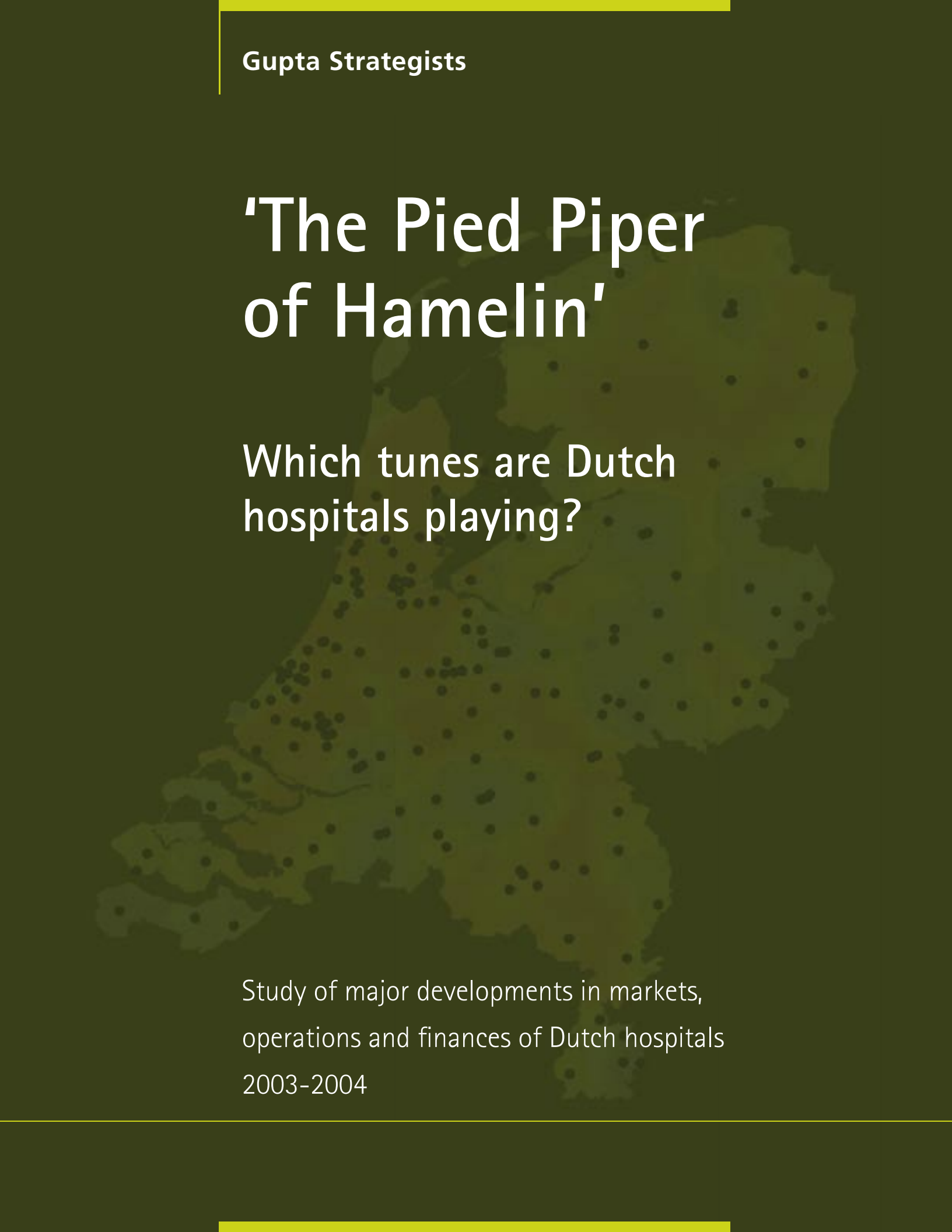
Gupta Strategists

# 'The Pied Piper of Hamelin'

## Which tunes are Dutch hospitals playing?



Study of major developments in markets, operations and finances of Dutch hospitals 2003-2004

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**The Pied Piper of Hamelin**
**Into the street the Piper stept,**
**Smiling first a little smile,**
**As if he knew what magic slept**
**In his quiet pipe the while;**
**Then, like a musical adept,**
**To blow the pipe his lips he wrinkled,**
**And green and blue his sharp eyes twinkled,**
**Like a candle-flame where salt is sprinkled;**
**And ere three shrill notes the pipe uttered,**
**You heard as if an army muttered;**
**And the muttering grew to a grumbling;**
**And the grumbling grew to a mighty rumbling;**
**And out of the houses the rats came tumbling.**
**Great rats, small rats, lean rats, brawny rats,**
**Brown rats, black rats, grey rats, tawny rats,**
**Grave old plodders, gay young friskers,**
**Fathers, mothers, uncles, cousins,**
**Cocking tails and pricking whiskers,**
**Families by tens and dozens,**
**Brothers, sisters, husbands, wives –**
**Followed the Piper for their lives.**
**From street to street he piped advancing,**
**And step for step they followed dancing,**
**Until they came to the river Weser**
**Wherein all plunged and perished**

THE PIED PIPER OF HAMELIN (Browning, Robert, 1812-1889)

The story of the Pied Piper of Hamelin may seem somewhat far-fetched for a study of Dutch hospitals, but we propose there is a beautiful analogy here. Transposing the old German fable to Dutch healthcare:

Hamelin = The Netherlands
The council = Ministry of Health
The rats =Unproductivity
The Pied Piper = Hospitals
The children = Patients

The city of Hamelin was plagued by rats, like the Dutch cure sector was with declining productivity. The council of Hamelin, read Ministry of Health, tried really hard to exterminate this vermin but all in vain. Till the pied piper, read the Dutch hospitals, played their magic tunes. Under spell of their tunes the cure sector gained in productivity and improved financial health. If the results for 2004 are set forth, Dutch hospitals, or the pied piper are well on their way to get rid of the unproductivity vermin. But now the council of Hamelin, Ministry of Health, needs to come through on their part of the promise, to further liberalize healthcare markets. The hospitals have magic in their flute to sway the patients, like the pied piper did for the children. And we all do know how the tragic story of the pied piper ended.

# Executive Summary

*Fighting fit, fitting right*

Dutch hospitals recorded a remarkable recovery in 2003-2004. They improved their operational productivity and strengthened their financial base. And according to our study, they did so under normal pressures of competitive markets in which most of them operate. This indicates that already in 2004 hospitals were competitively engaged well before the opening of the healthcare markets from 1st February 2005, when price-volume negotiations were initiated. We find there was already a shift of patients in 2003-2004 driven by competition between hospitals. And factors such as cost of operation as well as financial reward are already somewhat correlated to market performance. Especially in more competitive markets, the correlation is significant. Dutch hospitals have become fighting fit, and it is fitting right that they have done so.

The developments in the Dutch cure sector during the period 2003-2004 are analyzed and presented in this study. The study addresses two major queries:

1) How did the Dutch hospitals rise to their key challenges: growth, productivity improvement and financial robustness?
2) Is it possible to evaluate which instruments are truly successful in improving their performance? Specifically, do market mechanisms help redress the productivity gap challenge?

*Demand for care remains strong and..*

We conclude that the demand for cure services again grew strongly in 2004. In terms of patient entities the Dutch hospitals grew by 4.4%. In terms of revenues it grew by 5% with an additional amount of above EUR 600 million spent in 2004. In real terms this growth is in line with the projection that the cure sector will grow by 4% per year, doubling to nearly EUR 30 billion by 2020 (Exhibit 1).

*.. future financing is key issue*

The financing of this growth is one of the key policy challenges for the Dutch society. We believe that boundaries for the actual need for healthcare have yet to be reached. So far the consumed healthcare is dictated primarily by the available budget. We postulate that introduction of "free" market mechanisms shall most

*Exhibit 1.*

likely further drive growth of the sector, as the potential demand is greater. The introduction of a uniform basic insurance for all Dutch citizens is the first step in developing financing instruments for the future. But we are of the view that both more urgency and rigor are required in addressing the financing challenge.

*Dutch hospitals became more productive, cost effective ..*

On the second key issue of efficient delivery of care, Gupta Strategists conclude that the Dutch hospitals have risen remarkably to the productivity gap challenge. Under tremendous and sometimes unwelcome pressure, with strong winds of change blowing from many directions, the Dutch hospitals have posted an unprecedented improvement in their operational performance. Dutch hospitals saved above EUR 200 million on real basis, primarily by improving labor productivity. Given that this is a huge upswing, and a breakthrough compared to the declining productivity of the last years, this performance deserves special attention, analysis and recognition.

*.. and financially more robust*

The productivity gain was utilized by the hospitals to improve their financial position. For example, the profit margin of Dutch hospitals increased by nearly 1% to 1.3%. However, had Dutch hospitals been fully compensated on a real basis for the delivered services in 2004, they would have managed to retain another EUR 118 million as additional profit. Or in other words, half of the productivity gain, EUR 118 million was "returned" to the Dutch society by the hospitals as a "gift", or, depending on your perspective, debt incurred from previous years (Exhibit 2).

*Can healthcare be market driven?*

We were intrigued to what extent this productivity gain is a fruit of the various policy initiatives undertaken to coax hospitals into performance improvement. Specifically we have sought to seek whether this improvement is a result of market mechanisms or of macro budget reductions.

The debate on the suitability of market mechanisms for healthcare has been vociferous and sometimes even cantankerous, with both pro-market and anti-market camps having valid arguments. The pro-market camp believes that the "invisible hand" shall reshuffle the playing field to drive performance improvements. While the anti-market camp believes that such improvements can only be driven by regulatory insights and dictates, for example through "efficiency frontier" analysis.

*Exhibit 2.*

**Finders keepers?**
Destination productivity increase 2003-2004 (EUR m)

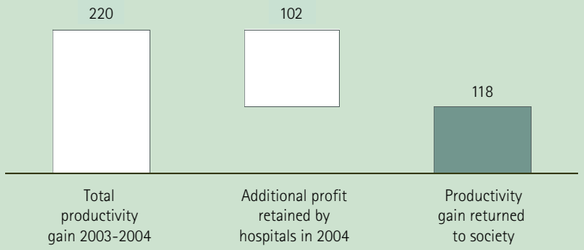
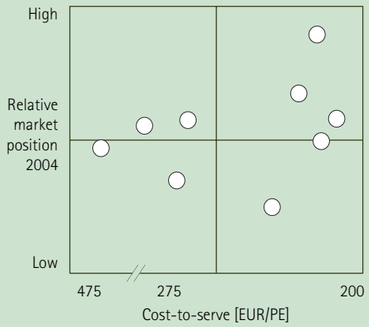
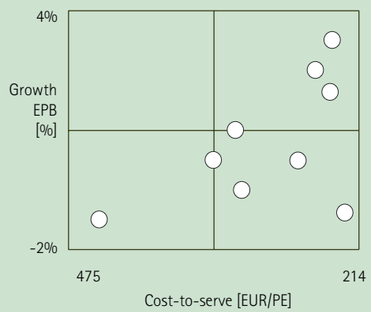


*Exhibit 3.*

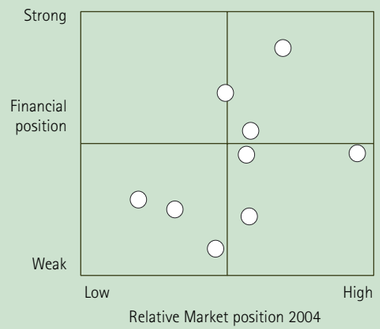
**Cost efficiency yields market strength ..**
Strategic positions within Rotterdam region




**.. and drives growth**
growth 2003-2004 within Rotterdam region




**... creating better financial position**
Financial positions within Rotterdam region




*Yes, cure was already a competitive market in 2004*

Irrespective of the outcome of the debate, we find that Dutch hospitals already operate in competitive markets and are sensitive to market pressures. It is important to emphasize that such pressures and sensitivities already existed in 2004, even before price-volume negotiations in the B-segment were possible. We estimate that at least EUR 100-200 million worth of revenues were competitively at stake in 2004, and hospitals actively strode for patient custom. This supports our conviction that hospitals themselves are capable of undertaking the necessary performance improvements, even in the absence of further explicit market or regulatory pressure. Already the existing market mechanisms forced them to do so in 2004. We conclude that on average Dutch hospitals are aware of their challenges, and have risen remarkably up to them in 2004.

*Market definition proposed*

In this report, Gupta Strategists present a consistent and logical framework of the Dutch markets. A framework of markets is essential to evaluate the effects of market mechanisms. The market framework requires first and foremost a consistent and logical definition of "markets" for each hospital. Since providing care is mostly a regional business, we have used postcodes and travel time[1] as the relevant variables to assign each hospital a market based on the same definition. Then, based on relative growth, operational and financial performance in a hospital's own relevant market, we have distilled the extent to which local market mechanisms prod hospitals to improve their performance.

*It pays to be competitive*

We find that in competitive markets, hospitals with higher productivity gained market share in 2004. This gain in share also translated in a further strengthened financial position of the market winners. This is the classic virtuous cycle of well functioning markets – gain in market share as a means to strengthen hospital performance.

[1] Travel time is only one of the many market defining variables, though perhaps for the bulk of the care the most important. See Market Performance, chapter 2, for further details.

On the basis of our analysis of 2003-2004 it would appear that costs can indeed be a market shaper, though the effect varies across the various regional markets, being most pronounced in Rotterdam[2]. And market share is a hospital shaper in terms of financial strength (Exhibit 3). The rudiments of the virtuous cycle already existed in 2003-2004 and are likely to be reinforced in the coming years.

*Let there be more "markets"*

On basis of the analysis of Dutch hospitals in 2003-2004, Gupta Strategists endorse further accelerated freeing of healthcare markets, and allowing more degrees of entrepreneurial freedom to hospitals. We conclude that the sector is already capable of leveraging the market sensitivities to meet the healthcare revolution challenge of the coming decades[3].

The key findings of the study are:

1) **The majority of the Dutch hospitals operate in competitive markets, and within their markets actively stride for patient custom and share.**
(Chapter 2)
Based on competitive intensity analysis of all Dutch postcodes, we conclude that citizens in most postcodes have ample choice in hospitals. At least 12 million Dutch citizens can choose from 2 hospitals within 15 minutes reach while nearly 10 m can choose from 3 hospitals. Viewed from a lack of choice perspective, less than 2 m Dutch citizens have only one hospital within 30 min travel time.

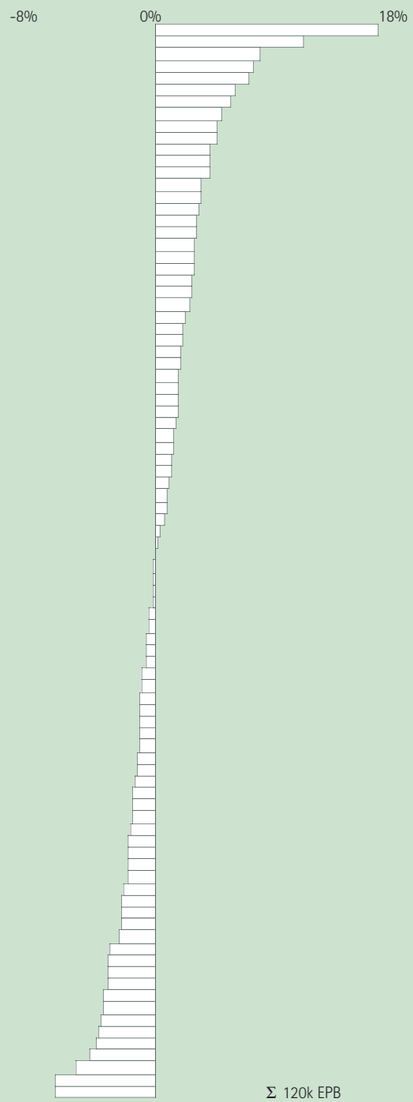
[2] We cannot rule out that quality of care may also be a relevant market shaper. It is possible that highly productive hospitals also provide high quality care, and quality of care is the underlying reason for gain of share.

[3] There is however one word of caution. The introduction of DBC's as a means to further liberalize markets has increased administrative burden, led to unnecessary complexity and from a specialist and patient perspective even inaccurate registration of cure. There is a risk that such changes may cause undesirable distortions of markets. Rather than achieve the desired aim of further liberalization, these may hinder openness, and ability to make judged choices. It would appear to us, that even in the pre 1st February 2005 paradigm, the markets were beginning to re-equilibrate to a more optimal position. It would be a shame if DBC's should distort this rather than accelerate it. In as much as not being fully addressed now, the authorities need to actively monitor, and prevent DBC led distortions of an extremely welcome and good performance under competitive markets in the Dutch cure sector.

*Exhibit 4.*

**Cure is becoming a real market**

EPB churn (switches above market norm as % of hospital EPB size)




*Cure is becoming a real market*

And Dutch citizens do exercise their choice. On average about 1-2% of the EPB seeking patients shifted their custom to a new hospital of choice in 2004. The actual churn in terms of Dutch citizens is of course much higher, as within the same amount of EPBs, the actual patient population churn will be higher. A 1% shift in average share is huge for healthcare, particularly in the context of the limited motive for mobility. In value terms a 1-2% churn means that about EUR 100-200 million worth of the healthcare market was at stake in 2004. Or there was already a "free market" worth EUR 100-200 million in 2004. Enough motive for competitive performance as an average hospital had EUR 1-2 million to win or lose, based on relative competitive performance. Of all Dutch hospitals 10 had positive churn rate above 5%, reinforcing the conclusion that already in 2004, significant competitive gains were realized by the market winners. (Exhibit 4)

Translated to hospitals[4], more than 80 Dutch hospitals operate in competitive markets. The effects of competitive arena are also clearly measurable. We see that hospitals in more competitive areas have a much larger spread in performance, and thus have both clear out-performers and under-performers. And it pays to be competitive. (Exhibit 3).

*Lower costs leads to higher share leads to stronger financial position*

The "invisible hand" already affected hospitals in 2004. We find that in a competitive area like Rotterdam, hospitals with lower cost-to-serve compared to their market peers, had higher share. It appears that cost is a market shaper. Moreover, with insurers actively negotiating on price since 2005, one expects performance will become more cost sensitive. Importantly we also conclude that it pays to gain share. The hospitals that gained share in 2003-2004 in their markets also showed a stronger financial performance. Indeed, in other sectors growth and market share are long enshrined measures of a successful business.

[4] Given our model of patient choice based on geography and demographics

*Exhibit 5.*

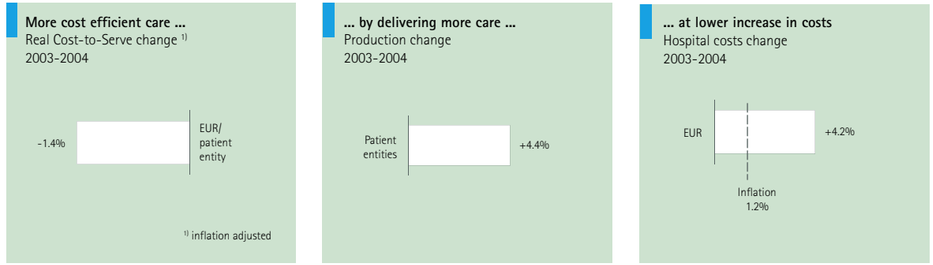



*Exhibit 6.*

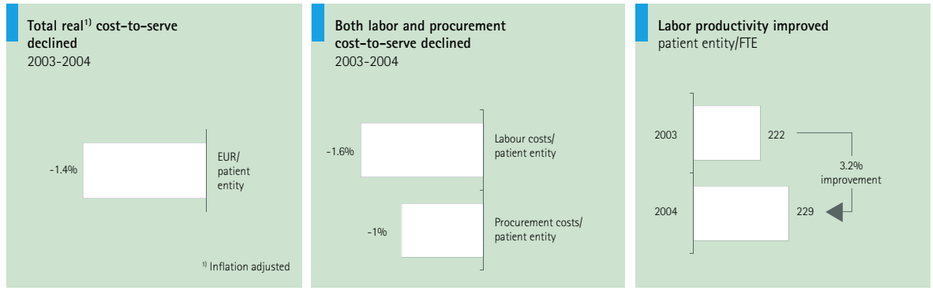
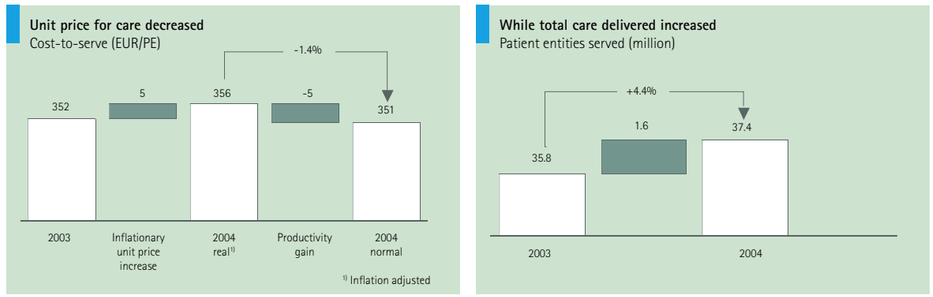
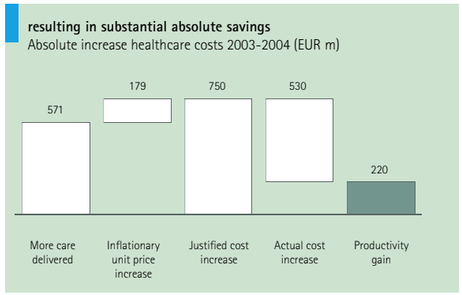



*Exhibit 7.*




*Cost-to-serve declined*

**2) Dutch hospitals posted a strong productivity gain, both in labor and in total cost-to-serve.**

(Chapter 3)

After years of declining productivity, Dutch hospitals posted a major gain in productivity in 2004. In cost-to-serve terms[5] Dutch hospitals gained in both nominal and real (i.e. inflation corrected) productivity. The real gain was 1.4%. This gain came along with a continued increase in production of 4.4% in patient entities (Exhibit 5).

The productivity gain was both in cost of labor (1.6%) and in cost of procurement (1%). The labor productivity (patient entities served per FTE) increased by a remarkable 3.2% (Exhibit 6).

In value terms Dutch hospitals gained above EUR 200 m through productivity improvement. (Exhibit 7)

While impressive, hospitals have still significant potential for further improvement. Improvement within the existing operational models is possible given the large variation in performance. But there is also significant potential through next generation, innovative strategies, for example, out-sourcing of procurement, or facility management. We find that Dutch hospitals have yet to employ competitively distinct out-sourcing models and we conclude there is significant untapped potential here.

*Financial position improved*

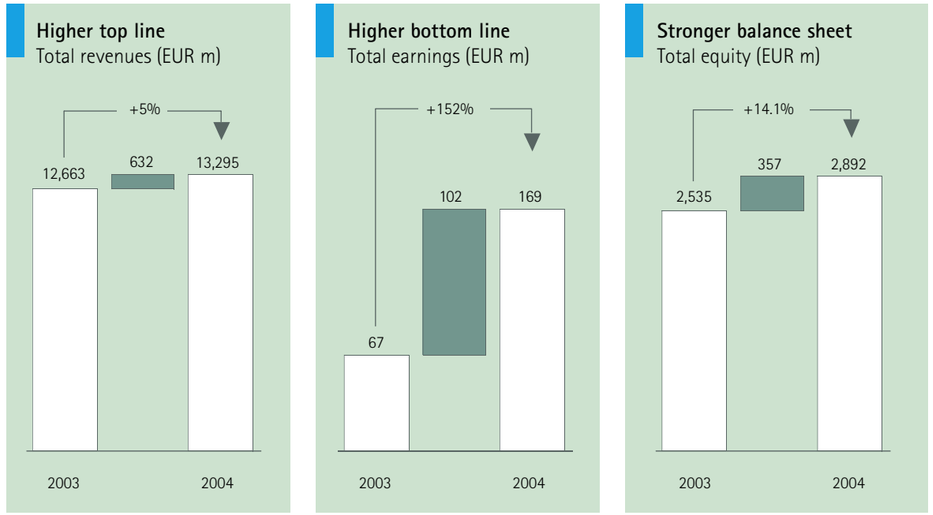
**3) The financial position of Dutch hospitals strengthened further, mainly as a result of self-achieved productivity gain.**

(Chapter 4)

The Dutch hospitals further improved their financial position (Exhibit 8). The margins (net results as percentage of revenue) increased from 0.5% to 1.3%, a total profit pool of EUR 169 m across all hospitals. An average Dutch hospital increased its absolute net results from less than EUR 0.8 m to EUR 2 m.

[5] cost in euros required to serve one patient entity

*Exhibit 8.*




Next to the profit gains, the balance sheet of the hospitals also improved. The total balance minus the total debt as percentage of revenue increased from 20% to 22%, and absolute gain of EUR 357 m on the balance sheet. On top of these improvements, financial management of the hospitals was also further strengthened. The operational cash flow as a ratio to debt increased from 10% to 11%. At the same time turnover of current assets also improved. Revenue as ratio of current assets improved to 3.63 from 3.58 in 2003. Thus hospitals required lower working capital in 2004 than in 2003 and they have more room available to improve their solvability. However, given the huge DBC billing problem in 2005, this measure is clearly going to suffer in 2005.

*Averages improved but performance gap widening*

**4) While the average of all Dutch hospitals improved in operational and financial performance, the performance bandwidths continued to diverge. Further entrenchment of winners and losers is ongoing.** (Chapter 5)

The 2004 analysis of hospitals shows that the sector is clearly segregating further into winners and losers. We have ranked all hospitals on their market, operational and financial performance in three groups: out-performers, on-par performers and under-performers. Based on the performance in 2003-2004 we conclude that the gap between out-performers and under-performers is widening. Out-performers are leveraging their performance premium to further gain ground on their competitors.

The oncoming demand revolution in healthcare will fundamentally change the way healthcare is managed. A paradigm shift is inevitable if we are to enjoy universal, high quality, affordable healthcare. Managing the shift requires fresh, creative, objective and rigorous strategic analysis and insights. Gupta Strategists strive to provide the analysis and insights required to manage the shift.

Gupta Strategists is a new player with the ambition to reshape the strategic consulting value proposition. Though young as a company, most strategists have extensive experience both in strategic consulting, and in healthcare but also importantly in other sectors. All strategists working in our company are driven by one shared passion: success for our clients. This report is an example of our thinking, our passion, and our investment in developing a rational knowledge base for the sector.

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