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# Emergency care reconfiguration in the Netherlands: conflicting interests and trade-offs from a multidisciplinary perspective

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## Abstract

Many countries are reconfiguring their emergency care systems to improve quality and efficiency of care, and this often includes the concentration of emergency departments (EDs). This trend is evident in the Netherlands, but the best approach is the subject of debate among stakeholders. We (i) examined the views of stakeholders on the concentration of EDs in the Netherlands and (ii) identified the main conflicting interests and trade-offs that are relevant for health policy. To do this, we organised focus groups and semi-structured interviews with emergency care professionals, hospital executives and selected external stakeholders. First, the participants saw both advantages and disadvantages to concentration, but these were also contested and debated. Second, we found that – sometimes conflicting – public health care goals (i.e. quality, accessibility and affordability) and narrower interests (e.g. the interests of specific hospitals, insurers, medical specialists and local administrators) were both pointed out. Third, there was no clear preferred approach to the future organisation of EDs, although most stakeholders mentioned some form of centralised decision-making at the national level, combined with regional customisation. Our findings will facilitate health policy decision-making around the reconfiguration of emergency care with the long-term goal of achieving efficient and high-quality emergency care.

**Keywords:** Emergency medical services; focus groups; health care reform; multidisciplinary research

## 1. Introduction

In a number of developed countries (e.g. Denmark, England, Ireland), we are seeing the reconfiguration of emergency care systems (or proposals for this) in order to tackle challenges like capacity constraints and coordination problems (Christiansen and Vrangbæk, 2018; Baier *et al.*, 2019; Knowles *et al.*, 2019; McHugh *et al.*, 2019). One way of approaching such a reconfiguration is to concentrate emergency care in a smaller number of emergency departments (EDs). This involves closing fully equipped  $24 \times 7$  EDs in some hospitals, or replacing them with less specialist urgent care centres (Chambers *et al.*, 2020). The rationale for these reforms is that concentration should improve efficiency and quality of care, limit costs and resolve staffing issues. Emergency care reconfiguration, including the reduction of the number of EDs, is also being discussed in the Netherlands. In 2020, the Dutch Ministry of Health (VWS) proposed reforms to the organisation and financing of the emergency care system (VWS, 2020). The reforms included in this ‘Blueprint for Emergency Care’ (Houtskoolschets acute zorg) are the subject of fierce debate among stakeholders. Unfortunately, an objective overview of the relevant trade-offs and

(conflicting) interests is currently lacking. The aim of this study is to provide such an overview. For this purpose, we will examine (i) the views of stakeholders directly involved in the concentration of EDs and (ii) the interests and trade-offs that these stakeholders believe need to be taken into account. Due to the medical, health economics and health care governance perspectives adopted, our research is multidisciplinary in nature, and is designed to identify the most important interests and trade-offs associated with the policy of concentrating EDs. To this end, we apply a two-step approach consisting of document analysis followed by focus group discussions and semi-structured interviews with relevant stakeholders.

## 2. Background: emergency care reconfiguration in the Netherlands

### 2.1 Current situation

In the Netherlands, emergency care is generally provided by three types of health care providers (NZa, 2017). First, hospital EDs provide secondary emergency care to patients who arrive there after being referred by a general practitioner (GP), arriving in an ambulance or attending of their own accord. EDs are staffed mainly by emergency physicians and qualified emergency nurses and are distributed across the whole country, based on the principle that all Dutch citizens should be able to reach an ED by ambulance within 45 min. However, recent research by the Dutch Health Council (Gezondheidsraad, 2020) has shown that scientific evidence for this standard is lacking. Second, primary acute care is provided by GPs, who join together to form larger general practice centres (HAPs; *Huisartsenposten*) for providing emergency services outside office hours. In recent years, collaboration between GPs and EDs has increased, ranging from co-location to closer forms of integration involving the formation of emergency care access points (Rutten *et al.*, 2017). Third, regional ambulance services (also known as RAVs; *Regionale Ambulancevoorzieningen*) are primarily responsible for the intake, on-the-spot emergency treatment and transportation of patients when severe or life-threatening conditions are suspected. EDs, HAPs and RAVs are embedded in 11 regional acute care networks, together with other partners in emergency care. Emergency care is organised through these networks, which are responsible for ensuring the availability of accessible emergency care across 11 regions.

### 2.2 Proposed reform

Although the number of EDs in the Netherlands fell from 105 in 2010 to 78 in 2019 (Gaakeer, 2019), mainly due to closures following mergers between hospitals, that number is likely to decrease still further. As mentioned previously, and in line with policy documents from previous years, in 2020 the Dutch Ministry of Health published their 'Blueprint for Emergency Care' in which they propose reforming the organisation and financing of the Dutch emergency care system (VWS, 2020). The document was published for consultation, so that the public could comment on it. One aspect of the proposal involves the concentration and specialisation of highly complex or life-threatening emergency care, particularly for more complex care conditions. In a recent letter to Parliament, the Minister of Health has argued (VWS, 2022): 'To guarantee the quality of highly complex emergency care, it is important that this care is provided in a more concentrated way than is currently the case. This is necessary firstly because of the scarcity of personnel. It is also better for the quality of care if healthcare professionals regularly see patients with the same condition, especially when highly complex care is required' (VWS, 2022: 2). The final number of EDs has not (yet) been announced, but stakeholders speculate that only hospitals with a license for an angioplasty centre will be allowed to keep their ED. If this is correct, it would leave 30–40 EDs in the Netherlands (Zorgvisie, 2020). The government considers these reforms necessary because of various challenges that could jeopardise the principles that underpin the Netherlands' health care system. Accessibility is at risk because there are too few qualified medical staff and there is inadequate coordination in follow-up care after the initial acute phase (NZa, 2021). For instance, the absence of

specific medical expertise and overcrowding in EDs has meant that hospitals have sometimes had to close their doors to new patients temporarily. This pressure is exacerbated by the ageing of the population and the resulting increase in the demand for high-complexity health care. Moreover, emergency care needs to be provided within stricter quality and financial frameworks (RVS, 2020). In sum, the quality, affordability and accessibility of emergency care are all at risk and, in the current setting, cannot always be guaranteed (RVS, 2020; VWS, 2020; NZa, 2021).

### 2.3 Debate on concentrating EDs

Despite the risks outlined above, the concentration of EDs is the subject of fierce debate among stakeholders – see for example the submissions in response to the government’s consultation document (VWS, 2021b). This debate is fuelled by the inconclusive nature of evidence on the effectiveness of concentrating EDs. In international literature, some studies show a positive relationship between treating higher numbers of patients and outcomes for several high-complexity acute conditions such as major trauma and stroke care (Nathens *et al.*, 2007; Morris *et al.*, 2019). According to the Dutch Association of Emergency Care Physicians this concerns, by estimation, 5% of the patients who enter the ED in the Netherlands (NVSHA, 2022). However, similar evidence is limited for the majority of (low-complexity) emergency care, where other indicators than volume appear to play an important role (Postma and Zuiderent-Jerak, 2017). For example, Browne (2020) argues that the concentration of emergency care in Ireland has not been associated with improved safety or efficiency. In addition, Flojstrup *et al.* (2022) show that the reconfiguration programme in the Danish emergency care system did not improve overall in-hospital mortality. In fact, earlier improvements in 30-day mortality trends were slightly delayed. The Dutch Association of Emergency Care Physicians therefore argues that policy should focus more on the quality and accessibility of all emergency care, instead of focusing on concentrating high-complex emergency care only (NVSHA, 2022). By contrast, a recent case study finds that the concentration of unselected ED care improves short-term outcomes and efficiency (Price *et al.*, 2020). In another study, ‘chain economies’ – a term that refers to the effect of emergency patients’ follow-up care on overall hospital costs – are found to prevent ED concentration from leading to cost savings at the hospital level (Blank *et al.*, 2017). Additionally, from the patient perspective, concentrating emergency care at fewer geographically dispersed EDs implies that patients will often have to travel further for emergency care, with potential consequences for accessibility. Increased distances could also have a negative impact on the environment, due to the extra travelling, and on inequality, due to increased travelling costs impacting poorer populations the most. As a result, the closure of an ED tends to have a major social impact, especially if citizens are not engaged in the reconfiguration process (Foley *et al.*, 2017; RVS, 2020). The concentration of EDs thus involves trade-offs and (potentially) conflicting interests.

## 3. Methods

To identify and learn more about the trade-offs and (conflicting) interests that are associated with the concentration of EDs, we conducted document analysis studies followed by three focus groups with representatives from all the relevant stakeholders and two additional semi-structured interviews.

### 3.1 Document analysis

To begin with, three types of documents were analysed. First, we studied policy documents, advisory reports, research reports and news articles to outline the policy context regarding the concentration of emergency care. Second, we analysed several scientific papers regarding international examples of the reconfiguration of emergency care. The reason for this was to understand the discussion from both a national and international perspective. Third, we selected the responses

from the main national stakeholders – i.e. organisations representing patients, hospitals, ambulance services, (emergency) physicians and nurses, GPs and health insurers as well as regulatory bodies (Health and Youth Inspectorate, Authority for Consumers & Markets, Dutch Healthcare Authority) – regarding the ‘Blueprint for Emergency Care’ document mentioned earlier (VWS, 2020). These responses were analysed using ATLAS.ti by deriving salient and common themes, which were then used first to structure the focus groups and interviews and then to derive codes for the analysis of the transcripts of focus groups and interviews.

### 3.2 Focus groups and interviews

We organised three focus groups for internal and external stakeholders to learn more about their attitudes towards the concentration of EDs in the Netherlands and to discuss their views of what trade-offs and interests are relevant. The focus groups were used as the main means of collecting data because of their discursive nature, which we believed would enable us to understand the motives of participants and clarify a range of different perspectives on the subject (Morgan, 1993, 1996; Krueger and Casey, 2000). We decided to conduct these focus groups and interviews online using Microsoft Teams due to the coronavirus pandemic and so that we could bring together participants from various regions of the Netherlands. This latter point was important for the external validity of our study (Morgan, 2018), and was easier to arrange through an online meeting.

The first focus group consisted of medical professionals working in emergency care, including emergency care physicians, emergency nurses, ambulance staff and GPs. The second group included hospital executives from hospitals of various sizes and types, including general and academic hospitals, and hospitals located in rural and urban areas. The third group composed of selected external stakeholders: national patient representatives and governmental (regulatory and advisory) agencies. Some participants were recruited based on the researcher’s judgement and expert opinion, and more participants were subsequently recruited using ‘snowball sampling’. Relevant stakeholders who were unable to join the focus groups were invited to participate in an interview. Consequently, we conducted two interviews with large health insurers in addition to the three focus groups.

During the focus groups, the moderator and observants were guided by a questioning route which had been carefully prepared in advance (see [Appendix 1](#)). However, participants were permitted to deviate from the questions. Based on the salient themes that emerged from the document analysis, we structured the focus groups and interviews around three main areas for discussion: the pros and cons of ED concentration, the (conflicting) interests of different stakeholders and how to manage the future organisation of EDs. The same questioning route was used by the researcher, who conducted two additional interviews.

Next, the focus groups and interviews were transcribed verbatim. We asked the participants to verify the content of the meetings by sending them summaries of the focus group or interview they had participated in. These checks were designed to improve the internal validity of the study. The transcripts were analysed thematically in ATLAS.ti using the three overarching themes outlined previously and a codebook prepared in advance. This was a three-step process. First, after discussion by the research team, a codebook (codes classified by themes) was developed based on the research question, the responses to the ‘Blueprint for Emergency Care’ document and the transcripts itself. Second, the codes were applied to text segments of the transcripts. Third, the text segments associated with the codes were compared within focus groups and interviews and then between focus groups and interviews. Analysis was carried out by two researchers.

## 4. Results

As explained above, the focus groups and interviews were structured around three main themes: the pros and cons of ED concentration, (conflicting) interests among different stakeholders and

how to approach the future organisation of EDs. The main findings from our coding and analysis strategy are summarised below.

#### **4.1 What were the participants' views on the advantages and disadvantages of ED concentration?**

The participants argued that the effects of concentration are ambiguous, and mentioned both advantages and disadvantages. The claimed advantages related to quality improvements, solutions for staff shortages and cost savings. To begin with, there seemed to be consensus about the relationship between the concentration of EDs and improved quality of care for high-complexity emergency conditions such as multi-trauma care. The positive relationship between volume and outcomes for such services was not disputed. Some external stakeholders and hospital directors emphasised that some smaller hospitals cannot provide complex emergency care to the standard of quality required. One hospital director said:

What emerges from the theme 'quality of care' is that you cannot or should not want to continue to provide all forms of emergency care, because there are forms of emergency care that are too complex to be provided in a small regional hospital or even a city hospital. So there is a good reason for having a limited number of trauma centres, and for concentrating heart interventions and a number of other services. (Hospital director, participant 5)

However, most ED care is less complex and medical professionals and external stakeholders asked questions about whether quality would necessarily improve if concentration at fewer hospitals were to take place. Participants argued that objective scientific evidence for this is lacking. As an example, one medical professional mentioned:

There are a very few acute conditions for which increased concentration leads to better quality. This is clear in the case of multi-trauma care. Maybe for PCIs and for aneurysms as well. But apart from that it is very doubtful, scientifically, whether you should drive the patient forty, fifty, sixty kilometres. There is only very limited data on this. (Medical professional, participant 3)

Ultimately, as the hospital directors discussed, the distinction between complex and less complex emergency care may lead to concentration only for complex emergency conditions, with different solutions for less complex acute care:

You have to think about what is best to provide locally, and what is better to concentrate? (Hospital director, participant 5)

In practice, however, this distinction could prove problematic, because patients often arrive at the ED without a clear diagnosis. This issue was brought up by both the medical professionals and some hospital directors. For example, one of the medical professionals commented:

When patients show up in primary care, whether in an ambulance or through their GP, they rarely have a very clear diagnosis. They present with a certain problem and you have to put together the pieces of the jigsaw. In every case, you are working with a certain margin of uncertainty. (Medical professional, participant 5)

Another claimed advantage is that concentrating emergency care means that fewer professional staff are required overall. All the focus groups mentioned the issue of staff shortages and the availability of specific medical expertise as reasons for concentration. To illustrate this, one hospital director stated:

[The hospital] was forced to make the decision to concentrate due to the scarcity of medical staff and efficiency issues in smaller hospitals facing financial problems. (Hospital director, participant 7)

As a counterargument, however, some medical professionals argued that the workload at the remaining – and now much larger – EDs is likely to increase. Overcrowding in EDs is, they said, associated with negative consequences in terms of quality of care and job satisfaction among ED staff:

You get these gigantic ED factories treating 60,000 or 80,000 patients a year, and people really start running away – staff I mean. (Medical professional, participant 3)

Also, the assumption that staff will transfer from EDs that are closing to the remaining EDs was disputed by one hospital director, because staff may not be willing to relocate.

A third advantage is related to the idea that the concentration of EDs could lead to cost savings. Some medical professionals and health insurers argued that hospital directors and medical specialists who work in merged hospitals decide to concentrate emergency care because it is expensive and organisationally challenging to keep two sites up and running. There was no consensus among participants on whether reducing the number of EDs in general would lead to cost savings. First, as argued by some external stakeholders and health insurers, concentrating care at fewer EDs could result in higher prices – and thus higher overall expenditure – due to reduced competition. That is, hospitals' pricing power vis-à-vis health insurers could increase as a result. Second, one hospital director also argued that in hospitals that lost their ED, costs may not fall as much as expected because some facilities and staff would still be required for other hospital services. If revenues were to decrease at the same time due to the closure of the ED, this could negatively affect the hospital's financial situation. The following quote highlights some aspects of this discussion:

In terms of money, when during a merger I considered closing an ED, entirely or only at night, we soon found out that it would hardly yield any savings, and there was an extra risk that you would lose a significant part of the turnover. That's because the ED is quite an integrated part of your hospital. If you don't have an ED, you are still required to have staff in the hospital who can provide emergency care at night. So the amount you save on staff by closing an ED it isn't that much. That was disappointing. (Hospital director, participant 5)

This quote relates to how EDs are closely associated with follow-up care in hospitals, which is one of the drawbacks mentioned of closing down ED care in some hospitals and concentrating it in others. It was argued by hospital directors and external stakeholders (including insurers) that EDs actually serve as points of entry for other forms of health care provision in hospitals, which in turn benefits revenues, quality of care and accessibility. The closure of EDs at some hospitals can therefore have an adverse knock-on effect. To illustrate this, one of the hospital directors mentioned:

We know that in most hospitals at least 25 percent of patients who enter the hospital, come in through emergency care. That means if you close emergency care, you really get into a discussion about whether such a hospital still has a right to exist and what that means for patients, hospital quality and all hospital staff, including medical specialists. (Hospital director, participant 8)

One of the external stakeholders expanded on care during childbirth, in particular:

The moment you remove childbirth care from a hospital, this has immediate consequences for the paediatricians who work there; and if there are fewer paediatricians, fewer children



are sent to ENT doctors and so you see a cascade effect in such a hospital, so you can ask whether that outweighs the [positive] effects of concentration of care' (External stakeholder, participant 6)

Although this external stakeholder argued that these cascade effects are likely to occur with respect to some emergency care disciplines (such as care during childbirth), they also referred to research which has shown that for a number of complex acute conditions (like cerebrovascular accident, heart attack, aneurysm), quality improvements do outweigh these cascade effects.

In addition to the issue of cascade effects, increased travel time for patients is another disadvantage of ED concentration that was mentioned by the medical professionals and external stakeholders (including insurers). This is particularly relevant for less complex emergency care and emergencies that require prompt treatment. As one medical specialist explained:

Low-complexity emergency care must also be provided in the region, and then it is not so convenient to have to travel for half an hour or forty-five minutes to get to a hospital. (Medical specialist, participant 9)

However, the importance of having an ED nearby was debated in cases where the increased travel time outweighs better quality. The following quote illustrates this discussion:

Concentration also means that travel times get longer. Our position is: if quality improves (by which we mean clinical effectiveness), you must also remember to take account of the effect of those longer travel times. Because the longer travel time isn't necessarily conducive to a better outcome in a really acute situation. The net effect of longer travel times and the concentration of care in a place where you have all the right expertise, the right experience and the right facilities – all that needs to be weighed up against the increase in travel time' (Health insurer 2)

Consequently, in the case of less complex emergency care, distance seems to be more important than quality of care; while for more complex acute conditions it is sometimes worth travelling further. However, it seems that this is difficult to explain to some citizens:

People get upset and ask questions and then it is quite difficult to explain that driving ten minutes further is actually better for you. (External stakeholder, participant 3)

The final drawback relating to the discussion on proximity to an ED is public opposition when the concentration of EDs is put on the public agenda. Both the external stakeholders (including health insurers) and hospital directors recognised this aspect of the discussion around concentration. For a number of reasons – including employment, status and (perceived) reductions in access to health care – citizens and local government are reluctant to lose 'their' ED, which is located 'just around the corner'. One external stakeholder described this as follows:

We notice that there is a lot of concern about EDs and that citizens very much like having an ED in their neighbourhood and preferably across the street. (External stakeholder, participant 3)

According to some participants, this is because citizens are generally not involved in decisions about the future design of the emergency care system:

I also understand why there is always that concern. Because the way that decision-making works and how citizens are involved is simply not very good [...] we also emphasise that

you have to organise it properly [...] so that even when those first talks about possible closure or relocation take place, make sure that you involve local people in that debate early. (External stakeholder, participant 5)

#### 4.2 Which (conflicting) interests play a role in the current discussion about concentration of EDs?

Some of the advantages and disadvantages outlined relate to the (conflicting) interests that play a role in the debate about concentrating EDs. Stakeholders mentioned several, potentially conflicting, interests that feature prominently in the discussion about concentration of ED care. These can be divided into interests of the public (i.e. public health care goals), patients' interests, interests of hospitals and medical specialists, insurers' interests and local interests.

First, the external stakeholders and medical specialists argued that people generally want to receive good-quality care that is accessible and affordable. However, these public health care goals are sometimes at odds with each other. The following quote illustrates this:

Every patient wants the best possible care when they need it. So every patient wants to see the most senior GP and to be able to get all their care at the hospital around the corner. Until the bill comes. (Medical specialist, participant 5)

From a medical perspective, quality of care is deemed the most important for the patient. However, as described by one of the medical professionals, the interest in quality from a medical perspective may conflict with health insurers' interests, for example, because in addition to quality they also want to control costs to ensure affordability. This conflict is illustrated by the following quote:

If I'm a health insurer and I say I'm looking at quality, that's often just about money. But I think it's a false economy. (Medical professional, participant 6)

The participants also mentioned that different patient groups have diverging interests. For example, patients with complex conditions are primarily interested in high-volume care provided in a large specialised medical centre, while patients with less complex care needs primarily want to receive care nearby in a smaller local hospital. Several participants argued that patients' interests should guide decisions about the future organisation of emergency care, rather than the interests of hospitals and medical specialists, for example. Ideally, they said, the future organisation of emergency care should be structured around the needs of patients:

Needs range from very complex – for which concentration will sometimes be more important and mean longer travel times – to needs that can still be urgent but much less complex and in those cases accessibility at a local level is important. (External stakeholder, participant 4)

In both cases the care provided is safe and of good quality, however what safe and good quality means depends on the specific situation a patient is in.

External stakeholders, hospital directors and insurers argued that hospitals seem to have an interest in retaining their EDs because of their gateway function for follow-up care. Questions were raised by hospital directors about whether hospitals would still have 'a right to exist' once an ED disappears. This is partly due to the way in which hospitals are funded – if you lose your ED, you end up providing less care and therefore lose revenue:

Financing does not match. Now you need to provide as much as care as possible to keep your business going. And it is very difficult to choose between different types of care, because then you immediately lose an important part of your income. (Hospital director, participant 9)



Consequently, both external stakeholders and hospital directors mentioned that hospitals tend to put their own interests before the public health care goals. Furthermore, hospitals fear a smaller catchment area if their ED is closed. However, as one of the external stakeholders mentioned, these interests also vary between hospitals according to the size and the geographic location of the hospital. Larger hospitals are better able to cope with changes than smaller hospitals and urban hospitals can make arrangements with neighbouring hospitals about distributing care more easily than rural hospitals. Also, bigger tertiary hospitals are interested in further concentration, while smaller general hospitals are afraid to lose their ED with subsequent consequences.

Maintaining revenues is not only in the interest of the hospitals, but also of the medical specialists. According to the insurers and directors, this is particularly relevant for self-employed medical specialists and less important for salaried doctors. Doctors' interests were discussed by one of the hospital directors in relation to organisational changes:

The income of specialists is an issue for us now that we are setting up an urgent care centre. That means patients will no longer attend an ED but be treated by a specialist nurse, so they will no longer end up seeing a specialist. (Hospital director, participant 10)

In addition, according to insurers and hospital directors, hospitals and specialists not only have financial interests, but also an interest in the challenging high-prestige work that is associated with having an ED, and opportunities for research:

You're a less sexy hospital when the ED is small. Doctors suffer from this, but so do nurses. I think it also plays a bit of a role for hospital directors. (Hospital director, participant 7)

Hospital directors and external stakeholders (including insurers) also mentioned that local and regional governments have an interest in maintaining an ED in their region or municipality because an ED provides employment opportunities and makes for a more attractive place to live. This also feeds into the public opposition to the closure of local EDs. These local interests are illustrated by the following remark:

A hospital is a high-quality employer that makes people in the area feel like all their needs have been taken care of. Local government does a lot to oppose [ED closures]. I think [it's] a very powerful actor. (Hospital director, participant 5)

In summary, various interests play a role in the discussion around the concentration of ED care in the Netherlands, and those interests sometimes conflict with one another. Narrower interests may sometimes prevail over the wider public health care goals, for example. According to the participants in the focus groups, hospitals, medical specialists and local government generally all have an interest in retaining a local ED. This could be summarised by the following quote:

People generally favour concentration if it happens in their own hospital or municipality. (Insurer 1)

Additionally, health insurers argued that some insurers have an interest in patients being able to access sufficient hospitals, so that insurers retain enough bargaining power vis-à-vis those hospitals. These narrower interests are sometimes at odds with the public health care goals, such as when closing an ED may be the better option in terms of the quality and efficiency of health care more generally. Hospital directors, partly due to their pursuit of the 'governance code of care', seem to understand that they are expected to take into account these public health care goals. However, they also explained that they sometimes encounter opposition from medical specialists and their revenue model when trying to make decisions about what types of care should

continue to be provided in a particular hospital, and which types of care should be provided elsewhere:

The governance code states that we have a duty to society as a whole, of course. But we also all understand that if we take that too far, we will face anger from medical specialists and not a single hospital director in the Netherlands will be left in a job. (Hospital director, participant 7)

Nevertheless, one insurer mentioned that financial interests are fairly well-balanced between medical specialists and hospitals, and both have interest in maintaining an ED.

Finally, some participants argued that when we consider all the (conflicting) interests outlined above, decisions on the future organisation of ED care can end up being postponed indefinitely. The following quote exemplifies this:

But the problem I think we're seeing a bit now is that if we try to take everybody's interests into account, nothing will happen at all. (External stakeholder, participant 5)

#### **4.3 How to approach the future organisation of EDs?**

An important question arises from the discussions outlined above: what is the best way to approach the future organisation of EDs in the Netherlands? Overall, two options were discussed by the participants: centralised government management or decentralised management by the stakeholders themselves. Both of these options were discussed in all the focus groups and interviews, either separately or in combination.

First, many participants argued that some form of centralised management is necessary; the government should, for example, set frameworks to provide guidance. According to some medical professionals and external stakeholders, compliance with the agreements made within this framework should be supervised by a national regulator. Furthermore, both external stakeholders and hospital directors discussed the option of separate funding for emergency care based on availability, rather than funding through the regular negotiations between hospitals and insurers regarding reimbursement for hospital services.

Centralised management would have several advantages according to hospital directors and external stakeholders. Stakeholder participation without any obligation is then counteracted. A form of overriding authority could be assured through centralised mechanisms if these field parties could not reach agreement or achieved sub-optimal outcomes due to their vested interests. This need for more central control is encapsulated in the following quote:

You can't expect it from those working in the field. They recognise the need for action but will not take the initiative because there is still too much comfort and too little urgency. It must be done centrally. (Hospital director, participant 4)

Moreover, if the government imposes certain (regulatory) frameworks, the risk of possible violations of competition law would be mitigated. Finally, central management would prevent the emergence of major differences between regions due to differences in the approaches taken.

On the contrary, several participants argued that there should be room for regional customisation. Centralised government management entails the risk of neglecting regional differences. In addition to this, one health insurer mentioned the risk that central management would be rejected by stakeholders:

I just see how averse this country is to centralised control. The influence of doctors and their information position is so strong that they will not resign themselves to some centrally invested or centrally managed overriding authority. (Insurer 2)

A second approach to management that might be easier to accept would be for stakeholders to manage the future reorganisation of emergency care, either health insurers or providers of emergency care in the region. To begin with, health insurers and external stakeholders discussed the possibility of regional management by one or several health insurers with the largest market share in that region on behalf of the other health insurers. According to an external stakeholder, insurers are important stakeholders, especially in relation to maintaining affordability, and should therefore play a role in organising emergency care. However, according to external stakeholders and as mentioned by the insurers themselves, it would be difficult for health insurers to play this role because they lack necessary information. Furthermore, assigning a coordinating role to health insurers in the Dutch market-based health care system would not be accepted easily. As one health insurer explained:

Management by health insurers would actually not be accepted. These kinds of rather drastic decisions are not accepted socially or politically. (Insurer 2)

In addition to guidance by health insurers, regional control by stakeholders also occurs through regional acute networks, a form of control that was discussed within all focus groups and interviews. These networks consist of providers of emergency care in the region (including hospitals, RAVs, GP services) and are organised around trauma centres. Sometimes there is also cooperation with the leading health insurers in that region. These networks have become increasingly important since the start of the COVID-19 pandemic:

The experience with COVID is that the ROAZs [regional acute networks] have started to play a much more important role. (Hospital director, participant 5)

Management by regional actors has the potential to be successful since these have substantive knowledge and are located closer to patients and can better respond to their needs and regional differences. Despite these advantages, there is a risk that narrower self-interest would be prioritised by the directors of larger hospitals, for example, according to several medical professionals and external stakeholders. One of the external stakeholders mentioned this challenge in the discussion about regional acute networks:

The greatest challenge is to make sure that the interests of the directors do not prevail over the interests of the experts, the patients, and the health insurers in these ROAZ organisations. (External stakeholder, participant 6)

One of the participants in the external stakeholders' focus group therefore opted for an independent chairperson appointed by the Minister of Health in order to prevent the more powerful hospitals from exploiting their position of strength.

Lastly, as noted by one external stakeholder, a general point for attention in decentralised governance by regional players is that competition legislation must be considered in the agreements made. This means that the parties are only allowed to collaborate if they can substantiate that the benefits for patients outweigh the potential drawbacks (i.e. the emergence of regional positions of power and consequences for public health care goals). For example, the health insurers indicated that all health insurers have already tried to work together on emergency care for high-complexity conditions, but were warned by the Authority for Consumer and Markets that they risked breaching competition legislation (ACM, 2014). Because a clear quality standard was lacking, the health insurers were unable to demonstrate that the quality gains would outweigh the restriction of choice due to concentration. Their initiative has since been abandoned.

The various governance options have their own characteristics and for that reason stakeholders identified different advantages and disadvantages. While the focus group participants did not

reach an unambiguous conclusion on the question of how to approach the future organisation of EDs, a general line of reasoning could be discerned: some form of overarching framework is required from central government, and the details of implementing that framework could then be decided more locally.

Although there is currently no clear consensus regarding the organisation of emergency care in the Netherlands, concentration of EDs occurs but only on an incidental basis in cases where there is a sense of urgency to act and thus no conflict of interests between hospitals. A coincidence of interests between hospitals could be favourable to the concentration if hospitals are merged or if there is no risk of a smaller catchment area for the hospitals involved. A sense of urgency or 'burning platform' arises for example when there is an unresolvable staff shortage that is having a negative effect on health care provision, in cases of bankruptcy, or if EDs are not backed by necessary facilities for emergency care provision such as intensive care units. The COVID-19 crisis is an example of the emergence of a shared sense of urgency that has led to changes to the organisation of emergency care. As one of the medical professionals noted:

COVID was not much fun, but what I did appreciate was that my cooperation with the emergency department and ambulance service has never been better, because we were in such a high-pressure situation and that suddenly allowed us to work together. And we thought we have to get this job done together and it worked. (Medical professional, participant 10)

## 5. Discussion

In various countries, the reconfiguration of health care has been characterised by the concentration of emergency care services and a reduction in the number of EDs. In 2020, the Dutch government proposed concentrating complex and life-threatening emergency care in order to guarantee the quality, accessibility and affordability of care. Both the need for and the objective of this reform have been the subject of much debate among stakeholders. In this paper, we have offered an objective overview of the considerations and interests that play a role in the discussion on concentration. Since evidence for concentrating emergency care is inconclusive, we have, by adopting a multidisciplinary perspective, identified the main trade-offs and (conflicting) interests involved with the concentration of emergency care in the Netherlands.

### 5.1 Key findings

Based on document analysis and followed by focus groups and interviews with stakeholders who are directly involved, we have found that the arguments for and against concentration ED care are ambiguous and contentious. The claimed advantages relate to improved quality of care, solutions to staff shortages and cost reductions. The disadvantages mentioned include the disrupted connection between ED care and the hospital as a whole, increased travel times for patients and public opposition. At the same time, all these pros and cons were called into question, and conflicting (financial) interests further complicate the debate. Trade-offs are needed between the wider public health care goals (i.e. quality, accessibility and affordability) and the narrower interests of the various stakeholders. Hospitals, medical specialists and local/regional governments wish to 'hold on' to their ED for various reasons including revenue, status and local employment opportunities. As a result, little progress has yet been made on reconfiguring the emergency care system. From the health policy perspective, this observation brings us to another important but unresolved question: what is the best way to arrange the governance of EDs in the future? This question was not answered ambiguously by the participants. However, the majority argued that future governance should include some form of central management combined with regional customisation. These findings have implications for future health care policy, which we will discuss below.

## 5.2 Limitations

A possible limitation of our study is that because the focus groups and interviews were held online, non-verbal communication was more difficult to observe and natural interaction was hampered somewhat. Nevertheless, conducting the research online meant we were able to include participants in different parts of the country, which enriched the data collected. Another drawback of this study was the specific and in-depth focus on EDs. As mentioned by several participants, it should be acknowledged that EDs are part of a larger system of acute care and health care. Hence, concentration of EDs is a potential instrument for improving quality and efficiency of emergency care, and not a goal in itself. We invited the participating stakeholders to take (non-)ED perspectives into account, but a more extensive analysis of the entire (emergency) care system was beyond the scope of this study.

## 5.3 Lessons

Despite the limitations highlighted above, our study offers some interesting lessons for health policy. Based on our findings, the most important lesson is that in the absence of centralised decision-making, the concentration of ED care will probably only take place if there is an alignment of interests among the relevant stakeholders (e.g. merged hospitals with multiple locations) or when there is a serious sense of urgency ('burning platform'). This was the case in one region of the north-eastern Netherlands, for instance, where all stakeholders (GPs, ambulance service providers, hospitals and health insurers) jointly decided to concentrate complex emergency care and reduce the number of EDs to keep acute care in the region accessible and affordable (Zorg voor de regio Drenthe Zuidoost-Groningen, 2020). At the national level, however, not much progress has been made in the aimed concentration of EDs. It seems that more direct action is required in order to reconfigure emergency care. As a starting point, the Dutch Ministry of Health, Welfare and Sport (VWS, 2020) has provided an outline of the building blocks for the future organisation and financing of emergency care. In addition, the Dutch Health Care Authority (NZa, 2022) recently advised the Ministry to develop a national framework of standards – based on a clear substantiation – that regional stakeholders (e.g. health care providers and health insurers) can use to reconsider the distribution of EDs in the region. The Authority emphasised that 'greater overriding authority in acute care is desirable, especially at the regional level; to bring about necessary changes in acute care, even if these have painful consequences or if stakeholders cannot reach an agreement' (NZa, 2022: 7). These recommendations will provide important input for future action (VWS, 2022).

Although essential in order to make progress, decisive steps by the government aimed at impacting the reconfiguration of emergency care more directly will probably not be without challenges. Recent experiences with concentrating neonatal heart surgery clearly suggest this. At the end of 2021, after many years of debate, the former Dutch Minister of Health decided to concentrate this type of complex care at two university hospitals (Rotterdam and Utrecht), meaning that two other university hospitals (Leiden and Groningen) were to be ceased to provide this kind of surgery (VWS, 2021a). Although experts agree on the importance of concentration for improving care outcomes (Kansy *et al.*, 2018; Bartelds *et al.*, 2021) – in contrast to the ongoing debate on ED care – stakeholders argued that the Minister's decision was inadequately substantiated and thus seemed arbitrary, which led in turn to significant social and political opposition (Skipr, 2022). As a result, the decisive action taken by the government in this instance ended up backfiring. However, following an impact analysis conducted by the Dutch Healthcare Authority (NZa), in 2022 the current Minister of Health confirmed the initial decision of his predecessor to concentrate neonatal heart surgery in two university hospitals, but selected Rotterdam and Groningen (VWS, 2023). Both 'losing' hospitals (Leiden and Utrecht) have announced they will appeal to this decision and thus ask for a court ruling (NOS, 2023).

For future policy decisions about the concentration of complex care, including the reconfiguration of EDs, it will be crucial to build support among stakeholders in order to legitimise

decisions. More specifically, decisions on concentration need to be transparent and based on a clear consideration of predefined criteria. This must be accompanied by convincing evidence-based arguments about the consequences in terms of improved quality and efficiency of care. For example, research by KPMG Health, commissioned by the Dutch National Health Care Institute, showed that the cascade effects of no longer providing acute care in a hospital occur for a few specific emergency indications (KPMG, 2018). For some other complex indications, however, the consequences for quality and profitability for follow-up care turned out to be minor in relation to the quality gains achieved by concentrating complex care. Additionally, studies from England focusing on specific examples of ED concentration found improved short-term outcomes (Price *et al.*, 2020) or no evidence of increased mortality (Knowles *et al.*, 2019). A national evaluation study on the reconfiguration of emergency care in Ireland found no improvement in safety or efficiency following concentration, and even a possible increase in capacity problems (Browne, 2020). Similar research could provide stronger empirical evidence for the debate and for future policy making. In addition to this, as shown by studies that take a health care governance perspective and as illustrated by our findings, it is also important to involve all the relevant stakeholders in the decision-making process, and to consider non-technocratic (public) values as well. Foley *et al.* (2017) argue that including a variety of stakeholders from the start affects views and responses to reconfiguration policies, which can lead to better implementation. However, due to conflicting interests, an independent ‘referee’ with overriding authority will be needed. Van de Sande *et al.* (2021) show how, in the context of the development of the Dutch national quality standard for emergency care, multiple accountability could help such an authority by bringing different interpretations of public values into the decision-making process. Finally, since any reconfiguration will lead to winners and losers, the transition process needs to be designed carefully by policymakers, including some form of (financial) compensation for those who stand to lose out. Policymakers may choose to distinguish between compensation for temporary friction (e.g. uncovered depreciation costs) or structural friction (e.g. redistribution of hospital services between hospitals). The above recommendations could all be considered in order to enhance the legitimacy of future policymaking.

## 6. Conclusion

We have presented an overview of the (conflicting) considerations and interests that play a role in the concentration of ED care. The results show that some form of central action, combined with regional customisation, on complex issues like emergency care reform seems to be inevitable. Diverse interests and values need to be reconciled, and this requires legitimacy. Our findings show that empirical evidence of better services is not the only way to legitimise the concentration of emergency care. This is certainly necessary, but not sufficient on its own. In order to reconfigure care in this area, it is crucial to identify the impact of any reforms on all of the stakeholders concerned including the potential risk that downgrading any public service in rural areas and smaller towns adds to the growing urban–rural and ‘technocrat-populist’ divides. During the implementation phase, stakeholders experiencing disadvantages can then be compensated, so that the outcomes will be accepted more easily. Overall, we can recommend a policy process of shared governance in terms of combining national management and regional customisation, shared innovation in terms of emergency care reconfiguration including the (potential) benefits following from concentration of EDs, and shared savings in terms of compensation for stakeholders who are clearly disadvantaged.

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## Appendix

### Appendix 1 Questioning route focus groups & interviews

#### Opening

- Explanation about purpose and objective character of research
- Proceedings of the focus group/interview
- Introduction of participants

#### Key questions

- What is the current state of concentration and/or geographic dispersion of ED-care in the Netherlands?
  - How is ED-care concentrated/dispersed?
  - Where is ED-care concentrated/dispersed?
  - What are the reasons for concentration/dispersion?
- What are the consequences of concentrating ED-care?
  - How does concentration of ED-care affect the Dutch healthcare system?
  - Consequences for most important stakeholders?

- Advantages and disadvantages?
- How should these consequences be weighed?
- What interests play a role when it comes to concentrating ED-care?
  - Participants' interests?
  - Other stakeholders' interests?
  - How should these interests be weighed?
- Who should direct the future organization of ED-care in the Netherlands?
  - What decisions should be made by the national government, health insurers and regional acute networks?
  - What decisions should be made by other stakeholders?
  - What interests should be decisive in steering?
  - To what extent is this appropriate given the current division of roles in the Dutch healthcare system?

### Closing

- Did we miss anything?
- Explanation of follow up and further course of research