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# Whole-of-Government initiatives in Sweden: The case of clinical medical research

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### Abstract

Decades of reforms focused on the deregulation of markets, have lead to disaggregation, competition and weakened political control. Today, the Western world is struggling to develop models to improve coordination: Whole-of-Government (WG) reforms are implemented. These reforms are focused in particular on the wicked issues that tend to appear in the boundaries between public and private, between policy areas and between politico-administrative levels. We know little on how these initiatives are organized or how they compare. This paper suggests a framework to understand different types of WG models, adopting a governance perspective. It builds on the case of clinical medical research in Sweden. This area serves as an outstanding example of a complex multi-level network environment, including stakeholders such as ministries, universities, regional councils, hospitals, and the pharmaceutical industry. Based on document studies from this area, the paper outlines a framework with four WG models: Contract, oversight agency, central agency and shared local units. The framework can be used to organize future research in this area.

## Keywords

Whole-of-government; joined-up-government; post-npm; coordination; research policy

# Whole-of-Government initiatives in Sweden:

The case of clinical medical research

In the classical debate over specialization or coordination in the administration (Gulick 1937), focus is now gradually shifting from the former to the latter. During the 1990s and 2000s, reforms focused on structural devolution, disaggregation and horizontal specialization (Pollitt and Bouckaert, 2004; Christensen and Lægreid, 2006, 2007a). Today, these ideas are replaced with ideas that in the literature are referred to as Whole-of-Government (WG) reforms or joined-up government reforms. They all have in common a strong concern with the issues of coordination, and with issues of central capacity and control. To promote coordination and increase political control, while cubing the tendency of 'vertical silos' or 'departmentalism', stronger instruments of central control are today adopted in the vertical dimension, and cross-sectoral bodies and programs are introduced in the horizontal dimension (Gregory 2003; Pollitt 2003), as part of the WG movement.

WG reforms tend to focus primarily on the 'wicked' problems found in the boundary between sectors, administrative levels and policy areas (Richards and Smith, 2006). By elaborating with different models to improve governance of the complex networks reaching across these boundaries, the idea is to promote coordination and central control. However, a problem in the literature on WG reforms, is that there are few studies exploring what specific forms WG reforms can take, when aiming to promote coordination and network governance (e.g. Salancik 1995; Powell et al., 2005; Kenis & Provan 2006; Provan, Fish & Sydow 2007). This paper wishes to make a contribution in this regard. Building on a case study of the governance of clinical medical research in Sweden, it suggests a framework with four WG models: Organization, Integration, Oversight and Contract.

In Sweden, circa 90 per cent of clinical medical research is conducted at university hospitals (SOU 2009:43). University hospitals are also of special interest as platforms for medical research, because they serve as hosts for the prioritized areas referred to as 'national health care' (in Swedish *rikssjukvård*, see Socialstyrelsen 2012). Clinical (patient-oriented) medical research is an outstanding example of a complex setting for WG reforms. It reaches across the boundaries between different politico-administrative levels, different sectors and different policy areas. This Swedish case is also interesting because a number of different models have been adopted to improve coordination and central control in this area. The paper is based on a literature review (document studies) focused in particular on this specific context.

It is organized as follows. First, there is an introduction to the literature on WG reforms. The context of clinical medical research at university hospitals in Sweden is introduced. A section depicting the different WG models adopted in the Swedish case follows. Results are discussed and a model is outlined. The paper is then closed with conclusions.

## Whole-of-Government reforms

The WG reforms (here used synonymously with Post-NPM reforms and JUG reforms) typically aim to handle some of the challenges that follow from NPM.

Two decades of NPM reforms focused on deregulation and marketisation has led to fragmentation, sub-optimization, accountability issues, loss of political control and loss of legitimacy (Bogasson & Musso 2006; Sørensen 2002). With deregulation and marketisation, the administration has been transformed into a network of stakeholders, and there has been a shift from close government in vertically integrated governance chains, to arms-length governance of networks of more or less autonomous actors (Rhodes 1996; Peters & Pierre 1998; Sørensen 2002). Against this background, a call for WG reforms has emerged.

Christensen and Laegreid (2007) mention two reasons why WG reforms take place. First, it can be seen as a reaction to the pillarization of the public sector. The problem of horizontal coordination was largely overlooked with NPM, which instead focused on vertical coordination of single-purpose organizations using on performance management (Fimreite and Lægreid 2005). Second, WG reforms can be seen as a reaction to perceptions of the outside world as becoming increasingly insecure and dangerous, not least because of terrorism. This has led to a reassertion of the center, but also an increased interest in horizontal coordination, including extensive knowledge sharing between agencies.

WG reforms come in many different shapes. For example, they can focus on policy-making or policy implementation. As mentioned, they can also focus either on the horizontal or the vertical dimension. Furthermore, they can be formal or informal. Laegreid and Christensen (2007) distinguish between WG reforms focused on policy development, program management, and service delivery. They also emphasize that these reforms not only are about joining up at the center, but also about joining up at the local level. Just like NPM, the WG concept should be seen as an umbrella term, rather than a concept representing a coherent set of reforms. WG reforms have in common the aim to increase integration, coordination, and capacity in the administration (Ling 2002).

In general, two themes are central in attempts at increasing coordination. The first is integration and the second is centralization. By integrating stakeholders and by centralizing operations, coordination can be increased. However, with WG reforms, the aim is typically to preserve the network of stakeholders and the benefits that may come with these networks, and thus the aim is also to avoid too much integration or centralization. Given their central position, these two dimensions - integration and centralization - will be part of the analytical framework of this paper.

To organize our study in this area, three research questions have been defined. In the following, the paper is organized in accordance with these, before closing with conclusions.

RQ1. What types of WG strategies have be adopted?

RQ2. How can these models be analytically distinguished, building on level of integration and level of centralization?

# **Research design**

To respond to RQ1 and RQ2, we have chosen to study the case of clinical medical research at Swedish university hospitals. This is an excellent example of an area with a highly complex network, reaching across boundaries such as politico-administrative levels and the private/public sectors. This is not only the case in Sweden, where several investigations and commissions have highlighted the coordination issues that these complexities have resulted in, but this is also the case in many western countries. At the same time, clinical medical research has also been pointed out as an area of priority in many policy documents.

Not least, this area is interesting as a contrast to studies on autonomy issues in higher education. These studies rarely call for more central governance or coordination, but instead they tend to emphasize the importance of autonomy. This line of research is often focused in particular on the social sciences. It can be noted that clinical medical research is quite different form social sciences research, since the medical researcher will be more dependent upon external stakeholders to conduct their research, for example to access equipment and patients (at hospitals). This is problematic, but this paper will not handle this specific issue other than in passing.

This specific study is focused primarily on the government perspective, rather than the stakeholder perspective. The reason for this is that it aims to understand *governmental strategies* to improve coordination (and increase political control), rather than stakeholder strategies. Please note that coordination does not necessarily mean a loss of autonomy for the researcher or the research group. Instead, coordination may be a condition for this autonomy.

Coordination problems in this sector can be studied from many different theoretical perspectives, for example innovation theory, public administration theory, research policy theory. This study aims to make its contribution primarily to public administration theory and this is also the literature that it primarily consults.

Document studies have been conducted and for the above mentioned reasons (governmental perspective), these documents have been sought primarily among governmental commissions and evaluations done by executive agencies. Partisan incentives in the area, reported in the media, have also been included in this review.

At this point in time, the study is exploratory, meaning that it is not our ambition to include every available report in the area, but rather to give an introduction and present some preliminary findings and suggestions.

### Clinical medical research worldwide

Throughout the Western world, clinical medical research is considered an area of priority. Hopes are that this research will help cure physical conditions and promote health, but also that it will help health care providers do more with less, as more cost-efficient treatments are developed. Clinical medical research is also considered important to promote employee motivation and to foster a culture of learning and innovation among health care providers. This includes the establishment of evidence-based processes, meaning treatments in line with the latest research findings (Berwick 2003; Gabbay & le May 2004; Swennen, van der Heijden et al. 2013).

# Clinical medical research in Sweden

"When many employees are committed to research and development, new knowledge will have a faster impact", a Swedish governmental investigation from 2009 confirms (SOU 2009:43 p. 42).

Swedish clinical medical research has traditionally been "exceptionally strong in comparison to the size of the country" (SOU 2013:87, p. 8). However, since a long period of time, this research has gradually decreased in Sweden (Ahrens 1992; Medicinska forskningsrådet 1998; Vetenskapsrådet 2004; Lindholm & Werkö 2008; SOU 2008:7; SOU 2013:87). For this reason the Governmental Research Bill for the years 2013-2016 (Prop 2012/13:30, in Swedish *forskningspropositionen*) included extra funding for medical research. The bill also confirms that extensive structural changes are required, in order to facilitate coordination and reduce fragmentation between the different stakeholders in this field:

"In order to preserve the Swedish position as one of the leading countries for research and innovation in the life sciences, and entrepreneurship within biotechnology, health technology and pharmaceuticals, a long-term increase in the resources provided for basic and clinical research is required, as well as structural changes when it comes to the conditions for clinical research. [...] Well functioning forms for collaboration between health care providers, universities and the private industry is a crucial success factor for the development of new products and treatments within health care." (Governmental research bill, Prop 2012/13:30, p. 81)

Also other countries experience problems following fragmentation in this field, sometimes referred to as the "Triple Helix", referring to relations primarily between university, industry and government (Etzkowitz & Leydesdorff 1995).

Fragmentation is problematic partly because it tends to lead to stakeholders giving priority to their specific local concerns, rather than on collaborating for a mutual - but sometimes more abstract and insecure - good. For example, regional councils, hospitals and clinics may be inclined to focus on providing health care services instead of devoting time and resources to clinical medical research. "Although the value of research is obvious to both health care and society at large, clinical research tends to be marginalised in the increasingly strained regional budgets.", a governmental investigation explains (SOU 2009:43, p. 48).

Fragmentation may also lead to lengthy research cycles, thereby fuelling a trend where the pharmaceutical industry increasingly are placing their studies in countries in Eastern Europe, Asia and Latin America, where these can be approved and completed faster and to a lower price (Tillväxtanalys 2014).

Another factor that contributes to the demise of clinical medical research are the poor incentives for physicians to enter a research career. These incentives have long been considered weak, both in Sweden and in other parts of the Western world (Rosenberg 1999; Sung, Crowley Jr, Genel et al. 2003; Ley & Rosenberg 2005). While clinical work is well paid and offers a rapid career development, research tends to be less rewarding in both these regards.

Looking only at research funding in the Swedish context, there are many different stakeholders. This is provided, in particular, by private (not-for-profit) foundations, central agencies (e.g. Vetenskapsrådet), pharmaceutical companies, universities and regional councils. This set of actors transcends borders between private and public, as well as between politico-administrative levels. Agencies and companies promoting and helping market Innovations also have an interest in this area, as do the various patient groups, which increasingly are organised in associations. University hospitals accommodate most of the clinical medical research, contributing with facilities, equipment, access to patient registers, etc. There are also central agencies providing evaluations and guidelines for health care services, e.g. Tandvårds- och läkemedelsförmånsverket (TLV), Statens beredning för medicinsk utvärdering (SBU), Socialstyrelsen, Inspektionen för vård och omsorg samt Vårdanalys. Agencies charged with promoting innovation in health care also have an interest in medical research, as do the companies that may wish to bring these innovations to the market.

However, even if stakeholders are plenty, clinical medical research is primarily a governmental responsibility (SOU 2009:43 p. 42). This is governed primarily through the governmental research bill and through every-day contacts between ministries and the various stakeholders. Several governmental ministries are usually engaged in this area, but this includes in particular the Ministry of Health and Social Affairs and the Ministry of Education and Research.

# WG models in clinical medical research in Sweden

In Sweden, a number of different strategies have been adopted to promote coordination and incentivise stakeholders. The main models and initiatives are as follows.

#### 1. The ALF agreements

A corner stone in the attempt to coordinate stakeholders in the clinical medical research conducted at Swedish university hospitals, has been the ALF contracts. ALF stands for 'Agreement between the Swedish state and certain regional municipalities concerning cooperation in the areas of education of physicians, medical research and development of health care' (in Swedish: 'Avtal mellan svenska staten och vissa landsting om samarbete om grundutbildning av läkare, medicinsk forskning och utveckling av hälso- och sjukvården').

The ALF contracts have been signed between the Government and some regional councils (in Swedish landsting). These contracts have been very important for university hospitals, regulating remunerations for participation in clinical medical research and the education of physicians. The current ALF contract has expired, however, and negotiations for a new contract have been going on for some time, without success. The association representing regional councils (Sveriges Kommuner och Landsting, SKL) maintains that there have been major difficulties evaluating clinical research (volume, focus, development) and that a thorough overview of performance is required before negotiations can continue (SOU 2013:87, p. 50). Also a governmental delegation (Delegationen för samverkan inom den kliniska forskningen), active in the years 2007-2009, argued that better processes for evaluation of the use of ALF funds are required (SOU 2008:7). In general, the delegation calls for a better structure for funding of clinical medical research, as do the two major central agencies focused on funding of medical research (Vetenskapsrådet and Vinnova) in a report from 2009 (Vinnova och Vetenskapsrådet 2009). The latter report resulted in a concrete suggestion, titled Svensk behandlingsforskning (SBF). Just like several previous governmental investigations (t ex SOU 2008:7; 2009:43), the report also calls for better processes for national coordination of universities, health care providers and the private industry, than those resulting from the ALF agreements.

#### 2. The shared research centres

The forming of shared organisations for medical research (in Swedish *universitetsmedicinska centra*) was suggested in a governmental investigation year 2009 (SOU 2009:43). The idea was that this arrangement should 'improve efficiency in the collaboration between health care, research and education' (SOU 2009:43, p. 18). The shared centres for medical research

(*universitetsmedicinska centra*, UMC) should preferably take the form of limited companies, the investigation suggested, hence avoiding the Swedish standard form for bureaucracies, namely the form of an executive agency.

A number of centres were formed around Sweden and they were meant to function as regional knowledge centres. One of these was found in Lund (*Universitetsmedicinskt centrum Skåne, UMCS*), where it was meant to bridge the university hospital, the two universities, the municipality, and the pharmaceutical/biotech industry. It was formed as a limited company, as the university hospitals of Lund and Malmo were merged in 2010, partly to secure that medical research was not hampered by the reform. There are several indications that this centre did not lived up to these expectations.

#### 3. The shared oversight agency

A recent governmental investigation (SOU 2013:87) suggests the forming of a new central agency, responsible for coordinating the various stakeholders engaged in clinical medical research in Sweden. With this agency, the hope is to be able to avoid county councils and hospitals systematically giving priority to health care over research.

#### 4. The centralization initiative

Finally, there is also a centralization initiative in this area. The head of one of the Swedish political parties, *Folkpartiet*, has repeatedly (in particular in the 2014 elections) called for a transfer of all university hospitals in Sweden from the regional level to central government. One reason is a wish to overcome the coordination problems hampering clinical medical research.

### **Discussion - and a framework**

The central concern in the case of clinical medical research in Sweden has been coordination. Problems with coordination are assumed to hamper in particular performance in this context. Political control stands out as less of a concern, presumably because of the strong principle of academic freedom. However, the current political debate, suggesting a transfer of all university hospitals to central government, indicates that there is a strong belief in the central control, as typical of WG reforms (Pollitt and Bouckaert, 2004; Christensen and Lægreid, 2007). The boundary between private and public stands out as less of a problem in this sector, than problems relating to the boundary between different politico-administrative levels and, to some extent, policy areas.

These four WG models depicted above are interesting, because they differ in significant ways. They can be distinguished building on the two dimensions integration and centralization according to figure 1.



Figure 1. A framework to compare Whole-of-Government models aiming to improve coordination.

Coordination through contract is achieved when the level of both integration and centralization is low. This means that stakeholders can have separate principals and to continue conducting their work in different organizations. Contracts provide with various incentives to promote coordination. An excellent example of this is the ALF agreements in Sweden.

Coordination through the forming of a shared oversight agency means that the level of integration is low and the level of centralization is high. There will still be many different local stakeholders, but there will be a central unit helping with planning and control from a distance. An example of this is the suggestion regarding the forming of a new executive agency in Sweden, responsible for coordinating stakeholders involved in clinical medical research.

Coordination through shared local units is a solution meaning that the level of integration is high and the level of centralization is low. Stakeholders will still function work under different principals, but a shared management team will be formed to promote coordination on the local level. An example of this is the shared local research centres. The idea was that these centres should be managed by stakeholders in collaboration, assuming that the fact that they have different principals is less important.

When the level of integration and the level of centralization are high, it will no longer be a matter of coordination, but a matter of centralization. This means that a new central (functional) agency is formed, to which all previous stakeholders will report. In the Swedish case, an example is the current political debate, suggesting that university hospitals, including the medical research conducted within these, should be moved from the regional level to the central level, where they would have be integrated.

There are different strengths and weaknesses with each of these four models. With *Contracts*, transparency and clarity can be achieved regarding incentives, but at the same time, there is a risk that it will be difficult to arrive on incentives that all can agree on. With a *shared oversight agency*, political and administrative control can be increased, but there is a risk that central responsiveness to local initiatives and needs will be hampered. With a *central agency*, political and administrative control can be further increased, but this may be done at the expense of local motivation and diversity. Finally, with *shared local units*, local stakeholders can be motivated by the structural devolution, but on the negative side, it may become difficult for the involved stakeholders to negotiate with several different principals.

# Conclusions

This paper started out by confirming that a problem in the literature on WG reforms is that there are few studies exploring what specific forms WG reforms can take, when aiming to promote coordination and network governance (e.g. Salancik 1995; Powell et al., 2005; Kenis & Provan 2006; Provan, Fish & Sydow 2007). Building on the case of clinical medical research in Sweden, a framework with four archetypical WG models has been suggested. Some strengths and weaknesses have been outlined for each model. The four models can be developed further and they can also be used to organize new research studies in this important area. In particular, with this contribution, the paper shows that WG initiatives can be studied on a more specific, empirical level than what usually is seen, and that this can help provide a structure for analyzing the specific challenges involved in these reforms. Thus, the framework suggested in this paper can be used to facilitate a transition from a macro level discussion, focused on 'trend-spotting' in the public administration, to studies focused on micro level issues and implications. As this study indicates, WG reforms can be implemented in many different ways and with many different outcomes.

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