOs locking horns.” Recent efforts to develop a functional District Alliance had foundered on the rocks of low trust.

So, because of the low trust environment with our PHOs, we had a lot of resistance, particular from [larger PHO] to even get round the table with everybody. And so that's what that is (DHB).

As such, the broader local system conditions and relative absence of any component of policy capacity at the local system level severely inhibited the development of network governance through the SLM initiative. SLMF implementation in District G exacerbated interorganizational tensions.

The broader policy and funding frameworks at the national level were also seen as undermining collaborative efforts in District G. One PHO respondent referred to the constraints of a competitive PHO environment, commenting “we're set up to not be friends” (PHO 2).

DHB respondents also noted that SLMs were introduced in a crowded operational environment, with DHB managers “expected to do so (implement SLM) within existing funding and existing staffing numbers – who all had other jobs to do and have other things on their plate.”

Our interviews in this district also revealed significant divergence in perspectives about health sector governance more generally. While PHO respondents supported the collaborative philosophy that underpinned the SLM framework, the following quote revealed a very different DHB perspective.

I understand quality improvement science and understanding why that is a good thing. But this is taxpayers' money we're all spending. And there needs to be as much accountability for how that dollar is spent, than there is now [sic]. As opposed to saying to organisations, would you do this, do you mind? Can you? (DHB).

Partial success: District P

In contrast to the clear success of District E and failure of District G, District P represents an intermediate case in that SLMF implementation processes were able to foster political capacity but not analytical capacity. Over the first few years of implementation, staff responsible for implementation were successful in operationalizing a relatively inclusive process for developing SLM IPs.

And the first plan was developed in a big workshop with relevant clinicians from possible primary and secondary PHOs. I don't think any of the NGOs were on that first planned development from recollection, but we had secondary head clinicians, primary care clinicians and management, and decision-makers in the room (DHB).

This had the effect of defining health system priorities for the whole district's population. But while the SLMF clearly assisted organizational managers and clinicians to focus on thinking in terms of an integrated local system aiming to deliver district-wide improvements, there was also a considerable limitation at the local level. The problem was that the political capacity built up through SLM improvement planning did not translate into improved analytical capacity and the key stumbling block was the lack of willingness of the non-state primary care actors to share data.

And the smoking referral again is a good example where the PHO was somewhat reluctant to share its practice data around where smoking referrals are coming from. Because they were worried about practices giving negative feedback (PHO).

While each individual organization experienced some development in their own analytical capacity, managers were unable to bring the different sources of relevant data together to build a bigger picture. In comparison to District G, implementation of the SLMF in District P did get to first base but went no

further. As such, the “virtuous circle” of positive feedback between components of policy capacity in SLM implementation failed to materialize.

The explanation for this stumbling block lies in the history of relationships between stakeholders. Unlike District E (but in common with District G), there was more than one PHO in the district, and even though they were largely geographically separate, the two PHOs perceived each other as competitors for DHB funding. As the above quote illustrated, individual primary care practices were nervous about their data being interpreted negatively, and each PHO feared that making their data available could jeopardize funding.

And we do need to understand that the data sharing really then is around trust in the relationship and the way that we ask the questions of practices. It shouldn't be about whether we share data or not. It should be [a] quality improvement opportunity rather than a compliance issue (PHO).

These concerns reflected an overarching history of transactional relationships between organizations at the local level in District P even though both DHB and PHO respondents expressed support for more collaborative ways of working.

Discussion and conclusion

There are three broad conclusions to draw from our analysis. Firstly, our exploration of the implementation of a policy initiative to support health system strengthening and improvement clearly illustrates that health systems and health service policy implementation are fundamentally local phenomena. Therefore understanding health policy capacity requires a sustained focus on local institutional factors. While these are partially shaped by national policy settings, there remains substantial variation at the local level which is driven by divergent local histories. This has important implications for the study of policy capacity and our understanding of how it links to institutions and practices of health system governance.

In New Zealand, the core governance tension regarding whether its health system is predominantly driven by hierarchical or network logics plays out differently across the country. Broadly speaking, where network governance was already established in the form of functioning District Alliances, network dynamics of policy capacity could develop. Where there were virtuous cycles of policy capacity (District E), they were stimulated by favorable conditions at the local system level, particularly in local system political capacity. Where the mechanisms “failed to fire” (Districts G and P), this was attributable to weaknesses in local system capacity.

Secondly, our analysis of local implementation enabled us to develop a new way of thinking about how policy capacity in health develops. We have established the importance of understanding policy capacity as a dynamic system which involves feedback loops between political, operational, and analytical elements of policy capacity. This more dynamic understanding of the relationship between the components of policy capacity opens up new ways of thinking about how to strengthen policy capacity. Understanding modes of governance in terms of whether these dynamics manifest in a clockwise or anti-clockwise direction is, we argue, potentially more useful than attempting to pinpoint a particular component of policy capacity as the Achilles heel. Indeed, our starting point for this analysis of health system improvement policy in New Zealand is that what initially appears to be a matter of developing analytical capacity in the health sector requires the development of all three elements of policy capacity.

Weaknesses in policy capacity at the local level were partly due to the institutional habits relevant to operational capacity—specifically the entrenched histories of transactional, arms-length, and competitive relationships between local health service organizations. Yet one could also easily argue that political capacity at the organizational level is the crucial component in the presence or absence of interorganizational trust, particularly between state and non-state actors. Our analysis shows that there are clear examples of virtuous and vicious reinforcing feedback loops between political and operational capacity. More broadly, it is likely that the need for anti-clockwise cycles of policy capacity development applies to any policy area that requires plurilateral coordination, not just health policy. Our research does suggest that in policy areas that require the cooperation of nongovernment actors, even hierarchical policy capacity cycles are unlikely to develop without healthy relationships between

state and non-state actors. A key reason is that where non-state actors withhold information that is necessary for analytic capacity, political and operational capacity will be stymied.

Thirdly, our analysis and development of the dynamic model of policy capacity have implications for those who see building network governance as the key to building better health policy. Our findings are broadly consistent with a range of other examples of attempts to stimulate the development of collaborative capacity and network governance in local health systems (Denis et al., 2009; Ferlie et al., 2013). Such findings illustrate a well-known paradox—that for network governance to “take off,” it needs to exist already. Specific initiatives planted to foster network governance (e.g., mandated networks) usually fail to thrive where local histories and institutional practices are not supportive (Elst & Rynck, 2013; Muir & Mullins, 2015; Rodríguez et al., 2007).

Developing network governance in health, therefore, is not simply a matter of developing goodwill and good relationships between state and non-state stakeholders when these relationships are underpinned by much stronger institutional dynamics embedded in past policy settings and hardwired public management routines and habits both nationally and locally. Our contrast of successful and less successful local examples of network governance and policy capacity development suggests the importance of local path dependencies that have long histories. Changing the course of local dynamics is something that will likely require much more than a specific policy initiative and is likely to require a shift in macro-institutional settings. In New Zealand, such a shift may be about to occur as the government has announced a major restructuring of the health system that has the potential to disrupt many of the locally entrenched institutional practices (New Zealand Department of Prime Minister and Cabinet, 2021).

However, even if network governance becomes more important, hierarchical imperatives will remain prominent, particularly in New Zealand’s publicly funded health system where the demands of political accountability exert a considerable force on health policy. This raises the question of whether the tension between the network and hierarchical ways of developing policy capacity can be managed in order to get the benefits of both. Addressing this question lies beyond the scope of our focus in this article, but Kreindler’s (2019) outline of how virtuous circles between “stipulation” (analogous to clockwise hierarchical governance) and “stimulation” (anti-clockwork network governance) may be a useful starting point.

Keeping in mind the paradox of network governance, the development of a more collaborative approach to governance and policy capacity clearly requires something different to mandated networks. The work of central government health agencies in the generation, fostering, and nurturing of local health policy capacity is likely to require a different set of policy skills and capacities that goes beyond more traditional reliance on authority and control. In the case of New Zealand health system improvement policy, officials in central agencies have taken an approach more compatible with network governance. But the key challenge, for both research and practice, is understanding what is necessary at the local level to stimulate the policy capacity necessary for network governance where it is relatively absent.

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Conflict of interest

None declared.

Appendix A. Case study selection

The case study districts have been selected purposively based on the results in the table below. District E demonstrated clear success in both dimensions of SLMF implementation. District G is a clear example of lack of success on both dimensions. District P was the only case that was relatively successful on one dimension (political capacity) but not the other (analytical capacity). These districts were similar in that each covered a geographic territory that included a regional urban center with a population between 80,000 and 200,000 and an extensive rural hinterland.

District codes	Outcomes			Implementation success#	
	Maturity of SLM Improvement Planning (Political Capacity)	Data sophistication and use (Analytical Capacity)	Total score	Maturity of SLM Improvement Planning (Political Capacity)	Data sophistication and use (Analytical Capacity)
B	4	4	8	Success	Success
Y	4	4	8	Success	Success
D	4	3	7	Success	Success
E	4	3	7	Success	Success
R	4	3	7	Success	Success
J	3	3	6	Success	Success
U	3	3	6	Success	Success
Z	3	3	6	Success	Success
K	3	2	5	Success	Success
P	3	2	5	Success	No success
Q	3	2	5	No success	No success
X	2	3	5	No success	No success
A	2	2	4	No success	No success
G	2	1	3	No success	No success
L	2	1	3	No success	No success
S	1	2	3	No success	No success

The technical details about the calculation of the success are available in Appendix 3, of [Tenbensel et al., 2021](#)

Tenbensel, T., Silwal, P., Walton, L., & Ayeleke, R. (2021). New Zealand's integration-based policy for driving local health system improvement—which conditions underpin more successful implementation? *International Journal of Integrated Care*.

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