

Summary

Between 1985 and 2007 the number of hospitals in The Netherlands decreased from 159 to 92. This decrease is mainly caused by mergers and extensive collaborations; the number of locations where cure and care is provided has increased. For the most part this is caused by the increase of clinics outside the hospital. The average number of beds in Dutch hospital equals 478 which is over twice as large as the European average. Compared with the United States, Dutch hospital are also very large. The accessibility for care in the Netherlands is very good for both hospitals and general practitioners. 99.4% of the Dutch population can reach a hospital with emergency care within 30 minutes by car. Compared to the rest of Europe this is above average.

Scale in healthcare is a measure to indicate the size of a hospital, expressed in for example number of beds or turnover. Several different types of juridical mergers can be defined; this can vary between a complete juridical merger to a extensive collaborations between specific departments. The goal of a merger is most often dual. From organizational point of view scale is increased to save cost, the main goal is however always to increase the quality of the care which is offered in the hospitals.

Optimal size

With a series of mathematical models, a lot of studies have tried to calculate the optimal size for a hospital from economical point of view. Most of these calculations are based on the following two methods: 'activity based cost' or 'optimal size'. With activity based cost all the cost for a treatment, including resources such as electricity and cleaning cost, are identified in order to compare the efficiency of a treatment compared to other hospitals. The optimal size method determines a specific number of beds for which a hospitals encounters advantages or disadvantages of economies of scale. Most studies agree there is a turning point between 200 and 300 beds where economy of scale transfers into diseconomy of scale. When the optimal size is calculated based on public aspects, such as quality and accessibility, there is no clear opinion in literature. This is mainly caused by each aspect having its own influence on the theoretical optimal size of a hospital.

Consequences economies of scale

There are a lot of different opinions in literature concerning the increase of quality in healthcare as a result of mergers. This is partly caused by the complex and different definition for quality used in literature. As a result, a lot of studies measure quality in a different way which makes it difficult to compare. Especially collaborations between specific departments at different hospitals, such as neurosurgery and cancer treatment, have a lot of potential to increase quality of the given care. This is not yet scientifically demonstrated.

During the implementation process of a merger between two or more hospitals, a lot of transition cost occur, for example to combine the ICT network. Besides advantages in joint purchasing, there is no proof given that larger hospitals can structural lower the cost as a result of their size.

The availability and accessibility in Dutch healthcare is despite the many mergers still very good, this holds for both emergency and scheduled care. When the amount of locations where care is provided should decrease in the future this would directly affect elderly and people with lower income. The expectation is that in future care will be more region based-care instead of location-based care. This means that a region must provide all medical specialism instead of every local hospital.

In the Netherlands the number of hospitalizations per medical specialist is 135 per year, which is lower than the European average of 144. From this, the conclusion could be made that large Dutch hospitals are less efficient. On the other hand a lot of studies conclude there is no correlation between scale and efficiency.

Conclusion

There is still a lot unclear regarding the influence of economy of scale on organizational and public aspects in Dutch healthcare, only the influence on accessibility is clearly defined and supported by multiple studies. The coming years will tell if hospitals are capable of taking advantage from the implemented mergers and collaborations.