

# Practice Interview Gupta Strategists

## Introduction

The practice case in this document helps you to understand what you can expect from a case interview. There are certainly different types of case interviews, but the case which here is drawn gives an idea of the features that you're likely to encounter. Several points in advance:

- The cases usually have no right or wrong answer
- We look more at how you get to an answer than to the answer itself
- This is an example on paper; in an interview to you of course always ask questions
- In a case interview, you will have 25 to 30 minutes to get to an answer

## Practice case: improve the efficiency of the Oranjezorg Hospital

Our client is a local hospital with a cost base of EUR 100 million. The hospital is located in a city with 130 thousand inhabitants. The city has a relatively young but rapidly aging population. The care provided is primarily focused on the basics; for complex treatments, they refer patients to an academic centre in the area.

## *Customer demand*

There is a social debate going on about the increasing costs of hospital care. This discussion is about both rising costs and increasing volumes. Therefore, the Oranjezorg Hospital, formulated a regional hospital in the Zuid-Holland region, aims to be the most efficient hospital in the Netherlands. Efficient means for Oranjezorg Hospital that it wants to keep the costs of hospital care per inhabitant in its catchment area as low as possible. Oranjezorg Hospital has asked Gupta Strategists to develop a strategy for this.

Now follow the questions that you can expect in a case interview. At the end of the document you will find the 'right' answers, so that you can get started with questions yourself.

## Questions

Question 1: What are the 'efficiency' drivers that you would include in this issue?

- Tip: Take the time to your thoughts well to structuring - first think, then talk
- Tip: try to think of a (quantitative) structure that you can use to solve the case before you delve into the details

Question 2: The team will first gather insight given into the cost per treatment of Oranjezorg compared to other hospitals. What should the team look at?

- Tip: try to think through the possible solutions first, before you immediately choose an option without considering alternatives together with the interviewer

Question 3: What are the relative costs per unit of Oranjezorg Hospital compared to the relevant benchmark? Use the following numbers:

	Oranjezorg Hospital	All hospitals	Regional hospitals	Academic hospitals
Cost per unit	104	150	130	180

Question 4: what is the volume of care in relation to the relevant benchmark? Please use the following numbers:

	Oranjezorg Hospital	All hospitals	Regional hospitals	Academic hospitals
% of population that is patient at hospital	22%	18%	20%	14%
Volume per patient	12	13	10	16

- Tip: this is a quantitative question that you should calculate as well as possible

Question 5: What are the potential savings that results from changing the volume to the average of the relevant benchmark? The cost of Oranjezorg Hospital is currently EUR 100 million.

Question 6: which actions can be considered to reduce the (unnecessary) volume of care?

Question 7: you are in the elevator with the client. He asks what his hospital should do to improve efficiency. How would you answer his question?

- Tip: There is no right or wrong answer. It is important to formulate the relevant conclusions concisely. A summary of what you analysed have, is therefore not clear summary.

## Possible Answers

### Question 1 - what are the 'efficiency' drivers that you would take here?

A correct answer would contain the following elements:

First, you define efficiency: in this case, efficiency means that the cost of care per inhabitant in the catchment area of Oranjezorg Hospital is as low as possible. The cost of care per inhabitant are driven by two factors:

1. The cost per unit of the care provided
2. The volume (number of units) of care provided per inhabitant. This can be further broken down into the percentage of residents who become patients and the number of units of care per patient who comes to the hospital.

Both the costs and the volume can be compared with other hospitals in the Netherlands to quantify the points at which the hospital is already performing well and where there is room for improvement.

The structure can then look like this: Healthcare costs per resident = Costs per unit of care \* Number of units of care per inhabitant, where the number of units of care per inhabitant is driven by:  
% population that becomes a patient \* number of care units per patient

Good candidates consider the limits of the chosen structure. Limitations of this structure are for example:

- How do we take the quality (outcomes) of the care with us?
- What is a healthcare unit?
- Which care is not provided by the hospital, but by general practitioners or other care providers? (the calculation of costs per inhabitant is then incorrect).

### Question 2 - how does the team gain more insight into the relative costs per treatment?

A correct answer includes the following elements:

- Costs of care sharing by the delivered production gives the 'costs per unit'
- The cost per unit you can then compare with the cost per unit in other hospitals

A very good answer would add that only hospitals with a similar profile should be included for a reliable benchmark are (i.e. hospitals which do comparable treatments and show a similar patient population). For example, academic hospitals are not suitable as a benchmark, because they provide much more complex care that, by definition, costs more. A hospital in an area with older people than in the area of Oranjezorg Hospital is not a good benchmark either: older people use on an average of more care, so they entail additional costs apply.

**Question 3 - What are the relative costs per unit of Oranjezorg Hospital compared to the relevant benchmark?**

Oranjezorg Hospital is 20% more efficient. This can be calculated as follows:

- The regional hospitals in the Netherlands are the relevant benchmark, because other hospitals deliver other types of care
- Then the relative costs per unit in Oranjezorg Hospital compared to the benchmark are:  $104/130 = 80\% \rightarrow 20\% \text{ lower}$

This is a considerably higher efficiency than the average in the Netherlands

**Question 4 - how does the volume of care relate to the relevant benchmark?**

32% more volume per inhabitant than the relevant benchmark. The calculation is as follows:

- The regional hospitals in the Netherlands are the relevant benchmark, because other hospitals deliver other types of care
- The relative volume is mainly driven by the % of residents that have visited the hospital, which is  $22\% / 20\% = 1.1 \rightarrow 10\% \text{ more than the benchmark}$
- Then, the relative volume is driven by the volume of each patient:  $12/10 = 1.2 \rightarrow 20\% \text{ more than the benchmark}$
- Ratio percentage of inhabitants that visit the hospital \* ratio volume per patient =  $1.1 * 1.2 = 1.32 \rightarrow 32\% \text{ more than the benchmark}$  (about 30% would be sufficient as an approximation)

This seems a very big challenge. Can this really be right? How can a hospital deliver so much more care than the benchmark? A strong candidate comes up with some hypotheses and tests them with the interviewer.

**Question 5 - what is the saving potential by adapting the volume to the relevant benchmark?**

Approximately EUR 25 million. This can be calculated as follows:

- EUR 100 million costs / 1.32 = EUR 75 million  $\rightarrow$  reduction of 25 million.

**Question 6: which actions can be considered to reduce the (unnecessary) volume of care?**

A correct answer could include the following components:

- Increasing the awareness of doctors and hospital management about problems associated with high volumes of care. This can be achieved by presenting the benchmark data and by extensive discussion of results.
- Reducing hospital capacity, so that doctors must apply stricter criteria for admission or surgery, which reduces the volume.
- Specifying for which specialty the high volumes are cardiology, pulmonology, ENT, ... Then in specialties with high volumes, implement specific policy
- Improving cooperation with primary care, so that fewer admissions may be required
- Strengthen preventive care in the region. The feasibility of this is quite low because the hospital is not primarily concerned with this

**Question 7 - what do you answer to the client who asks in the elevator what he should do to improve efficiency?**

A possible answer can be:

- There are two sources of potential improvement: reducing unit costs and the volume of care
- Oranjezorg Hospital scored all very well on costs per unit; there seems no room for improvement
- However, in reducing volume lies a major challenge: your hospital provides ~ 30% more care than comparable hospitals. It seems prudent to develop measures to responsibly reduce volume

