POLICY AND SOCIETY
2020, VOL. 39, NO. 3, 478–493
https://doi.org/10.1080/14494035.2020.1783787

Routledge
Taylor & Francis Group

ARTICLE

OPEN ACCESS Check for updates

Nudges against pandemics: Sweden's COVID-19 containment strategy in perspective

Jon Pierre

Department of Political Science, University of Gothenburg, Gothenburg, Sweden

ABSTRACT

Sweden's strategy to contain the COVID-19 pandemic stands out internationally as more liberal in terms of not ordering a complete lockdown of society. Sweden kept its primary schools, daycare centers and industries largely open. The government financially supported furloughed workers and increased its support to regional and local governments delivering healthcare and elderly care. However, the death toll in Sweden which passed 4000 by late May 2020 stands in stark contrast to those of other, comparable countries, raising questions about the design of the strategy, and its appropriateness. The paper argues that key assumptions sustaining the strategy, for instance that symptom-free people do not carry, and cannot transmit the Coronavirus, or that local and regional government staff had the necessary training and equipment to tackle the pandemic, along with problems associated with coordinating a decentralized healthcare system, may explain the poor performance of the Swedish containment strategy.

ARTICLE HISTORY

KEYWORDS
COVID-19; Sweden COVID-19 strategy; Coronavirus; COVID-19 nursing homes

Introduction

Without a doubt, 2020 and presumably several years onwards will go down in history as the years of the COVID-19 pandemic. Beyond the unimaginable human loss and economic devastation that the pandemic is wreaking, we are already beginning to see early signs of what will be a massive research effort aiming at explaining cross-national variations in government responses to the COVID-19 pandemic (for an early assessment, see Toshkov, Yesilkagit, & Carroll, 2020). As the situation is still very much evolving – most experts caution that we have not yet (this being written in June 2020) witnessed more than the early phases of the pandemic – any assessment of governments' strategies to contain the pandemic will be very tentative. What we can say something more definitive about, however, is the strategic choices made by governments, the stringency with which the strategy was rolled out and government performance more broadly during the early, critical stages of the pandemic.

We are currently witnessing an extensive variation across different countries in terms of the strategy they have chosen to respond to the pandemic. Some countries (for instance France and Germany) have chosen a rather forcefully implemented lockdown, allowing society to open up slowly and incrementally when the epidemiological evidence

CONTACT Jon Pierre jon.pierre@pol.gu.se

suggests it to be appropriate. A few other countries (for instance, the early containment strategy of the UK) countries have opted for a more varied response, allowing the population to move about while maintaining social distancing and avoiding crowds. The pandemic has had a major, if not devastating, impact on the economy, and governments' measures to alleviate these problems include unprecedented levels of public support to private businesses. However, governments differ significantly in terms of the support they offer to private businesses and the industry (Toshkov et al., 2020).

One of the more contentious debates during the COVID-19 pandemic has revolved around Sweden's strategy to curtail the spread of the virus. During the week of 13 May 2020, Sweden had the highest COVID-related per capita deaths in the world, according to the Financial Times' coronavirus tracker. On May 25, Sweden passed the 4000 deaths milestone. As Sweden had relied on a different strategy to contain the pandemic, it was only logical to many observers to attribute this poor performance to Sweden's strategic choices.

Yet, there is significant disagreement about the virtues or perils associated with Sweden's COVID strategy. Some have described the Swedish response as dangerously liberal, with only a few constraints on people's movements. Most recently (April 2020), others like Michael Ryan, Executive Director of the WHO Health Emergencies Program, have made a very different assessment. Ryan argues that while Sweden's strategic objective has been very similar to that of most other countries, i.e. a fairly advanced lockdown and social distancing, the country has relied on other, less coercive means to reach that goal. In late April 2020 Ryan even went so far as to suggest that Sweden may well be a model for other countries in the management of future pandemics.

The debate on whether a less restrictive regime would be more efficient than a strict lockdown has also been intense among experts, politicians and laymen in Sweden. The medical-epidemiologist community remains deeply divided on this issue, as shown by highly critical op-eds authored by more than 20 professors or senior physicians who have questioned the containment strategy designed by the PHA (see for instance *Dagens* Nyheter, 2020a, b).

In addition, as the death toll has steadily increased, advocates of a liberal strategy have emphasized that this is less because the strategy is flawed but more because key elements of the strategy such as protecting the elderly in nursing homes and elsewhere were not properly implemented by local authorities. As we will elaborate later in this paper, many of these issues hark back to the institutional relationships among the institutions in the Swedish public health and healthcare system and the elderly care sector.

Given that a key objective in fighting a pandemic at a societal level is to alter social behavior in order to minimize inter-personal contact and thereby reduce the spread of communicable disease, any response strategy must depart from pre-existing social norms and behaviors, broadly defined, and those norms vary considerably across countries and even regions. There is a similar variation in the perception of government and its role as a regulator. Thus, while changing social behavior in some countries requires coercive enforcement measures and regulations in other countries changing population behaviors can be accomplished with much more subtle signaling from the government.

In both these aspects of containment – the strategic objectives and the selection of instruments to alter social behavior – Sweden has stood out from the majority of countries. The Swedish containment strategy was not centered around a complete

lockdown but rather included more selective measures such as minimizing people's visits to areas where a high density of people could be expected. Perhaps most importantly, government and agencies preferred to issue recommendations and advice on the appropriate social behavior instead of coercive regulations. It is this aspect of the Swedish approach that has perhaps triggered most international curiosity.

While the paper studies policy design and implementation during a major societal crisis, it also raises a series of questions of continuing significance, such as the problems of vertical policy coordination and problems related to decentralized governance (Adam, Hurka, Knill, Peters, & Steinebach, 2019). A large number of issues in contemporary policy-making target regions and cities – not least highly complex and salient issues like climate change adaptation and mitigation – as the main actor in the implementation of public policy. Also, when most countries have built an extensive system of independent executive agencies, a complex principal-agent problem has emerged between departments as the key strategic actor and agencies as the operative structures. Thus, although the paper draws on empirical observations from an extreme case of public policy, the findings speak to more continuous issues as well.

This paper will give an overview of the Swedish strategy to contain the COVID-19 pandemic. First, however, we will briefly describe the institutional arrangements in Sweden which define the roles of the Cabinet, the agencies, the regions and local authorities which are the key public actors responsible for the implementation of the strategy. After outlining and assessing the Swedish pandemic strategy we will assess the strategy in terms of its internal logic and outcomes.

Nudges, nudges everywhere: the institutional arrangements of the Swedish public health system

It is often argued that institutional arrangements and the choices they represent enable the government to employ some policy instruments to implement public policy while at the same time preventing it from using others (see, for instance, Rockman & Weaver, 1993). For instance, extensive decentralization allows local institutions to deliver services that have the discretion to respond to local needs and demands at the same time as it prevents redistribution across regions.

Furthermore, institutions operate in a landscape of social norms. Institutions and social norms are closely related. Institutions are essential in reproducing social norms and defining a 'logic of appropriateness', i.e. a set of social norms and expectations on individual social behavior (March & Olsen, 1989). The degree to which institutions can shape social behavior depends to a large extent on the level of institutional trust in society. In political cultures where trust is low (see Hartley and Jarvis, this issue), institutions often have to resort to govern society by coercive measures, whereas if the trust is high institutions can rely on more subtle instruments such as advice or recommendation or even nudges to bring about the desired social behavior (see Einfeld, 2019).

In the present analysis, this perspective on institutional design, trust and social behavior makes very much sense (Trägårdh, 2020). Sweden has for the last two centuries – i.e. long before the executive agencies that emerged as part of the New Public Management reform campaign in the 1980 s and 1990 s – had a system with highly autonomous agencies (*myndigheter*). Indeed, one could argue that the point of gravity in

the central government system is not the Central Government Office (CGO; *regeringskansliet*) with a total staff of about 4,600 but rather at the agency level, where 341 agencies with a total staff of some 226,000 are the locus of expertise, resources and manpower.

How does this arrangement work in practice? How does the fairly small core executive institution ensure that the more sizeable and constitutionally autonomous agencies do not become self-referential organizational structures pursuing their own agenda while operating beyond political control? The answer, in short, is that the government certainly has some formal levers in relationship to the agencies: it appoints the Directors General; controls the budget; and can, if necessary, simply terminate them at any time. In terms of the daily operations of agencies, the most common type of 'steers' (Page & Jenkins, 2005) that government departments give their agencies is conveyed through informal contacts. Several studies substantiate both the significance and the durability of networks between departmental and agency-level staff (for an overview, see Jacobsson & Sundström, 2015).

Thus, although agencies certainly report to their parent department which provides them with an annual budget appropriation and instructions, they do enjoy considerable autonomy vis-à-vis the department, by virtue of their constitutional mandate, their expertise and other organizational resources. The political leadership relies largely on informal contacts and 'steers' coupled with a strong sense of loyalty towards the government of the day among the civil servants (Niemann, 2013).

Turning now to the regional government, the key significance of this tier of government in the present analysis is that the 21 regions are in charge of the healthcare system. The central government provides strong economic support to the regions and conducts oversight of the medical services they deliver but in terms of formal jurisdiction, central government lacks authority in relationship to the regions. The National Board of Health and Welfare (NBHW; *socialstyrelsen*) and the Public Health Agency (PHA; *folkhälsomyndigheten*) offer advice and information and may allocate targeted funding. The NBHW makes a distinction between 'soft' coordination, which is the daily, routine exchange of information and 'hard' coordination which can include the transfer of costs or resources among regions or align regions with central government services such as units in the national defense.

Local government in Sweden (290 municipalities) delivers the bulk of welfare services, primary education and care of the elderly. This latter service has become a key area of attention during the pandemic, as 90% of the COVID-19 fatalities have occurred among people aged 70 years or older. Again, local governments in Sweden enjoy extensive autonomy in relation to the central government, which essentially prevents national healthcare agencies like the NBHW and the PHA from enforcing rules concerning personal protection equipment or the separation of infected people from non-infected people.

This is the institutional context within which the strategy to contain the COVID-19 pandemic evolved. With autonomous agencies, regions and local authorities, central government policy-making institutions find themselves managing and coordinating a highly decentralized system. Furthermore, agencies in the healthcare sector have no remit over the regions delivering healthcare; their only means of guiding the region is to provide information and to maintain informal networks. Thus, the coordination of the public institutional system is to a large extent achieved through informal mechanisms, bargaining, information and networking. This is not to suggest that the system lacks

coordination, but it does suggest that in times of crisis the system may be slow in responding.[1]

Another important observation is that the institutional arrangement is conducive to allowing expertise to influence policy and administrative action. Given that much of the expertise is found in the agencies and to a lesser extent in government departments, it becomes difficult for departments not to invite or consult with experts in the agencies. In the case of the government's response to COVID-19, the Prime Minister as well as other Cabinet members stated early on in the process that they would take advice from the experts and the agencies. And indeed they have; in the daily press briefings from mid-March onwards senior public servants representing the PHA and the NBHW are the main speakers compared to Cabinet ministers.

A final concluding observation relates to the soft coordinating mechanisms in the government system. While they might appear too subtle and vulnerable to provide guidance, particularly in crisis situations, they draw to a large extent on inter-organizational networks of specialized public officials. Sweden is a high-trust society, both in terms of interpersonal and institutional trust. This high level of trust facilitates informal yet efficient coordination with very low transaction costs. A big question here was to what extent this model of governance and coordination would also work during a crisis like the COVID-19 pandemic.

The Swedish COVID-19 containment strategy

Let us now review the finer details of the Swedish strategy to combat COVID-19. We will first assess the strategy at the institutional level, i.e. institutional roles and patterns of coordination among agencies, regions and local governments. We will then turn to the strategy implemented to adapt social behavior.

The overall goals of the COVID-19 strategy, according to state epidemiologist Lars Tegnell at the PHA, are to protect the elderly and to ensure that the healthcare system is not overloaded with patients. The elderly have a weaker immune system and may also have diabetes, cardiovascular or other health problems which make them further susceptible to contract the virus.

Ensuring that the hospitals do not receive more patients than they can handle – the 'flattening of the curve' – is achieved by efforts to restrict large gatherings of people, urging people to maintain social distancing and staying home if they experience any symptoms or if their work allows them to work remotely. Thus, herd immunity is not a strategic goal in and of itself but is more seen as a secondary outcome of the strategy.

We will first go through the main points of the response at the institutional level, i.e. to clarify the role of different institutions. We then turn to the strategic level to

[1]As an example, the present author interviewed an official at the Public Health Agency in March 2020 for a research project on the Swedish program to address antimicrobial resistance. When asked about what the biggest challenges in this work were, the official responded that the agency's lack of jurisdiction over the regions was a major challenge. When later asked what might explain the success in addressing antimicrobial resistance; however, the official stated the collaborations with the regions and local authorities had been a key factor. It appears as if the 'strength of weak ties' is believed to be a better coordinating arrangement than formal command lines (Granovetter, 1973).

see which objectives and instruments have been implemented to address the pandemic.

The institutional level

Already at an early stage of the crisis, it was clear that the core executive, i.e. the Prime Minister and other Cabinet ministers and their staff, would not be operationally involved in the crisis management. Instead, agencies like the PHA and the NBHW were to take the lead by virtue of their expertise on pandemics.

Key points:

- Cabinet ministers take the backseat while urging citizens to follow the experts' advice. Daily press briefings, occasionally with Cabinet ministers but mostly with experts from the PHA, the NBHW and the Civil Contingencies Agency (CCR; *myndigheten för säkerhet och beredskap*)
- The NBHW combines 'soft' and 'hard' coordination
- The CCR oversees and supports coordination among agencies
- NBHW and PHA oversee the healthcare system managed by regional governments
- NBHW oversee nursing homes and other elderly care facilities managed by local authorities
- Regions are in charge of healthcare
- Local authorities are in charge of elderly care

The emphasis on coordination stems in part from the decentralized nature of the institutional system discussed earlier, requiring more coordination efforts than systems with a clear command-line structure of government. Coordination was achieved by relying on soft and informal instruments of guiding agencies' reliance on expertise and informal channels of coordination both among agencies and also between agency level (central government), regions and local authorities. In addition to this 'soft' coordination, the NBHW also used 'hard' coordination with more institutional leverage when coordinating across sectoral boundaries, e.g. to use defense equipment to transfer patients from overloaded regions to less-affected regions.

Compared to many other countries, this model of crisis management differs in terms of the more subtle role of Cabinet ministers. In most countries, a high visibility of the Prime Minister or President is expected to provide leadership and to send a message to the public that the crisis is handled at the top level of government. In Sweden, however, it was clearly announced that the government would follow the advice of the PHA. This should not be seen as an abdication of the political leadership – although there has certainly been criticism raised against what has been seen as a conspicuous absence of political leaders during the pandemic. Crisis management scholars tend to argue that the best strategy to manage crises is not to alter institutional roles and hierarchies but to the extent possible let institutions act, and interact, in familiar roles and relationships (Boin, Hart, Stern, & Sundelius, 2006). Also, while most other countries can declare a state of emergency

to centralize authority and make additional resources available, in Sweden that option can only be used when Sweden is in a state of war.

The strategic and societal level

Let us now look at the concrete measures emphasized by the strategy. Epidemiologists and other experts have repeatedly emphasized in the media that all measures should be evidence-based and aligned with science.

Key points:

- Protect the elderly and fragile
- Contain the spread of the virus in order to avoid overloading hospitals with patients; 'flatten the curve'
- Restaurants, shops and factories to remain open
- Restaurants and bars will be inspected by experts from authorities to ensure that patrons are seated, with the proper social distance between the tables
- No complete lockdown but urging people with symptoms to stay home
- All those who can work from home are recommended to do so
- Primary schools and daycare centers remain open; high schools and universities provide teaching online
- Maintain social distancing. Meetings with more than 50 people are not allowed
- Exercise individual responsibility and sound judgement about self-protection

In March 2020, the PHA rolled out its strategy with characteristic aplomb. Again, the subtle and non-coercive nature of the measures is striking. There has however been some development over time in this respect. For instance, when inspectors found that restaurants and pubs were too crowded to ensure social distancing, inspections were stepped up and several establishments were forced to close temporarily. Also, early on in the crisis, the recommendation was for people with symptoms to stay home from work. Later, that recommendation was revised so that unless you have to go to work you should work from home, and obviously not go to work if you have any symptoms.

Overall, the strategies have features of what Damon Barrett (2020) calls a 'harm reduction strategy'; the objective is to protect the healthcare system from overloading while at the same time protecting the most vulnerable and susceptible groups in society from the virus. It should also be noted that primary school and day-care centers have remained open; indeed, Sweden was the only European country which chose not to close down schools (Toshkov et al., 2020).

Equally important as what is in the strategy are the rules and recommendations that are *not* included. Perhaps most importantly, travel restrictions were introduced at a late stage. For instance, direct flights from Iran and northern Italy were admitted even after the corona outbreak in these locales had become known to Swedish authorities. Passengers arriving from those stations were not screened when disembarking the flights, let alone quarantined. We do not know what explains this tardy response in the face of clear evidence of the growing pandemic.

Another item missing in the list above is testing. Testing still remains underdeveloped in Sweden although the PHA has conducted several testing campaigns on samples of the

population. These tests measure the amount of antibodies in the human blood, i.e. they do not measure whether a person is carrying the coronavirus but rather if they have contracted the virus and since recovered. As we will argue in more detail later, by not quickly putting a system for testing in place the public health authorities lacked important data on the spread of the virus.

Testing for anti-bodies is important for a number of reasons, not least to see whether a sufficient percentage of the population has been infected in order to have achieved herd immunity. While herd immunity is not a goal in itself but rather 'a by-product' of the containment strategy, the level of contagion in society is critical to ascertain whether herd immunity has been established. Some, like state epidemiologist Anders Tegnell, suggest that herd immunity will be established when circa 60% of the population have contracted the virus while others, like mathematics professor Tom Britton, suggest that 40% will suffice to achieve herd immunity. In late May, preliminary studies show that only some 6–7% of the population has contracted the virus, suggesting it will take more time to achieve herd immunity than would be the case with a more regular flu virus (Dagens Nyheter, 2020b). Contagion has also proven to 'cluster' regionally and locally, so that some areas have been badly hit by the Coronavirus while other regions have had much lower number of cases.

In terms of how government and agencies employed coercive instruments to induce appropriate social behavior, the government did step up the distinctiveness of its recommendations in March and April 2020 as the scope of the pandemic became clearer. The government has repeatedly emphasized that tougher measures will be introduced unless social distancing is practiced, for instance closing restaurants and bars that do not ensure social distancing or patrons who are not seated.

The government has also introduced a series of support 'packages' giving massive economic support to industry and small businesses and also to local and regional governments. The government has also supported the furloughing of employees by covering the bulk of the employees' salary while furloughed. In addition, the central government committed itself to compensate the subnational government in full for the additional costs incurred by the pandemic.

Assessing the Swedish COVID-19 strategy

Together with the UK until March 2020, Sweden is the only country to not lock down society in order to reduce the spread of the virus. Instead, as we have seen, Sweden chose a more open strategy, allowing free movement, stressing personal responsibility and to focus its efforts on protecting the old and fragile.

As an outlier, Sweden has rightly attracted international attention where some praise and others dismiss the path chosen by the Swedish public health authorities. Some have focused on the appropriateness of the strategy; others on the degree to which strategic actions and priorities were actually delivered; while yet others have sought to measure the actual outcomes and to compare those data with data from similar countries. Comparisons are often likely to draw on fairly simple measures, particularly when time is of the essence.

Another complexity relating to the success of different containment strategies relates to time. At the time of writing (June 2020), it appears clear that it is still too early to assess

the efficiency of the Swedish approach to the COVID-19 pandemic, let alone draw any definite comparative conclusions (but see Toshkov et al., 2020).

For these reasons, evaluating the Swedish COVID-19 strategy and teasing out conclusions that can aid institutional learning may appear easy at first but soon becomes rather complicated. There are a number of variables that make any international comparison difficult. With that said, however, the fact remains that Sweden has recorded a much higher number of deaths than countries with which Sweden is often compared. By mid-May 2020, for example, Norway and Denmark report COVID 19-related fatalities on average in single digits while Sweden records circa 70 deaths daily. And, as mentioned, Sweden had the highest COVID-19 related deaths per capita in May 2020.

As of 3 June 2020, Denmark and Norway reported death tolls per million of 100 and 44, respectively, to be compared to Sweden's 450 deaths per million (Worldometer, June 4). Sweden thus reports more than four times the Danish COVID-19 death numbers; more than 10 times the Norwegian number; and about eight times the Finnish number of 58.

The combination of a liberal containment strategy and an exceptionally high death toll pattern begs questions of causality and why the Swedish public health authorities recommended this strategy. The main factor underlying this choice of containment strategy was not to protect the economy. Sweden is a trade-dependent economy and the global recession meant that overseas demand for Swedish products has plummeted, as has the import of components for the manufacturing industry. Instead, it appears as if the liberal strategy emphasizing personal responsibility was believed to be best suited for the Swedish culture and social behavior.

The public health authorities emphasized that its recommendations were strictly evidence-based. Evidence, by definition, draws on past experiences and hence easily leads to analogy thinking. Institutions facing a crisis sometimes tend to, consciously or subconsciously, think in terms of analogies in order to quickly come up with a plan for managing the crisis (see Boin et al., 2006). However, while the heuristic value of the analogy strategy hinges on an analysis that the present crisis is in fact of a similar nature as a crisis handled in a previous time, that analysis is rarely conducted properly. There is a possibility that the architects of the COVID-19 containment strategy saw this pandemic as similar to the H1N1 or the SARS pandemic in terms of the speed of dissemination of the virus and devised the current strategy accordingly. Key strategic decisions and recommendations might have been made with at least some reference to past pandemics without a thorough investigation of whether the new Coronavirus behaved similarly to previous such viruses or influenza viruses. We will return to this issue later.

Was the Swedish pandemic strategy appropriately designed? Has it been successful? It is, to reiterate a point made earlier, in some ways premature to assess the appropriateness of Sweden's COVID-19 strategy. The PHA argues that countries that chose to lock down their societies, like for instance neighboring Denmark, Norway and Finland, will experience an increasing death toll once they open up their lockdown and that their death toll will even out in the longer run. Elaborating this view, former state epidemiologist and current advisor to PHA and the WHO Johan Giesecke (2020) argues that 'our most important task is not to stop spread (*sic*), which is all but futile, but to concentrate on giving the unfortunate victims optimal care'. Fatalism aside, the perspective that more or less the entire population will contract the virus at some stage sustains the idea that in

addition to protecting the healthcare system and the elderly, herd immunity is an important by-product of the containment strategy.

This leads us to an assessment of the theory underpinning Sweden's strategic choices. By late May, the percentage of the population that had contracted the Coronavirus remains around 10% or less. Given that the Coronavirus has been found to be highly contagious, this was an unexpectedly low percentage. The limited spread of a highly contagious virus, or more correctly, the strong regional variations in the spread, is a major puzzle in and of itself. State epidemiologist Tegnell has pointed out in numerous press briefings that the Coronavirus does not behave like most similar viruses. Contracting the virus can affect different individuals to vastly varying degrees, ranging from few or unnoticeable symptoms to death. That means that people can carry the virus and transmit it without their knowledge.

Also, the outbreaks of COVID-19 have been distinctly localized. Epidemiologists still do not know what explains these two patterns. Even so, both of these factors were inconsistent with the theory that underpinned the Swedish containment strategy. Thus, if we assume that there was some degree of analogy thinking that sustained the COVID-19 containment strategy, herd immunity, 'flattening the curve', and protecting old and weak people, which would have been key components of such a strategy were less efficient than expected.

Advocates of the Swedish containment strategy suggest that the Swedish death toll will decline in late 2020, when herd immunity has been achieved (Giesecke, 2020). They also suggest that we are likely to see mortality rates spike in previously locked down countries once they begin to roll out an 'exit strategy'. Thus, former Swedish state epidemiologist Johan Giesecke (2020) argues that the final assessment of which strategy proved better cannot be done until probably sometime in 2021.

While many aspects of the design of the strategy make sense, the execution of the strategy raises several questions. Perhaps most importantly, a key objective in the PHA strategy has been to ensure that the elderly, in nursing homes and elsewhere, are protected from the virus. This objective, which state epidemiologist Anders Tegnell describes as 'our biggest problem area', has clearly not been achieved (Orange, 2020). While it was clear early on that older people (70+ years of age) and/or people suffering from diabetes, hypertension or respiratory diseases are particularly susceptible to COVID-19, measures to protect this cohort were few and late to be implemented. The PHA apparently grew frustrated by what it perceived as a lack of training and equipment among nursing home staff, but as nursing homes operated under the auspices of local authorities, the PHA lacked any formal levers to correct those problems. The control span grew even further as several local authorities had contracted out parts of the elderly care to private service providers.

There is much to suggest that the main cause for the very poor performance of nursing homes and other elements of elderly care is related to the institutional arrangements in Sweden discussed earlier. The constitutional division of authority between the state, on the one hand, and regional and local government on the other also meant that the PHA and the NBHW – the two key agencies in the public healthcare sector – were poorly informed about the status of the stockpile for PPEs and other essential equipment at other tiers of government. For instance, when information about the lack of PPE in nursing home reached the PHA, there was noticeable frustration with the performance of

local authorities. It seems clear that while the multi-level institutional arrangement in healthcare and elderly care works fairly well under normal circumstances, it suffers from structural coordination problems which surface in times of crisis when the time elapsed from decision to execution is critical to a successful outcome.

Inspired by New Public Management 'just-in-time models', cities and regions had reduced stockpiles, often to a bare minimum. When local and regional authorities began exploring the market for personal protective equipment (PPE) they soon realized that many of the products they needed were in huge global, and domestic, demand. The shortage of PPEs left staff, and thereby senior people, in nursing homes unprotected.[2] Also, high levels of staff turnover, often with very limited training and occasionally with only a very basic proficiency in the Swedish language, exacerbated the problems in the nursing homes. Thus, one of the key strategic goals and preconditions for a successful implementation of the Swedish COVID-19 strategy – protecting the elderly – failed to a large extent (see Orange, 2020).

Another key aspect of the strategy was that people not showing any symptoms of contracting the coronavirus could move about in society and go to work, while observing social distancing; 'stay at home if you have any symptoms'. However, it soon became apparent that asymptomatic people could not just carry but also transmit the virus. This was a nothing short of a game changer and a serious blow to the limited mitigation strategy. If anyone in any social context could transmit the virus to other people, containing this highly contagious virus became virtually impossible.

Together, these two significant flaws in the Swedish COVID-19 pandemic strategy – overestimating the capacity of nursing homes to protect the elderly and underestimating the risk of asymptomatic people transmitting the virus – have caused significant problems to the containment of the virus. In addition, Sweden, like many other countries, shares the problem of facilitating mass testing. It could be argued is that the Swedish containment strategy allowing people to move about more freely in society created a bigger need for extensive testing compared to a more restrictive and mitigated strategy. The failure to quickly put a testing regime in place quickly – something which comparable countries like Denmark and several other countries had achieved – meant that public health authorities lacked critical information that could have informed strategic choices.

As we have argued throughout this paper, the Swedish culture has for a very long period of time has been defined by its collectivity, homogeneity and consensualism (Arter, 2006; Elder, Thomas, & Arter, 1988; see also relevant chapters in Pierre, 2015). This culture has been conducive to subtle but efficient social and institutional signaling. Thus, despite the fragmented nature of the Swedish institutional system, coordination among central government institutions, or between central and subnational governments, has for the most part been conducted to a large extent through informal means but has nonetheless been efficient. Similarly, state institutions have been able to shape social behavior by using subtle instruments.

The containment of the COVID-19 pandemic so far suggests that this model of conducting coordination, particularly in times of crisis, has become less efficient and

[2]The lack of facemasks and other personal protective equipment became a problem to the Work Environment Authority (WEA, *arbetsmiljöverket*) requiring such equipment to be used in this type of situation. After consulting with the employer, the Swedish Association of Local Authorities and Regions, however, the WEA change its ruling from a requirement to a recommendation, triggering massive criticism.

reliable. Within the public sector, coordination among agencies, regions and local authorities seems to work reasonably well during normal circumstances but less so in times of crises. 'Soft coordination', i.e. coordination among autonomous institutions, takes time. While such processes ensure that all actors are on board a joint project, it is not a model of management that is geared to manage crises where speed and compliance are of the essence.

In terms of ensuring social compliance to government and official recommendations, there are now indications – e.g. recent studies by the Swedish Civil Contingency Agency, MSB – that the public is becoming less responsive to government recommendations or advice. It is difficult to explain why this is happening, particularly as institutional trust overall remains high in Sweden.

Towards comparative analysis

An important purpose of this Special Issue is to lay the groundwork for a broader comparative assessment of national strategies to contain and manage the COVID-19 pandemic. The analytical focus is on the role of expertise, particularly the confidence experts had in their assessments of the pandemic.

In Sweden, the message from senior Cabinet ministers very early in the pandemic was they would take advice from the experts, i.e. the PHA and NBHW staff, on key issues, not least whether to lock down or continue to allow movement while maintaining social distancing. While we have no first-hand information on how confident the epidemiologists in the PHA were in their analysis and the strategic recommendations that followed from that assessment, the consistency of their recommendations suggests that the degree of confidence was high. There also appears to have been a high level of confidence in the healthcare system to handle the pandemic, provided that the mitigation could 'flatten the curve', i.e. keep the number of COVID-19 patients sufficiently low in order for the system to sustain the flow of patients.

The apparent inaction, compared to most other countries, was however less an indication of a slow or weak response but more of a deliberate evidence-based strategy.[3] The PHA epidemiologists were concerned that a complete lockdown would not be sustainable in the longer run but that it could lead to increased societal psychological issues, depression and increased domestic violence. Furthermore, the epidemiologists apparently did not see any reason to question the capacity of local authorities to manage nursing homes appropriately in terms of protecting the elderly and the staff; nor did they appear to be worried about the stockpile of PPE managed by the regions.

In sum, from what we have heard from the PHA experts, it seems clear that the response was not slow or poor. The response followed a playbook based on previous experiences of handling pandemics, protecting social groups that were susceptible to the virus and also ensuring that the healthcare system could accommodate the growing number of patients.

[3]If anything, the strategy was almost *too* evidence based; only measures which were support by hard empirical evidence were considered while more precautionary measures that were not equally supported by hard evidence were not implemented.

In hindsight, it appears as if there are two broad sets of issues where the early analysis may have been incomplete or flawed. One issue relates to the Coronavirus, particularly how contagious it is. We have already mentioned that although not a goal in itself, herd immunity has been seen as a by-product of the limited mitigation strategy. The Coronavirus has proven to behave differently than previous flu viruses and achieving herd immunity has turned out to be much more long term than was previously thought to be the case. Also, as previously mentioned, the initial strategy was based on the assumption that only people displaying symptoms of COVID-19 were carriers and transmitters of the virus. This assumption was soon falsified, urging a change of some elements of the mitigation strategy.

The other issue relates to the HPA assumptions about the preparedness and capacity of subnational governments to tackle the pandemic. These assumptions have proven to be much too optimistic. While the healthcare system has performed well, elderly care has been a major problem, with a very large number of senior people in nursing homes, but also members of staff, contracting the virus.

These two circumstances – the unexpected features of the Coronavirus compared to previous virus-based pandemics and the poor performance of primarily local authorities – were serious blows to the containment strategy rolled out by the PHA and NBHW. There was confidence in the measures that comprised the strategy but perhaps more confidence than a closer inspection would have warranted. Annika Linde, the state epidemiologist between 2005 and 2013 and highly critical of the management of the COVID-19 pandemic, argues that in hindsight a one-month lockdown in Sweden early on when the pandemic first hit would have bought politicians and experts valuable time to assess the situation and to carefully design a strategy, a game plan, to tackle the crisis (*Dagens* Nyheter, 2020c). Instead, she suggests, we ended up in a blame game and failed to stop the inflow of travelers from COVID-19 hotspots in Italy and Iran. The lockdown time could also have been used to gather information on the virus to see whether any analogy with previous similar pandemics was relevant. Again, it is anybody's delight to conduct analyses with all the facts on the table, but even so there is much to suggest that a month of lockdown might have provided the PHA experts with additional and extremely valuable data on the nature of the Coronavirus.

An important takeaway from the Swedish case is that the complex and negotiated relationships between the national public health authorities, the autonomous regions and the also autonomous local authorities are not a perfect institutional system for addressing crises such as pandemics. The system performs well in fair weather, allowing for the inclusion of actors and stakeholders across society, but less so in more challenging situations when strict command lines are required to ensure swift and concerted action.

Concluding discussion

As we have stated several times in this paper, the phenomenon under study is still very much evolving. This makes more definitive assessment of the containment strategies adopted by different countries very difficult. This would arguably be particularly important for an assessment of the Swedish containment strategy, as it did not include an early lockdown but rather allowed for a mitigated spread of the virus in the country. This strategy could generate higher death numbers in the early stages but the curve would

soon flatten. Meanwhile, countries that opted for a complete lockdown would report fewer deaths in the early stages of the pandemic but higher numbers when they opened up the lockdown. So far, neither of these developments have taken place; Sweden still reports high death numbers while Scandinavian neighbors are now gradually opening up and maintaining their record of very moderate fatalities.

The Swedish case of addressing a pandemic stands out internationally, both in terms of its liberal views on constraining social movements and interactions; the instruments used to implement the strategy, and also in terms of the death toll. The big question to investigate once the pandemic is bought under control is to what extent these three factors are causally related in any way. It is certainly tempting to assign causality among the limited mitigation and the number of Corona cases but only a very careful analysis can establish whether that theory is true.

The state epidemiologist Anders Tegnell acknowledged in an interview with Radio Sweden on 2 June that 'if we were to encounter the same disease, with the knowledge we have today, we would probably have to implement a strategy about halfway between what Sweden did and what the rest of the world did'.[4] Thus, the containment strategy was designed very early and was presumably designed drawing on evidence from influenza pandemics and other previous virus pandemics such as H1N1. With more extensive knowledge about the specific behavior of the Coronavirus, Tegnell said, the strategy would have included strategically selected sectors of society that would have been locked down for some period of time. That sequence of actions echoes what Tegnell's predecessor as state epidemiologist, Annika Linde, advocated; that the public health authorities should have imposed a lockdown at a very early stage of the pandemic to gather knowledge about the behavior of this particular virus, and only then outline a containment strategy that would have responded more efficiently to the pandemic.

Arguably, the potential for cross-national learning in the case of pandemic containment strategies is fairly limited. Given that the overarching objective of such a strategy is to alter social behavior, strategies must depart from the pre-existing patterns of behavior and the inclination among citizens to follow government guidelines. In some cultures, such guidelines have to be enforced with severe sanctions for those who ignore the guidelines whereas in other cultures the government can rely on using more subtle means. Sweden would fall into the latter category of countries.

The final analysis of Sweden's strategy to contain the COVID-19 cannot be conducted until late 2021, at best. It is still anybody's guess when societies hit by the pandemic will be able to return to normal. The question of what can be learned from this crisis can be answered first when in-depth analyses, as well as comparative studies, have been completed.

Author's note

I am a political scientist, not an epidemiologist. My main sources for this paper, in addition to those cited and referenced, are the daily press briefings and media interviews with key agency officials. Doing personal interviews with key officials has, for obvious reasons, not been an option.

[4]Present author's translation. Tegnell later modified this statement, saying that there is always 'room for improvement' ('*förbättringspotential*') in any containment strategy.

My comments on issues like the contagiousness of a virus, antibodies or the requirements for herd immunity are thus based on a very shallow, if any, knowledge on these matters.

I am extremely grateful for comments on an earlier draft of this paper from the editorial team, particularly Darryl Jarvis; from the reviewers; and from the participants in a webinar organized by Jae Moon at the Yonsei University.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Jon Pierre is Professor of Political Science at the University of Gothenburg, Sweden and adjunct professor at the University of Pittsburgh. He has also served as Chair in Politics at the University of Strathclyde 1996-1999 and as Professor of Public Governance at the University of Melbourne, 2013-2018. His field of expertise is public administration, public management and urban politics. His most recent books in English *Comparative Governance* (Cambridge University Press, 2016) (with B. Guy Peters); *Governing the Embedded State* (Oxford University Press, 2015) (with Bengt Jacobsson and Göran Sundström); and (ed) *The Oxford Handbook of Swedish Politics* (Oxford University Press, 2015). His work has also appeared in journals such as *Administration and Society; Governance; Journal of Public Administration Research and Theory; Journal of European Public Policy; International Review of Administrative Sciences; Public Administration; and Journal of Politics.*

References

Adam, C., Hurka, S., Knill, C., Peters, B. G., & Steinebach, Y. (2019). Introducing vertical policy coordination to comparative policy analysis: The missing link between policy production and implementation. *Journal of Comparative Policy Analysis*, *25*, 499–517.

Arter, D. (2006). *Democracy in Scandinavia: Consensual, majoritarian, or mixed?* Manchester: Manchester University Press.

Barrett, D. (2020). Sweden's Covid harm reduction strategy. *Medium.com*.

Boin, A., Hart, P., Stern, E., & Sundelius, B. (2006). *The politics of crisis management: Public leadership under pressure*. Cambridge: Cambridge University Press.

Einfeld, C. (2019). Nudge and evidence based policy: Fertile ground. *Evidence & Policy*, *15*(4), 509–524.

Elder, N., Thomas, A. H., & Arter, D. (1988). *The consensual democracies: The government and politics of the Scandinavian states*. Oxford: Blackwell.

Giesecke, J. (2020, May 5). Correspondence: The invisible pandemic. *The Lancet*, *395*(10238), e98.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, *78*(6), 1360–1380.

Jacobsson, B., & Sundström, G. (2015). Governing the State. In J. Pierre (Ed.), *The Oxford handbook of Swedish politics* (pp. 347–364). Oxford: Oxford University Press.

March, J. G., & Olsen, J. P. (1989). Rediscovering institutions: The organizational dimension of politics. New York: Free Press.

Niemann, C. (2013). *Villkorat förtroende: Normer och rollförväntningar i relationen mellan politiker och tjänstemän i Regeringskansliet* [Conditioned trust: Norms and role expectations in the relationship between politicians and civil servants in the central government office]. dissertation. Stockholm: Department of Political Science, Stockholm University.

Nyheter, D. (2020a). Folkhälsomyndigheten har misslyckats—nu måste politikerna gripa in [The Public Health Agency has failed, politicians must now step in] (op-ed), April 24.

Dagens Nyheter, D. (2020b). Flockimmunitet är en farlig och orealistisk coronastrategy [Herd immunity is a dangerous and unrealistic corona strategy] (op-ed), May 14.
Nyheter, D. (2020c). Annika Linde: En månads stängning hade gett oss tid [Annika Linde: A one-month lockdown would have bought us time], May 19.
Orange, R. (2020), "Anger in Sweden as elderly pay price for coronavirus strategy", *The Guardian*, April 19.
Page, E. C., & Jenkins, B. (2005). *Policy bureaucracy: Government with a cast of thousands*. Oxford: Oxford University Press.
Pierre, J. (ed). (2015). *The Oxford Handbook of Swedish Politics*. Oxford: Oxford University Press.
Rockman, B. A., & Weaver, R. K. (eds). (1993). *Do institutions matter: Government capabilities in the United States and Abroad*. Washington, D.C.: The Brookings Institution.
Toshkov, D., Yesilkagit, K., & Carroll, B. (2020). Government capacity, societal trust or party preferences? What accounts for the variety of national policy responses to the COVID-19 pandemic in Europe?. unpublished paper. University of Leiden: Institute of Public Administration).
Trägårdh, L. (2020), "Why Might Sweden's Covid-19 policy work? Trust between citizens and state", *The Guardian*, April 21.