



**Procedure**

# Analyses of product markets in hospital care

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Muzenstraat 41  
2511 WB Den Haag  
[www.acm.nl](http://www.acm.nl)  
070 722 20 00



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# 1 Introduction

## 1.1 Background

When assessing mergers and collaborations, a first step is defining the product market(s). This provides ACM insight into the range of health care services offered by the market participants that wish to merge or collaborate, and into the substitutability of the products or services of other providers. ACM looks at these aspects from both the patients' perspective (demand side) as well as the health care providers' perspective (supply side). This information helps ACM get a first impression of the competitive pressure among market participants and/or nearby providers, and, consequently, of the possible effects of the merger or collaboration on buyers and patients.

In its previous assessments in hospital care, ACM used a classification into basic care and top care (top-clinical care and top-reference care), where basic care was further classified into clinical and non-clinical general hospital care. Within basic care, ACM did not explicitly distinguish any specialties or subspecialties, except when the merger centered on just several specialties.<sup>1</sup>

ACM has observed that the product range of hospitals has been evolving over the past few years. Whereas each hospital used to offer almost all types of health care, hospitals nowadays increasingly specialize in several fields by choosing a certain health-care profile, whether or not in a network of hospitals/health care providers. In addition, the introduction of volume standards by scientific associations has resulted in hospitals no longer offering (or no longer being able to offer) all treatments and/or specialties. The differences between the product ranges of hospitals thus increase. The question is what this means for the assessments of mergers and collaborations<sup>2</sup> by ACM.

In order to get a good picture of whether hospitals are able to offer the same treatments, it is also important that ACM is able to distinguish between basic care and top care (hereafter: complex care). Not every hospital is able to perform complex treatments. If one merger party is able to perform certain types of complex care, but the other party is not, they do not exert any competitive pressure on each other for that type of care, which means that this type of care should not be taken into account in the assessment. The question of whether nearby hospitals are or are not able to offer certain types of care should be looked into in a similar fashion. However, in practice, it is not that easy to distinguish between basic care and complex care properly, as there is no unequivocal and shared definition of complex care. At least no such definition can be deduced from the DTC health care product (DTC stands for diagnosis-treatment combination, its Dutch acronym is DBC).

The complexity of health care can be distinguished into care complexity and case complexity. With regard to care complexity, the nature of the treatment determines the level of complexity. With regard to case complexity, the situation and the patient's condition determine the level of complexity, for example because they have multiple conditions at the same time, thereby rendering a rather straightforward operation still complex. Case complexity in particular may result in the same DTC-care product entailing complex care in

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<sup>1</sup> In more recent cases, such as the one involving the Sint Anna Hospital and the Catharina Hospital, ACM also looked at differences at the specialty level. In the past, ACM in its assessments also focused on specific specialties if the concentration only involved a certain specialty, which was the case in the merger between The Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital and the University Medical Center Utrecht (oncology) and in the concentration between NPM Health Care and Orthopedium (orthopedics).

<sup>2</sup> In the rest of this document, ACM will only mention mergers for the sake of convenience.

some cases, but not in other cases. In the past, ACM in various cases found that it was not easy to distinguish between basic care and complex care properly. For example, in a number of cases, ACM designated several DTCs offered by academic hospitals as basic care while patients sometimes had to travel over 30 minutes to reach the hospital, whereas they also could have visited several nearby hospitals for the same type of health care services. In such cases, it is more logical to consider this complex care. However, that could not be deduced from the DTCs involved, because they are offered by both academic hospitals as well as by non-academic hospitals. The conclusions drawn by ACM from the patient flows are also not always recognized by health insurers<sup>3</sup>.

That is why ACM in 2016 commissioned SiRM and Twynstra Gudde to study two aspects:

1. What is a good definition of basic care?
2. At what level can product markets within hospital care be defined?

This study was published in early-2017.<sup>4</sup> Below, ACM will briefly discuss the results of this study. This will be followed by the follow-up study that ACM conducted.

## 1.2 Results of study by SiRM and Twynstra Gudde

### 1.2.1 Difference between basic care and complex care

In order to be able to make a classification into levels of complexity, SiRM and Twynstra Gudde in their study choose to link complexity to travel distance. The underlying assumption is that, generally speaking, patients will travel farther for complex care (including high-complexity care) because not every hospital offers (or is able to offer) such care. Based on observed travel patterns, SiRM and Twynstra Gudde subsequently classified the various DTCs that hospitals offer into three categories: category A that represents basic care, category C representing complexity care, and category B representing a heterogeneous group, which is not easily classified into any level of complexity. According to the study, 70% of the amount of DTC-products can be designated as basic care, and 13% as complex care.

### 1.2.2 Potential product markets

For basic care, SiRM and Twynstra Gudde subsequently examined what forms of care are linked to each other. They came to the conclusion that 19 clusters can be distinguished. According to the researchers, seven of these clusters may be defined as separate product markets. These clusters have a weak link with other specialties, and are also offered by independent treatment centers (ITCs). These forms of care can be offered without the need for a fully-equipped hospital organization. These clusters are ophthalmology, orthopedics, ENT, dermatology, rheumatology, surgery (groin ruptures), and plastic surgery. The other 12 clusters have stronger links with hospital facilities (such as the operating room or an emergency room), or with other specialties, and are harder to define as separate product markets. For example, this concerns five clusters with internal specialties: internal medicine, neurology, cardiology, gastroenterology, pulmonology, and two clusters with internal medicine and surgery. With regard to these clusters, SiRM and Twynstra Gudde wonder whether health care providers have sufficient scale for being able to commercially

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<sup>3</sup> For example, see the second-phase decision in the merger case Stichting Albert Schweitzer hospital / Stichting Rivas Zorggroep of 15 July 2015. Health insurers indicated that the outflow of patients from the catchment area of the merger parties to the Erasmus Medical Center and the Maasstad hospital primarily concerned complex care, whereas this could not be deduced from the data because the DTCs in question were also offered by the Albert Schweitzer Hospital and the Rivas Zorggroep.

<sup>4</sup> Product market definition for hospital care (in Dutch: Rapport Productmarktafbakening ziekenhuiszorg), SiRM and Twynstra Gudde, December 2016.

exploit these types of care independently from a hospital or other specialties.

### 1.3 ACM's follow-up study

ACM used the study of SiRM and Twynstra Gudde for a follow-up study into possible improvements when analyzing the product markets in hospital care. Below, ACM discusses the choices it has made with regard to the classification into levels of complexity, as well as the product level at which it will analyze this care from now on.

ACM has also put forward its choices in two meetings with health insurers and hospitals in 2018. During these meetings, ACM's decision to review the product-market definition process was greatly welcomed. Following these meetings, ACM carried out several additional analyses to test its assumptions. In addition, a meeting with medical specialists took place, where several medical aspects were discussed in greater detail. Finally, a meeting with research firms and lawyers took place in order to get a clear picture of the practical implications of using the new definitions.

## 2 Classification of basic care and complex care

ACM has compared different methods/definitions in order to come to a choice for the classification of health care into complexity that is the most appropriate for its oversight:

1. Method based on regional general hospitals; this is the approach used by ACM in previous assessments. In this approach, all DTCs that are offered by regional general hospitals in the vicinity of the merger hospitals are taken as the starting point for the definition of basic care. Any remaining DTCs that involved WBMV-care<sup>5</sup> are subsequently eliminated as these clearly involve complex care.
2. The method used by SiRM and Twynstra Gudde as described earlier.
3. The method based on 20 general hospitals; this is an approach that closely follows the approach used in previous assessments. In this approach, a DTC is designated as basic care if at least 20 general hospitals (excluding academic and STZ hospitals or independent treatment centers, ITCs) in the Netherlands offer it<sup>6</sup>.

### 2.1 Assessment criteria

ACM has used different assessment criteria in deciding what definition could be chosen best for classifying health care into complexity. These are both qualitative and quantitative criteria.

In this context, ACM notes that it has looked at the classification into complexity from a competition-law

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<sup>5</sup> The definition of WBMV-care is further explained on page 6.

<sup>6</sup> ACM has performed various sensitivity analyses for other cut-off points where a DTC is classified as basic care, which are 10, 15 or 24 hospitals out of a total of slightly over 40 general hospitals in 2015. In the end, the choice for 20 hospitals was based on these considerations: 1) the odds of a DTC being basic care are higher if the number of hospitals that offer this DTC is larger; 2) the number of hospitals should not be too large, because otherwise, there is a risk that the definition must be adjusted often, for example if a hospital obtains an STZ status; 3) with a very high percentage, think of 75% of the general hospitals, the bar is set very high for a DTC to qualify as basic care. However, it remains a somewhat arbitrary choice. With the threshold at 20 hospitals, 77.52% of the turnover from DTCs in 2015 is designated as basic care. If the threshold is set at 24 instead of 20 hospitals, another 1.69 percentage point of the total turnover from DTCs in 2015 will no longer be designated as basic care.

perspective, which does not necessarily correspond with a medical perspective. Specific forms of health care can be complex from a medical perspective, due to the nature of the treatment involved, such as breast cancer surgeries, but do not need to be complex from a competition-law perspective if a large number of hospitals are able to offer this type of health care.

### 2.1.1 Qualitative criteria

One of the first criteria that ACM looked at was the degree to which the definitions are consistent in terms of substance. For example, is it logical that each DTC offered by a regional hospital should immediately be designated as basic care? One other important criterion is that the classification needs to be reproducible as time passes, including for external parties. It should be possible to change the definition if changes occur in the DTC classification or travel patterns. In addition, ACM wants to be able to use a DTC coding system because this is the starting point of its quantitative analyses. For basic care, we do not want to focus on an analysis of individual patients, as this will not be necessary most of the time. Furthermore, it is labor-intensive, and not easily reproduced. Also, ACM examined whether the classification results in a generally useful list for the assessment of mergers, and to what extent the various definitions take into account regional differences.

### 2.1.2 Quantitative criteria

ACM has looked at various quantitative criteria. First, it analyzed to what extent the classifications into DTCs that follow from the various definitions fit in with current measures for complexity such as WBMV-care, exceptional care, and to what extent that care is predominantly offered by academic hospitals and STZ hospitals.<sup>7</sup>

*WBMV-care*: these are forms of health care that fall under the Special Medical Procedures Act (WBMV) and can only be performed under a license. The number of hospitals that are granted such a license is limited. This is how the supply of complex care is regulated. For example, stem cell transplantations fall under WBMV-care. In most cases, it involves experimental treatments about which more knowledge needs to be gained, for example in what way this type of care can be offered best. That is why this type of care is, to a significant degree, complex care.

*Exceptional care*: life-threatening or chronic disabling diseases that are so uncommon that combined efforts are needed in order to treat patients. This care is primarily offered by a select number of expertise centers, and should therefore be designated as complex care.

*Care by academic hospitals and “top” STZ hospitals*<sup>8</sup>. This criterion indicates to what degree this form of

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<sup>7</sup> With regard to other indicators of complexity, referred to in the SiRM and Twynstra Gudde study, such as (i) the degree to which IC is used in the treatment, (ii) whether multidisciplinary care is involved, and (iii) whether volume standards are in place, ACM assessed in what way these match the three definitions of basic care. For all three indicators, only a limited correlation with the three definitions was found, whereas a correlation was found with the indicators mentioned in the main text. That is why we did not include these other indicators in the choice of a definition of basic care. Another oft used method for identifying complex care are the so-called ROBIJN criteria. However, these criteria cannot be easily linked to individual DTCs, thereby making it impossible to compare this definition with the other definitions of complex care.

<sup>8</sup> Following SiRM and Twynstra Gudde, ACM only included the STZ hospitals with the most robust profiles when applying this criterion. With regard to the selection of these hospitals, we looked at the share of three complex forms of care (complex-high volume, complex-low volume, and WBMV) within the total production of each of these hospitals. The 13 “top” STZ hospitals are: Catharina Hospital, Eindhoven; Isala Clinics, Zwolle; OLVG hospital, Amsterdam; Medisch Spectrum Twente, Enschede; St. Antonius Hospital, Nieuwegein; Medical Center Leeuwarden, Leeuwarden; Amphia Hospital, Breda; Rijnstate Hospital, Arnhem; Noordwest Ziekenhuisgroep, Alkmaar; St. Lucas Andreas hospital, Amsterdam; St. Elisabeth Hospital, Tilburg; Maasstad hospital, Rotterdam; Medical Center Haaglanden, The Hague.

care (for different thresholds) is offered by academic and “top” STZ hospitals. In these hospitals, the odds of a DTC involving complex care are higher than in a general hospital. ACM has assessed this for the threshold where the number of DTCs is offered by academic and “top” STZ hospitals for 50% and for 80%.<sup>9</sup>

For the quantitative indicators, ACM predominantly uses accepted measures for complexity. The reasoning behind the interpretation of the results of the abovementioned measures for complexity is the following: the fewer DTCs in these groups are classified as basic care in accordance with the three tested definitions, the better the definition performs.

In addition, ACM analyzed what the effects are when using different definitions of basic care for a dozen actual merger cases from the past. In that exercise, ACM mostly looked at whether the application of other definitions would lead to a higher market share and a higher diversion ratio<sup>10</sup> for general hospitals. Conversely, ACM looked at whether other definitions would lead to lower market shares and a lower diversion ratio for hospitals with more complex profiles such as academic hospitals. After all, that would be the trend that ACM would, logically speaking, expect if it were possible to make a better distinction between basic and complex care

When comparing the various definitions, ACM did not further distinguish between clinical and non-clinical general hospital care because such a distinction would not lead to significantly different results.

## 2.2 Benefits and drawbacks of the various methods

### 2.2.1 Approach based on regional general hospitals

#### *Benefits*

This approach is relatively easy to execute in practice. The only choice to be made is which hospitals (regional or otherwise) should be included in the analysis. This approach also takes into account any specific regional circumstances, because the DTCs that are offered in a region are the guiding factor for the definition of basic care.

#### *Drawbacks*

The main drawback of this approach is that a DTC will already be designated as basic care if just a single general hospital in the region offers it. According to ACM, this will lead to an overestimation of the number of DTCs that are classified as basic care. The method is thus sensitive to the number of hospitals that are included when determining the definition of basic care. Leaving out one or more hospitals may clearly alter the classification into complexity, while this has little to do with the question what kind of care is involved. ACM's analyses reveal that this method is a worse fit with accepted measures for complexity than the two other definitions for basic care. Furthermore, the application of this definition also shows a larger outflow/diversion of patients to, for example, academic hospitals than the two other definitions.

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<sup>9</sup> This method is also used in the assessment in the notification phase of the merger case between Academic Medical Center and the VU Medical Center, two academic hospitals located in Amsterdam.

<sup>10</sup> Diversion ratios give an indication of the degree to which patients divert to other health care providers, for example, if parties reduce health care quality. Suppose for the health care services in a region that are not provided by one of the health care providers involved in the merger, 3 out of 10 patients would go to hospital X instead. The diversion rate to hospital X would then be 30%. The exact percentages are determined by the degree to which parties and the other health care providers attract patients from the same areas, adjusted for the importance (in terms of the share in the total of all origins) of the municipalities in question for the parties. The higher the diversion ratio to a specific health care provider is, the higher the competitive pressure is that that health care provider exerts on the merger party in question.

### 2.2.2 SiRM and Twynstra Gudde's approach

#### *Benefits*

The method of SiRM and Twynstra Gudde results in a better comparison with accepted measures of complex care and the outcome in actual cases than the method that uses as its starting point a group of regional general hospitals, and it leads to similar results as with the definition of at least 20 general hospitals.

#### *Drawbacks*

However, there are also drawbacks. The first is of a methodological nature. Travel time (on which the classification into complexity of care is based) is not just correlated to complexity, but also to competition. DTCs that see a lot of competition, and for which patients by-pass nearer hospitals, will fall in the category of complex care (C) in the method used by SiRM and Twynstra Gudde, whereas they are actually not complex care. Increased competition over the years (more hospitals are passed by) also leads to the conclusion that more DTCs will be designated as complex care, while this is actually an indication of an increase in competition. As more DTCs are designated as complex care in that case, it could lead to the conclusion that less competition occurs between basic hospitals. Another drawback compared with the two other definitions is that it is quite laborious to generate a new DTC-list every year because travel patterns can vary each year, and thus also the classification into complexity. The last drawback is that the approach does not take into account any specific regional circumstances.

### 2.2.3 Approach based on 20 general hospitals

#### *Benefits*

As with the method used by SiRM and Twynstra Gudde, this approach uses as its starting point the idea that a DTC is complex care if patients travel for it. However, this method does a better job at taking into account the situation that this care should only be considered basic care if it is offered by a substantial number of hospitals. This definition is a better fit with accepted measures of complexity, and it leads to better results in real-world cases: a lower outflow/diversion to academic hospitals for basic care, and a higher market share for typical basic hospitals than the definition used by ACM in previous assessments. In addition, the method is easily reproduced. Compared with the approach that takes as its starting point a group of regional general hospitals, it is less likely that a DTC is incorrectly classified as basic care because at least 20 hospitals must offer this DTC, while, in the approach based on regional general hospitals, if a single regional hospital delivers a DTC this is already sufficient to classify a DTC as basic care. General hospitals, too, have specialties (including subspecialties) and complex care. These DTCs are not included in this approach.

#### *Drawbacks*

One drawback of this definition is that it does not take into account any specific regional circumstances. In addition, this method is sensitive to decreases in the number of general hospitals over time, and the definition does not take into account any shifts in basic care from hospitals to ITCs (such as orthopedics, dermatology, and ophthalmology). The latter may result in an underestimation of the competitive pressure exerted by ITCs on general hospitals because certain forms of basic care could be incorrectly considered complex care if less than 20 general hospitals did not offer them.<sup>11</sup> It additionally does not take into account any advanced specialization in general hospitals with regard to high-volume care.

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<sup>11</sup> ACM has conducted various checks in order to assess whether ITCs already offer certain forms of health care today that are not offered by general hospitals, and whether the DTCs for which the ITCs post the strongest growth figures are offered substantially less by hospitals. That was not the case.

## 2.3 Assessment of various methods including ACM's choice

Our analyses show that improvements are possible compared with the way ACM defined basic care in previous assessments. The classification of basic care in both the method used by SiRM and Twynstra Gudde as well as in the approach where a DTC is designated as basic care if at least 20 general hospitals offer that DTC are a better fit with other accepted measures of complex care. In addition, using the newer definitions also lead to more logical results in actual cases. In our observations, using these definitions leads to a lower outflow/diversion of patients to academic hospitals with regard to basic care, and a correspondingly lower market share of academic hospitals for basic care. One major drawback of the method used by SiRM and Twynstra Gudde is that there are indications that too much basic care is designated as complex care because of the link between journey time and competition.<sup>12</sup> If competition in basic care increases, then that care will be incorrectly designated as basic care because more hospitals will be passed by. Furthermore, with regard to the approach based on 20 general hospitals, it is easier to compile a new list of DTCs every year.

Following the meetings with hospitals and health insurers, ACM has carried out several additional analyses to test the robustness of the new definition that was presented in those meetings. For example, it looked at whether any large differences exist between urban and more rural areas in order to test whether a generic approach would be the right one. Based on our analyses, that would be the case.<sup>13</sup>

That is why, in future cases, ACM will use the following definition for basic care: *“An individual DTC will fall under the definition of ‘basic care’ if at least 20 general hospitals offer that DTC.”*

Until now, ACM has discussed its new definition for basic care. The DTCs that are not designated as basic care provide, in its opinion, a good picture of the DTCs that can be designated as complex care. When defining complex care, ACM will, in actual cases, also look at different methods such as a combination of case and care complexity, as already used, for example, in the merger between the Academic Medical Center and the VU Medical Center.

## 3 Level of analysis when defining the product market

In its previous assessments, ACM analyzed the various product markets for basic care for all products combined and thus as a single market for general hospital care.<sup>14</sup> That means that ACM groups the various products markets at a relatively high level. Although competition authorities in other countries also define

<sup>12</sup> ACM compared the DTCs that were classified differently by the method used by SiRM/Twynstra Gudde and the method based on 20 general hospitals with the opinions of several doctors in training. For each DTC, the doctors in training indicated whether they considered the DTC basic care or complex care. This analysis revealed that the opinions of the doctors in training more often matched the classification based on the 20 general hospitals than the one based on the approach used by SiRM and Twynstra Gudde.

<sup>13</sup> ACM assigned the level of urbanity to the zip code (postal code) of each patient (source: Statistics Netherlands, CBS). The weighted average score of urbanity of patients determines the level of urbanity of each hospital. The hospitals were then divided, where half was designated as urban, and the other half as rural. The threshold of the method based on 20 general hospitals has been adjusted to get a sufficient number of hospital types in both subgroups. Next, it was determined in each subgroup which DTCs would be designated as basic care and which as complex care. A comparison of both subgroups showed that the differences in care typing are small (approximately 3% of the total turnover of DTCs).

<sup>14</sup> For complex care, ACM in previous cases defined the product markets per type of care (such as WBMV-care) as well as used a combination of case and care complexity in order to get a proper definition of complex care.

the product markets at a reasonably high level, various regulators in Europe are considering defining the product markets at a lower aggregated level, and the UK regulator has several times already defined the market at the specialism level (and even subspecialism level). The approach used by ACM in previous cases could lead to ACM overlooking certain market problems. For example, ACM could give full clearance to a concentration, while, at a lower level (for example a specialism), a problem does exist. The hospital could use its strong position for this particular specialism to its entire range of health care services, thereby enabling it to ask a higher price or volume for the other specialisms. On the other hand, ACM could also block a merger in its entirety, whereas a relatively simple remedy might have sufficed, for example, transferring a particular specialism or part thereof to an ITC or another hospital.

Product market definition analyses can be done at different levels. Generally speaking, disaggregation can be done in various ways, in ascending order: (i) the level of the clusters that SiRM and Twynstra Gudde have identified, (ii) specialism level, (iii) patient group level (see box 1), and (iv) sub-specialism level of health care product level<sup>15</sup>.

ACM has also looked at product market classifications that are used by hospitals and health insurers. An oft-used classification by hospitals is that between elective care, acute care, and complex care (including high-complexity care). However, without good definitions of these terms, it is difficult to operationalize them. The levels at which health insurers negotiate over the products a hospital offers also fails to provide a clear picture. In practice, we see that health-care insurers and hospitals negotiate on different levels (specific health-care services, patient groups, on the total level, and combinations thereof). The approaches used by each health-care insurer per hospital may differ from those used by health-care insurers. Therefore, it is difficult for ACM to decide on an appropriate starting point for its product market analyses on the basis of those varying negotiation methods, leaving aside the question of whether the classification used by health-care insurers can be used for competition-law assessments, which is what ACM wants.

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<sup>15</sup> This is collection of DTC health-care products. This collection has been grouped based on medical characteristics such as ICD-10-diagnosis, WBMV-indication or other criteria (so-called pre-MDC).

### **Box 1: Patient groups**

When compiling patient groups, the diagnosis of each patient is the guiding factor. For each diagnosis, it is determined what complaint, symptoms, or health care needs a patient has when visiting a hospital. The activities that are linked to these are subsequently grouped into different patient groups. Similar complaints fall under the same patient group. For example, patient groups can be: a red or painful eye, a chest defect, painful joints or limited range of motion.

The classification into patient groups is based on the International Classification of Primary Care (ICPC), which is the accepted standard in the Netherlands for coding and classifying complaints, symptoms, and diseases for general practitioners.

For example, the patient group 'musculoskeletal' include symptoms such as arthritis, degenerative spine conditions (hernia), internal derangement of the knee, inflammatory polyarthropathy (rheumatism), osteoporosis, other musculoskeletal conditions, and fibromyalgia.

A total of 65 patient groups are distinguished, which are grouped into 16 main groups.

The Dutch Healthcare Authority (NZA) uses this classification in its analyses in the hospital-care market scan.

Below, ACM discusses the benefits and drawbacks of an analysis of the product markets at (i) the cluster level, (ii) specialism level, (iii) patient-group level, and (iv) subspecialism level or health-care product level. The different methods are compared with the method that ACM had previously used for the analysis of the product markets.

## **3.1 Assessment criteria**

ACM uses the following criteria for determining at which level the product markets can be analyzed best:

*a) Does a product market analysis on a different level lead to different results than analyses in previous assessments?*

An analysis at a lower level is only useful if such an analysis reveals that the various forms of health care that a hospital offers have different competitive circumstances. If the results at a specialty level (for example) look the same as for all specialties combined, it will not be necessary to distinguish between specialties in the analyses.

*b) Competition-law applicability*

When defining the product markets, ACM uses as its starting point the substitutability on the demand side and the supply side, as described in chapter 1. With this criterion, it assesses how the various classifications correspond with those.

*c) Recognizability*

When assessing mergers or collaborations, ACM finds it important that it is able to check its findings from its quantitative analyses by market participants. For example, if ACM sees a competition problem with regard to a specific type of health care, it wishes to check with market participants if they recognize this problem. In those cases, it is essential that these market participants recognize the classification used by ACM as such.

*d) Practical application*

It should be possible for both ACM and market participants to carry out product-market analyses, in which the thereto-associated administrative burden and implementation costs are taken into account.

### **3.2 Benefits and drawbacks of the various methods per criterion**

*a) Does a product market analysis on a different level lead to different results than analyses in previous assessments?*

If we analyze the product markets in several past hospital mergers on a cluster level, specialism level or patient-group level, we see significant differences in terms of market shares as well as in the calculation of the diversion ratios. All of the mentioned classifications show that the various forms of health care that providers offer have different competitive circumstances.

*b) Competition-law applicability*

The question of how health care is currently organized in hospitals is central in both the product-market analysis on the basis of clusters as well as in the one using specialisms. The guiding factor is the provider's perspective.

In that context, the cluster analysis of SiRM and Twynstra Gudde provides more insight into what is needed in order to offer a specific specialty. After all, it offers insight into the mutual interconnections with other specialties and necessary facilities such as an IC or an ER. The analysis can thus also show for what cluster it is easy for other providers to enter that market. From a competition-law perspective, that is important because, for clusters that can be reasonably independently offered from a hospital, a competition problem is less likely to occur because the barriers to enter these markets are lower.

One of the main benefits of a classification into patient groups (and main groups) is that the patient's complaint is central, and thus the perspective from the demand side. It provides insight into which health care providers are able to offer the products in question, and thus exert competitive pressure on each other. This is a key element for competition-law analyses.

With regard to the way the product markets have been analyzed in previous assessments, all options offer increased insight into the degree to which demand and supply substitutability is possible.

Although an analysis at a lower aggregated level might offer better insight into any potential competition problems, an analysis at *too low* a level will insufficiently take into account any options for demand and supply substitutability, and thus overestimate the potential competition problem. The latter would be the case if, for example, the market were analyzed at the DTC-level.

*c) Recognizability*

Hospitals and health insurers recognize an analysis at the specialty level because they often think in specialties, and hospitals are often organized along those lines.

Of the 19 clusters defined by SiRM and Twynstra Gudde, seven are clearly recognizable. These are clusters that they identified as possible separate product markets. These clusters consist of a clear main specialty, and this care is also offered by ITCs. The meetings with market participants showed a mixed

picture regarding the other 12 clusters, which have stronger links with the rest of the hospital. Some health-care insurers and hospitals recognize these clusters, whether or not helped by the specific DTCs that fall under these groups. Other insurers and hospitals have a harder time recognizing these clusters. In addition, these analyses for these 12 clusters have only been performed for basic care. However, hospitals also offer complex care, which will be linked to basic care. That complicates recognizability.

Market participants consider an analysis at the patient group level to be recognizable since more and more health care services in hospitals are organized based on that perspective. For example, think of the different one-stop shops in hospitals (in Dutch: 'zorgstraten', literally: health care streets). One drawback of an analysis based on patient groups is that it sometimes takes a long time before new patient groups are included by the NZa. As a result, certain developments in health care may be overlooked, which means that patients groups may not provide an up-to-date and thus not a recognizable picture of some forms of health care.

An analysis at subspecialism level or health care product level does not correspond with the way health insurers and hospitals negotiate with each other in practice, and is therefore less recognizable.

*d) Practical application*

For both ACM and market participants, the lower the aggregated level at which ACM analyzes the product markets (for example specialty versus patient groups) is, the more time to perform these analyses is needed. Because of a lack of data, it will not always be possible for market participants to perform the analyses at a lower aggregated level themselves. Market participants have an easier time to provide information at the specialism level than at the cluster level or for patient groups.

### **3.3 Assessment of different options including ACM's choice**

All proposed classifications in this chapter are an improvement over the method that ACM has so far used in its analyses. With these classifications, ACM will get better insight into whether specific forms of health care experience different competitive conditions.

If we compare the different ways in which ACM can analyze product markets at a lower aggregated level, then an analysis based on patient groups is the preferred choice. This is because of recognizability and the better fit with how the competition-law works in practice. That is why, in future cases, ACM will use the following principle: *"ACM analyzes planned mergers between providers of hospital care at the level of patient groups."*

In that context, ACM will analyze product markets based on main groups and patient groups. If the results per patient group within a main group do not differ from each other, ACM will use and discuss the results at the main-group level.