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Abstract

Purpose
From the late 1980s and onwards health care in Sweden has come under increasing financial pressure, forcing policy makers to consider restrictions. The aim of this paper is to review experiences and to establish lessons of formal priority setting in four Swedish regional health authorities during the period 2003-2012.
Design/methodology/approach
This paper draws on a variety of sources, and evidence is organised according to three broad aspects: design and implementation of models and processes, application of evidence and decision analysis tools, and decision making and implementation of decisions.
Findings
The processes accounted for here have resulted in useful experiences concerning technical arrangements as well as political and public strategies. All four sites used a particular model for priority setting that combined top-down and bottom-up driven elements. Although the process was authorised from the top it was clearly bottom-up driven and the template followed a professional rationale. New meeting grounds were introduced between politicians and clinical leaders. Overall a limited group of stakeholders were involved. By defusing political conflicts the likelihood that clinical leaders would regard this undertaking as important increased.
Originality/value
One tendency today is to unburden regional authorities of the hard decisions by introducing arrangements at national level. This study suggests that regional health authorities, in spite of being politically governed organisations, have the potential to execute a formal priority-setting process. Still, to make priority setting processes more robust to internal as well as external threat remains a challenge.

Introduction

From the late 1980s and onwards health care in Sweden has come under increasing financial pressure, forcing policy makers to consider restrictions. Adaptation to a new climate of austerity has, however, taken place *within* existing policy arrangements (Hacker, 2004). Hence, the framework in which the population benefits from universal coverage in a tax financed national health services type of system, with a regionalised structure, has remained virtually unchanged (Magnussen *et al.*, 2009). Within the 21 directly elected regional authorities (county councils) politicians are formally accountable to the population for the distribution between service areas. Although formally independent, the regional authorities cannot be described as equal partners with central government, as the latter can always use its legislative power. The regional authorities and their decision makers are not only affected by frequent initiatives coming from central government to increase quality in health care, but also by fluctuations in the local tax base. One effect of this system of fiscal decentralisation and central government regulation has been a chronic deficit in the finances of the regional bodies (Rehnberg *et al.*, 2009, SALAR, 2015).

Taking the longer view the challenges for the publicly funded health service are gigantic. A recent report from the association representing the regional and local health authorities (SALAR, 2010) dismissed the option to further increase already high taxes and argued in favour of new funding opportunities, efficiency measures and not least, explicit priority setting.

Sweden is one of a few countries where health care politicians can seek guidance in ethical principles (human dignity, need-solidarity and cost-effectiveness) issued by Parliament when setting priorities in health care (Ham, 1997). Apart from highlighting the ethical principles, the parliamentary decision states that priority-setting activities should be explicit and give patients and citizens opportunities to be informed and to influence policy making (NCPS, 2008). Furthermore, the National Guidelines for severe often chronic diseases, issued by the state agency, the National Board of Health and Welfare, draws on a formal model for the appraisal of severity level, patient benefit and cost effectiveness that can be traced back to these ethical principles. The guidelines are intended to serve as an input to regional and local health care resource allocation. Still the standard operating procedure for resource allocation in Swedish health care is not one of explicit priority setting, where a comprehensive process is applied across service areas and where the results are clearly accessible for the public (NCPS, 2008).

There are, however, exceptions in the last decade where Swedish health authorities have engaged in more formal and transparent ways of setting priorities. In the 1980s many authorities introduced a purchaser-provider split, and in the 1990s “medical programmes” were introduced, with the intention of identifying health care needs in the population (Kernell Tolf *et al.*, 2003). This paved the way for an increased dialogue with clinical leaders on the allocation of resources within and between service areas, and a more developed commissioning. In some cases this was followed by formal priority setting. A majority of regional health authorities appearing in this study took this route. Östergötland was the first county council in Sweden to arrange a formal priority setting process in 2003. Having drawn their lessons from this first event of formal priority setting a group of health authorities followed in the years 2008-2009, among them Västerbotten, Västmanland and Kronoberg. A few other regional bodies in Sweden engaged in formal priority setting in similar ways. After a period of lesson drawing Östergötland reorganised its process in the following years.

Still, formal and explicit priority setting remains controversial among regional authorities as it is considered too complicated, politically risky and time consuming to be attractive (Garpenby and Bäckman, 2013).

Priority setting is sometimes regarded as the "technical" application of evidence concerning "what works" but as will be shown here a real life process is a balance between searching for and processing information, coalition building between actors and the joining of different rationalities

Referring to the debate between Klein and Williams (2000) on the role of information available for priority setting versus the institutional capacity of the decision-making bodies, Williams et al (2012:127) name this division "a false dichotomy". In real life a complex interplay exists between information and institution where "priority setters" working in national expert bodies – established to process scientific information – and in local health authorities, respectively, face very different conditions. To local decision makers' information is only one component and has to be considered in the light of many, not least of which are external factors such as e.g. what the community can accept. Hence, as Williams et al (2012:128) conclude:

> "Information is only as influential as politics, institutions and values allow."

Key players in healthcare priority setting are usually non-elected officials and clinical leaders but the process is inevitably, as noted by Klein (2010) and Berg and van Grinten (2003), political, since values are always in play here. In the Swedish context the political nature of priority setting is always present, as directly elected politicians appear at regional level, responsible for the healthcare mix available to the public. In that case the priority-setting process has to be "relational" (Williams et al 2012:115) considering the fact that politicians and professionals represent different ways of approaching problems and thus different and sometimes competing types of "rationales" (Lin, 2003).

As information in priority setting does not represent simple "truths" but has to be administered throughout the process, this will place a high demand on relationship building, as the key to success. In this paper we will show that priority setting in a regional context is an integrated process where many pieces must fall into place.

The priority setting process – key aspects

In the literature a range of aspects are highlighted when accounting for priority-setting activities. Ham and Coulter (2001) summarising experiences of priority setting/rationing around the world, conclude that "decision-making processes", "technical approaches", and "the involvement of stakeholders" are all important. Drawing on experiences from the English National Health Service, Robinson *et al.* (2012a, 2012b) mention four key areas: the design of decision-making mechanisms and processes, the application of evidence and decision-making tools, the generation of meaningful and appropriate stakeholder involvement and leadership. Smith *et al.* (2013) when investigating resource allocation processes in Canada include other aspects, such as explicit internal communication plans and a system to inform the public and external stakeholders. Additionally there are suggestions that the actual decisions and the implementation of decisions ought to be considered (Williams *et al.*, 2012). In this paper they are arranged into three broad categories.

Design and implementation of models and processes

The keystone of a more formalised priority-setting exercise is said to be the formation of a process allowing for the interaction between stakeholders, with an input of different types of knowledge and evidence, recognising the political and social environment (Williams *et al.*, 2012). Of outmost importance is the question who is allowed to take part in and influence the process. According to Williams *et al.* (2012) priority setting should be treated as a "wicked issue", where relational leadership is favoured in order to help staff members make sense of difficult choices and enable them to develop an understanding of the political nature of resource allocation where the building of alliances is important. If politicians explicitly endorse policies that could be unpopular they are inclined to engage in strategic manoeuvres in the political and in the public sphere (Wenzelburger, 2011). In the first case, such manoeuvres are dependent on the institutional setting, e.g. the expected resistance among coalition parties and the force of political opposition. In the second case, launching a risky programme in the right way is important, not least in pursuing the right message when communicating directly with the public or through the media. The need to strengthen the medical leadership in times of austerity has also been emphasised (Harrison and Mitton, 2004; Dickinson *et al.*, 2013). Physician participation on priority-setting panels/boards is, however, an intricate business and there is always a challenge to having clinicians work together for the formulation of a 'shift list' of options for disinvestment and resource release (Mortimer, 2010). It is increasingly in vogue to insist on extended stakeholder involvement in priority setting and numerous techniques exist that could be used to involve the public, e.g. communicative forms (the one-directional transferring of information to citizens), consultative models (the collection of opinions and preferences) and participatory forms (interaction between the public and decision-makers) (Rowe and Frewer, 2005). In spite of the widespread quest for public participation citizens remain largely outside of decision-making structures and processes (Williams *et al.* (2012).

The application of evidence and decision analysis tools

A wide variety of techniques have been suggested for priority setting. Methods that combine different types of evidence or considerations have gained in popularity. One prominent example, drawing on economic theory, is programme budgeting and marginal analysis (PBMA) (Mitton *et al.*, 2014). As health care is a giant organisation it will have implications on how service areas, services and technologies are defined and divided when a priority-setting/rationing exercise is on the agenda, how the pieces are grouped together and what trade-offs are made. The categories used must make sense to those making the decision and possibly also to key constituencies, to whom the decision makers are accountable (Giacomini, 1999).

Decision making and implementation of decisions

The setting of priorities can result in either a decision to disinvest, to invest or to re-allocate resources within or between service areas. Disinvestment can take different forms: the full withdrawal/decommissioning of services, services for some population/patient groups are restricted on the basis of particular criteria, reduction of the amount of a particular treatment (retraction), and the replacement of treatments or services with alternatives (substitution) (Daniels *et al.*, 2013). The withdrawal or substitution of services need not, however, result in rationing but can result in efficiency savings. Decision makers can choose either to re-invest all or part of the resources into the same service area, or re-invest across service areas. In some cases there are no explicit decisions to disinvest, but instead a decommissioning strategy to move resources from e.g. hospital to community based services, i.e. substitution (Robinson *et al.*, 2012b)

The institutional framework of priority setting must facilitate implementation of the actual decisions and this in turn requires better information on outcome and impact (Williams *et al.*, 2012). There are challenges for the health care organisation to change the practice once a formal decision has been taken as part of priority setting (Robinson *et al.*, 2011).

Methodology

There is no single study dealing with the process in all four counties. What's available is a series of reports conducted by the Swedish National Centre for Priority Setting in Health Care (NCPS), a government sponsored body with the task to support development and transfer of new knowledge on explicit priority setting in health care. A majority of the studies were commissioned by the respective regional authority but carried out as independent evaluations by the NCPS using different techniques:

- *Östergötland*; semi-structured interviews, non-participant observations and examination of documents (Bäckman *et al.*, 2004, Bäckman, 2013); semi-structured interviews and examination of documents (Bäckman *et al.*, 2006, 2008).
- *Västerbotten*; semi-structured interviews, non-participant observation and examination of documents (Broqvist *et al.*, 2009).
- *Kronoberg*; semi-structured interviews, examination of documents and survey (Garpenby *et al.*, 2010)
- *Västmanland*; in-depth interviews of key persons, examination of documents, participant observations and survey (Östling *et al.*, 2010).

In these cases semi-structured interviews were conducted, purposeful sampling (key personnel) was used and the participants were politicians, public officials in the regional health service and health care professionals, mostly clinical managers. All interviews were digitally recorded and fully transcribed verbatim. Qualitative interview data was analysed using a data-driven thematic approach, as in Östergötland, Västerbotten and Kronoberg (Boyatizis, 1998).

Surveys were used in Västmanland and Kronoberg and both quantitative and qualitative data was obtained from the survey instrument. Questionnaires in Kronoberg were sent to 146 participants and the target population consisted of the political steering group, the standing committee, the medical committee, all unit managers and a sample of members in the sub-groups under the medical committee. The target group in Västmanland was the politicians in the executive committee, the management committee, all unit managers and a sample of health care staff – in total 471 people. In both sites the questions focused on the perceptions of the process and its result, views on openness in priority setting and future expectations of resource allocation. Quantitative data was analysed as descriptive statistics (Ott and Longnecker, 2010).

Non-participant observations were used in Östergötland and Västerbotten, whereby researchers attended a series of priority-setting meetings with politicians, senior administrators, medical advisors and clinical managers (Östergötland) and a three-day priority setting meeting with clinical management (Västerbotten). Detailed field notes were written close to the meetings where dialogue and the communication lines generated were noted down. In Östergötland an observation scheme was used but at the same time the observation remained flexible to the process. An analysis was carried out on the transcriptions of the meetings using a data-driven thematic approach (Boyatizis, 1998).

The study in Västmanland was carried out as participatory action research (Greenwood and Levin, 1998), whereby the researchers collaborated closely with senior decision makers throughout the priority-setting process to establish the research agenda and generate knowledge throughout the process. Qualitative data collection methods included document review, participant observation and in-depth interviews close to the priority-setting meetings.

Documents that relate to the priority-setting process include political intentions and other instructions, blueprints for the process, decision support and information on the processes in printed or electronic versions. We have reviewed the evaluation reports and documents from the regional authorities to find comparable information about key aspects of the process, in order to come to conclusions on similarities and differences between the four sites.Apart from this we have used documents that deal with the outcome of the implementation of priority setting decisions.

Results

Below we examine formal priority-setting experiences from the county councils of Östergötland (pop. 400 000) year 2003 and 2012, Västerbotten (pop. 260 000) year 2008, Västmanland (pop. 250 000) year 2009 and Kronoberg (pop. 180 000) year 2009. Findings are discussed in three sections, drawing on the aspects presented above. The first examine the design and implementation of models and processes in terms of (a) aim of the process, (b) the overall framework of the process, (c) involvement of and leadership among key actors, and (d) efforts to engage external actors including the public. The second explores the application of evidence and decision analysis tools, while the third section considers the final decision-making and the implementation of decisions.

Design and implementation of models and processes

Aim of the process

In 2003 when Östergötland completed the first ever comprehensive priority-setting process in Sweden, the aim was strictly to limit the supply of health care interventions in order to avoid an economic deficit (ÖCC, 2003, 2004). Five years later the conditions for priority setting in Sweden had changed. Although the health authorities were struggling with deficits, elected and non-elected leaders had become aware of the necessity to frame priority setting in a different way. Västerbotten in 2008 changed the aim to let new investments match the sum of disinvestments to achieve reallocation. Focus of the priority-setting processes shifted from urgently handling a deficit to developing healthcare for the future. As part of this a list was developed for investment in parallel to disinvestment, though in a less structured manner. In Västerbotten proposals for disinvestment were to be “clean”, and not include efficiency measures, while Västmanland in 2009 allowed also efficiency savings to be handled alongside decommissioning or reduction in the same process. Although Västmanland first wanted to use the process for reallocation of services it was eventually used entirely to make savings on account of a soaring budget deficit. In Kronoberg efficiency savings were part of the process but were handled separately from the disinvestment proposals. In contrast to this, Östergötland in latter years decided to focus first on reallocation and most recently towards identifying new health care needs and new investments only.

Overall framework

At all four sites the priority-setting process had a similar framework that remained unchanged over time. It was coherent with a clear beginning and end and in most cases organised alongside the ordinary system for resource allocation. Each authority had its strictly prepared agenda for how the different phases should link into each other.

Authorised by the political leaders of the regional authority, the process was driven forward by numerous proposals that were brought together within the many units providing clinical and non-clinical services. Basically the process consisted of three phases: First, the unit managers created a rank order among treatments and services, using a formal model with a 10-level scale (following the scoring model in the National Guidelines (see *Introduction*) where 1 indicates the highest priority and 10 the lowest). In this model each item (proposal) is allocated its rank order (1-10) by weighting together what is known about severity of condition, patient benefit and cost-effectiveness. Although scientific evidence should be used when available, the actual ranking became, as will be shown below, a matter of judgment among different actors. Next, the proposals were classified and examined by medical experts, senior administrators and in some cases politicians. Finally, decisions on the bulk of proposals were left to a committee of 10-15 people, who could be politicians or administrators, to decide. In Kronoberg the arrangements differed from the other sites in two ways: (a) they were firmly rooted in the line organisation and were not, as in the other cases, part of a temporary organizational structure for accomplishing formalised priority settings, and (b) the role of the politicians was solely to authorise the process but not to decide on particular proposals for disinvestment. The health authorities chose to operate on tight timelines and the process varied from 5 to 12 months.

Political leadership

The degree of political involvement in the process differed between the four sites. In some cases regional politicians had a major role (in Västerbotten, Västmanland and the first year in Östergötland), where they collaborated closely with senior administrators and clinical leaders, discussed specific proposals and took full responsibility for the final decision-making stage. In later years the politicians in Östergötland took part in discussions with clinical leaders but did not engage in detailed processing of the proposals, while in Kronoberg, as mentioned above, the politicians choose to distance themselves from the process.

In sites where politicians had a salient role, efforts to reach agreements across party lines proved to be of great importance. Strategies in the political sphere included: (a) a mutual endorsement of the overall objectives and design of the priority-setting process, (b) arrangements for political bargaining aiming at a unanimous decision and (c) in some cases efforts to downplay potential conflicts before appearing in public.

In three sites joint discussions were held between politicians and clinical leaders, occasionally named “Priorities Forum” or “Leadership Forum”. During 1-2 day sessions the ranking lists were reviewed and clinical leaders could argue for their decisions, whilst the politicians had an opportunity to ask questions and grasp what could be controversial in the proposals. Such arrangements were intended to build relationships between the different domains – the political and the clinical. As noted by politicians in Västerbotten and Östergötland:

> “A priority-setting process cannot only be undertaken by politicians or only by the medical profession or only by the administration, rather one must cooperate.” (Broqvist *et al.*, 2009:75)

> "If one has this type of process, they [the clinical representatives] must actually be more responsive to what political goals one has established and what political orientations one has in the county council budget documents." (Bäckman, 2013:31)

Furthermore, representatives of the clinical leadership seem to have appreciated the opportunity to collaborate with politicians and peers from other service areas, as this quote from Östergötland indicates:

> "What is fascinating is that one lifts oneself to a completely different level at these conferences than you might do in everyday working life. Because you also see that there is a lateral responsibility, you see the whole of the county council, that it is so large and complex and there are so many different activities. One focuses not only on one's own business, _ _ _ " (Bäckman, 2013:45)

Professional leadership

Although health care staffs are made up of different professionals, the clinical leadership involved in the priority-setting arrangements was dominated by physicians at all four sites. In the first stage of the process – the scoring of treatments or services within specific clinical units – there were occasionally broader groups of professionals involved, but in later phases narrow groups – dominated by physicians – reviewed and decided on the remaining proposals.

In all sites a system for peer-review was used, where proposals and lists were examined across specialities with the intention of achieving a common understanding or a more consistent ranking. The peer-review was directed entirely towards the quality of the individual proposals and not their appropriateness for the entire health service. For example, in Västmanland professionals verified whether: the objects were reasonably described, the estimation of the potential savings was credible, and the consequences of disinvestments were reasonably described for the understanding of politicians and the public.

Administrative leadership

In some cases senior administrators acted as intermediaries between clinical leaders and the politicians, by making adjustments in the proposals, or even removing proposals from the lists. Occasionally this caused frustrations, both among politicians and health care professionals, as this made the process unpredictable and less transparent. Clinical leaders found that proposals they had suggested were suddenly not on the list or the content had been changed. For example, in the first year in Östergötland, clinicians were puzzled over why some of the lower ranked treatments were left out while higher ranked were subject to disinvestment. In Kronoberg proposals considered to be "impossible for political or other reasons" were withdrawn from the lists before they reached the final stage, causing uneasiness among professionals who had not been informed as to why some of the proposals were accepted and others rejected. One senior administrator in Kronoberg noted:

> "We should perhaps have justified more decisions, but I feel that one should not need to sit and, in accordance with some formula, justify all decisions. Some you could say are quite obviously correct." (Garpenby *et al*., 2010:32)

Wider engagement

All sites made efforts to communicate with the public on priority-setting issues. For example, in Östergötland, during two years, more than 2000 citizens participated in meetings with politicians to deliberate on resource allocation in health care. Furthermore, the health authority arranged a citizen's jury to meet over two days to deliberate on the proper allocation of pharmaceuticals between patient groups. In 2009 when the priority-setting process was already under way, politicians in Västmanland held discussions with almost 700 citizens during city festivals and in libraries.

However, there are no indications that citizen views were used as an input in the formal priority-setting process. Regardless of whether the views of the public were sought through questionnaires, direct communication between citizens and their elected representative or through panels or citizen juries, the result seems to have been used mainly to prepare politicians for people's reactions or defuse potential criticism for not listening to the public. Stakeholders such as patient organisations, unions, local authorities (municipalities) and private contractors, were usually informed, but were in most cases not given opportunities to influence the process. Communication with the citizens was not of concern only to politicians but also to clinical leaders, as this statement from a member of the medical committee in Kronoberg suggests:

> "The general public must participate in the debate but it must in some way be controlled so that it is not the loudest voices that get the most. Can we in society find common goals/principles for priority setting? It is not enough that Parliament, the National Board of Health and Welfare and others produce finely formulated communications. As a citizen I must understand and accept that there are priorities other than helping me." (Garpenby *et al.*, 2010:84)

Neither formal appeals mechanisms nor opportunities for open public comment on decisions were part of the process at any of the sites. Citizens or organisations unhappy with the content of decisions were left to use whatever channels were available, such as turning directly to senior administrators or elected representatives in the county councils or use of the media.

The application of evidence and decision analysis tools

The work with priority setting in the four sites involved the gathering and processing of large quantities of information. Västerbotten in 2008 introduced targets in terms of percentages of the total net budget per provider unit that were stipulated throughout the process, to be used in a step-wise reduction of the proposals – something that was copied by Västmanland and Kronoberg. After the unit managers had separately identified the lowest ranked 10 percent of treatments or services, they were allocated to ten cross-specialty groups to discuss, and possibly adjust the rank order of the proposals for disinvestment, in order to reach the target of 4 percent of the total net budget. At the next step senior administrators scrutinised the list before it was handed over to three leading politicians, who further reduced the bulk of proposals in order to reach the final goal, disinvestments matching 2 percent of the net budget, and thus prepared for the final decision. At all sites "price tags" were attached to the different proposals irrespective of their character (treatments, services or administrative measures). In Västmanland meetings were held for economists, to discuss how templates for cost information should be used. However, savings were difficult to estimate as the proposals could be related to the reduction of only part of a particular service or the withdrawal of part of the staffing (this had implications for the implementation of proposals).

Evidence from interviews suggests that unit managers found it particularly difficult to find cost data, and to grasp how cost-effectiveness should be calculated. One clinical unit manager in Kronoberg concluded:

> "We have a very good Financial Manager and it is possible to pick out much more from the system than before. However to pick out exactly what individual measures cost, such as something as simple as blood pressure checks, cannot be coped with by the system." (Garpenby *et al.*, 2010:16)

When data was missing, rough estimations were made and accepted as input in the process. Lack of data, and these gaps filled by estimations, were the usual reason for variations in the quality of scoring lists (other common explanations were lack of dedication and analytical skills among unit managers and their assistants, complexities among treatments or services causing difficulties in judging facts). For example, in the second phase of the process in Västerbotten, the unit managers sitting on the cross-specialty groups, where they should compare the scoring and the evidence for a large number of proposals, experienced major difficulties. They considered the proposals to comprise both facts and values, to be premature or sometimes perceived them as "pure guesses". At this stage of the process the judgements were also perceived to be the result of a person's ability to present "facts". Mixed views can be found among the unit managers on whether the work in the cross-sectional groups was an honest effort among peers to do the best for the health service or if it was just a matter of reaching the targets without suffering too much damage in their own speciality. Still, in order to safeguard the process they were encouraged to show respect for each other and for the work put into the proposals. Similar experiences of developing and handling proposals were found in Östergötland. Clinical leaders in Kronoberg and Västerbotten sometimes had doubts about the quality of the proposals but still had the ambition to appear in professional unity:

> "There was no completely straightforward, one could say, formula to work with. This setting of monetary terms – it resulted in very notional amounts." (Garpenby *et al*., 2010:17)

> "Somewhere in some way we must state from Healthcare, what we should and should not do. And have some form of substantiated arguments for it. And a common approach in this context." (Broqvist *et al.*, 2009: App2)

Decision making and implementation of decisions

In all sites the priority-setting process implied dealing with a large number of treatments and services potentially subject to disinvestment, reallocation or new investment. For example, in Västmanland unit managers initially identified approximately 800 items, which throughout the process were gradually reduced to 230 in the political decision, (see Table 1). The character of the individual proposals varied with regard to number of patients affected, level of detail, and the potential for savings, (see Box 1). Proposals for disinvestment could take different forms (see Box 2).

If we borrow a term from Giacomini (1999), there were in fact three different "priority-setting algorithms" in play in all four sites. Only one was made explicit in official documents, namely the scoring system drawing on the National Guidelines template, i.e. severity level, patient benefit and cost-effectiveness.

In later stages of the process the aspects used in the sorting of items, (efficiency savings, need of dialogue etc.) originated from considerations among the non-clinical administrative leadership in the regional authority. Finally, in latter stages a "political algorithm" came into play with a focus on whether it was or was not possible to reach a consensus around certain proposals for disinvestment, due to party political considerations or considerations on whether the health service had the capacity to manage proposed changes i.e. in the case of a suggested transfer of care from secondary to primary care. How this "political algorithm" was put into effect practically varied between the four sites and was dependent on the degree of political involvement in the process. As noted above there were differences in this respect between the sites.

In sites where politicians had a salient role, efforts to reach agreements across party lines proved to be of great importance for securing decision-making capacity. Strategies in the political sphere included: a mutual endorsement of the overall objectives and design of the priority-setting process, arrangements for political bargaining aiming at a unanimous decision and in some cases efforts to downplay potential conflicts before appearing in public. As noted by one politician in Västerbotten:

> "It is important that we stick together, that we do our utmost to stay together all the way. So it is not just in the initial phase which later culminates in something quite different" (Broqvist *et al*., 2009:60)

Politicians could apply their "veto" to proposals they found undesirable. In the final decisions they usually preferred to lean heavily on the lists produced by the professionals whose judgments were supplemented with political considerations. One politician in Västerbotten concluded:

> "Confidence in the process must be strong" (Broqvist *et al*., 2009:60)

As was noted above the character of the content of the decisions varied quite a lot, which makes it difficult to determine whether they were in fact mandatory or should be seen as purely recommendations. For example, a decision to raise patient fees for particular treatments should be seen as mandatory, as this is clearly a political authoritative decision within the Swedish health service. On the other hand, a decision such as "stop doing other than acute operations and anaesthetics in duty time," or "reduce the number of caesarean sections without medical indication", is very much dependant on clinical judgment and current standards. On the whole, Västerbotten in its decisions, used the term "stop doing" while at the other sites the status of the final decisions was more open to interpretation. Interviews from Östergötland show that clinical leaders had different views on whether the decisions were an absolute ban on performing certain activities or simply recommendations.

One administrative leader on the standing committee in Kronoberg expressed worries about the implementation of decisions:

> "It is important that priority-setting decisions are implemented otherwise confidence will be lost in the future." (Garpenby *et al*., 2010:69)

Evaluation reports from three of the sites are available, showing that implementation of decisions on disinvestment in numbers or in terms of savings, seems to have been rather successful.

In Östergötland a major part (79 percent) of the decisions in the first round was considered as fully implemented after two years, while 17 percent had been partly implemented and 4 percent not implemented (Bäckman *et al*., 2006). In Västerbotten an internal follow-up of the decision from the 2008 process indicated that in economic terms 66 percent were implemented in 2009 and 49 percent in 2010 (outcome compared to estimated savings). In some disease areas, one or a few items representing major estimated savings have not been implemented (VBCC, 2011). Västmanland found that 60 percent of what had been decided was implemented, while 20 percent was partly implemented, mainly due to difficulties in executing disinvestments in full, but also because some of the decisions were found to have negative consequences that had not been previously predicted and therefore had to be revoked. Only 18 percent of what was decided was not implemented, due to inability to replace or restrict certain treatments or services, an unclear aim or miscalculation of possible savings (Elfvendahl, 2012). Although the final decisions could be implemented the actual savings/investments represented a tiny portion of the total budget, as shown in Table 1.

Discussion

In this paper we have reported on the experiences of formal priority setting in four Swedish regional health authorities in the period 2003-2012. To our knowledge, no previous studies exist taking the broader view on attempts of explicit priority setting at regional level in Sweden, drawing on evidence from many sites. In this section we draw together observations related to the aspects referred to earlier in the paper, connect to the literature on priority setting and discuss some of the wider implications.

Working with formalised priority setting proved to be a challenge for both professionals and politicians considering that new issues had to be confronted and that new relations were formed across specialities and party lines. The traditional type of interaction between key actors in Swedish regional health authorities – politicians, senior administrators and clinical leaders – came into question when proposals for disinvestment were made explicit. Although the process was authorised from the top it was clearly bottom-up driven and the template followed a professional rationale (Lin 2003). Politicians responded to the proposals, which the clinical leaders had agreed upon, but had little room for their own initiatives. Ultimately this was a question of trust – did the proposals and the decision making represent an honest attempt to weigh together clinical, ethical, economic and political factors? Obviously most effort went into securing “internal legitimacy” by refining the interplay between political, managerial and clinical leaders. Similar tendencies to restrict the “struggle for legitimacy” to stakeholders within the healthcare “family” have been observed in e.g. English PCTs (Robinson *et al.*, 2012a).

Strategies in the political and public sphere (Wenzenburger, 2011) were keys to the process at all sites and by defusing party political conflicts the likelihood that clinical leaders would regard this undertaking as important increased. Strategies in the public sphere consisted mainly of arrangements to create a climate of trust and thus make clinical leaders sympathetic to the process. It confirmed the importance of having medical leaders on board (Harrison and Mitton, 2004; Dickinson *et al.*, 2013) and was a necessary condition prior to disclosing the process to the public.

Locating and compiling clinical and cost data proved to be a delicate matter and obviously the quality of the information differed considerably in spite of the efforts to control and reassess data. Gaps in the information had to be filled with judgements. The problem of obtaining and assuring quality data is well known from priority-setting activities elsewhere (Robinson *et al.*, 2012a). The findings support Giacomini's (1999:749) observation that "the further this type of exercise is taken into administrative or public policy domains, the wider the set of envisioned 'opportunities' and potential trade-offs".

This study suggests that formal priority setting at the regional level in Sweden, to a very limited extent, has been dependent on the participation of a wide range of stakeholders. Leaders of Swedish regional health authorities in general seem to reject citizen participation in priority setting (NCPS, 2008). There are some examples of communicative and consultative forms (Rowe and Frewer, 2005) but their linkage to the actual process must be considered as weak. Difficulties integrating public views into the priority-setting process have been noted by others (Mitton *et al.*, 2011).

At all sites priority-setting activities embraced a broad range of disease and service areas with the aim of reaching decisions to disinvest and reallocate across service areas. In most cases, the arrangements were separated from the ordinary resource allocation process, something that probably helped to draw attention to the particular event among health care staff, but might have had implications for the implementation of decisions and the willingness to repeat the effort (Williams *et al.*, 2012).

Conclusion

Currently the Swedish health service has reached a crossroads with regard to strategies for limit setting and resource allocation. This study suggests that regional health authorities in spite of being politically governed organisations have the potential to execute a formal priority-setting process. Evidence from three of the sites shows that most decisions on disinvestments were possible to implement, although the initial targets were not always fully achieved. The accomplishment was in many ways unique to Sweden – it increased the dialogue between political and professional leaders on the necessity of restrictions.

Still, we need to acknowledge the difficulties in making priority-setting processes more robust to external threat (Williams, 2015), as well as internal threat, which remains a challenge. With regard to coalition building the Swedish contribution, reported here, concerns foremost the potential for alliances within and between political and professional actors. When it comes to strategies to prevent broader stakeholder resistance, the contribution is less convincing. If the new alliances formed within the regional authorities were not considered solid the key actors might not see it as wise to open up the process for other stakeholders. Experience from Sweden clearly indicates problems in this respect – health authorities that spent numerous hours developing their formal priority-setting process, later tended to abandon it. The kind of extensive disaggregation of health care into proposals for disinvestment, as in the examples reported here, tended to be used as swift and intense measures for achieving resource release in times of threatening deficits. The regional authorities appearing in this study have been reluctant to continue to further refine a formal priority-setting process that embraces all service areas, where investments and/or resource release are both included.

One tendency today is to unburden the regional authorities of the hard decisions, by leaning on arms-length expert bodies at national level to introduce various opaque decision-making arrangements. Another option is to draw on the experiences of priority setting reported in this paper, to further enhance the governance of health care at regional level. This implicates a will to recognise resource allocation in health care as a political issue, and while taking this into account, further improve the robustness of the process. Thus, our study illustrates that in priority setting, information is very important but able institutions are indispensable.

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BOX 1. Examples of treatments/services due for disinvestment and the estimated savings.

- Varicose veins without lesions and solely cosmetic problems, SEK 50k (EUR 5.5k) (ÖCC, 2003).
- Arthroscopic surgery for knee disorders on elderly patients, SEK 2900k (EUR 318k) (ÖCC, 2003).
- Special tinnitus day in rehabilitation programme for adults with tinnitus with moderate disability, SEK 70k (EUR 7.7k) (VBCC, 2011)
- Halving consumption of test strips for glucose for self-test in patients with diabetes type 2, SEK 2600k (EUR 283k) (VBCC, 2011)

BOX 2. Examples of different forms of disinvestment (following Daniels *et al.*, 2013).

1. ***Decommissioning or full withdrawal of services.***
   - Full withdrawal of Botox treatment for underarm sweating (VLCC, 2010).
   - Full withdrawal of treatment of warts (VBCC, 2008).
2. ***Services for some population/patient groups are restricted on the basis of particular criteria (restriction).***
   - Restriction of treatment for women with moderate or severe menopause symptoms (VBCC, 2008).
   - Referral to ophthalmologists only for patients with severe symptoms of dry eyes (ÖCC, 2003).
3. ***Partial decommissioning or the reduction of the amount of a particular treatment (retraction)***
   - Dilution of follow-up visits concerning lipid profile for patients with diabetes, except for new treatments (KCC, 2009).
   - Dilution of follow-up of pacemaker patients during the first five years (VLCC, 2010).
4. ***The replacement of treatments or services with another alternative (substitution).***
   - Transferal of responsibility for medical examination of minor prostate problems from hospital to primary care (ÖCC, 2003).
   - Physician visits replaced by nurse visits for 5½ year follow-up in child health centres (VBCC, 2008).

Table 1. Characteristics of the priority-setting process in four Swedish regional health authorities.

	Östergötland (2003)	Östergötland (2012)	Västerbotten (2008)	Kronoberg (2009)	Västmanland (2009)
Services targeted	Clinical services, except for highly specialised care and primary care	Clinical services	Clinical and non-clinical services and political committees	Clinical and non-clinical services	Clinical and non-clinical services and political committees
Target savings or additional resources	In total 4% (SEK 300m /EUR 33m) of the health care budget, where priority setting was one activity together with efficiency savings and changes in structure	Not stated. Additional resources	2% of the health care budget	Not stated. Priority setting was one part in a strategic plan, together with efficiency savings, changes in financing and health care structure	2.5% (SEK 113m /EUR 12m) of the health care budget
Number of items in the final decision	76 items for disinvestment (33 full withdrawal, 12 restrictions, 27 substitutions, 4 changes in fees)	14 items for investment	351 items for disinvestment (mixed forms) and 31 objects for investment	56 items for disinvestment (mixed forms)	234 items (76 full withdrawal, 66 restrictions, 69 efficiency savings, 4 changes in fees, 13 due for dialogue with municipalities, 6 county-wide proposals)
Price tags on items	Yes	Yes	Yes	Yes	Yes
Calculated potential saving/investment cost for items in the final decision (in relation to the county councils total expenditure on health care (SALAR 2015))	Sek 37.7m (SEK 5608m/EUR 614m)	SEK 62m (SEK 8891m/EUR 973m)	SEK 114m (SEK 5460m /EUR 597m)	SEK 15-30m (SEK 3614m/EUR 395m) for the strategic plan in total	SEK 106.5m (SEK 5224m/EUR 572m)
Actual savings	NA	-	NA	NA	NA