Summary

In part I of this thesis we examined the quality and safety of care via literature study (chapter 1), conducted a cross-sectional survey accompanied with interviews at emergency departments (chapter 2) and we analyzed the trend of the Customer Quality index of Dutch hospitals in the period 2006 – 2009 (chapter 3). Based on the findings in these chapters we conclude that there is substantial potential for improving quality of care. Chapter 1 shows that processes (care pathways) in health care in comparison with other industries are relative unreliable and that most hospitals are still in the early development (phase 0 to phase 1) of assuring quality and safety of care. This finding is confirmed in chapter 2, which shows that none of the 27 emergency departments that were sampled complied to minimum quality standards. A first step in improving the reliability of high risk processes may be complying to the quality requirement framework in chapter 2, but actual measurement of outcomes and process compliance and steering by professionals and management to improve these outcomes, will be essential to substantially improve the quality of care. In chapter 3 we show that the introduction of transparency and competition as part of the health reform in 2006 seems to have improved patient experiences in Dutch hospitals. If one combines the findings of chapter 1, 2 and 3, one may conclude that focusing on the measurement of outcomes of care and publishing these outcomes in concordance with the development of quality requirement frameworks may be a fruitful route to further improve the quality of care in the Dutch health care system.

In part II of this thesis we analyzed the costs, efficiency and accessibility of the hospital system by examining all (day)clinical Diagnosis Treatment Combinations (DTCs) in the period 2006-2009 (chapter 4). In chapter 5 we provide the results of a regional study around the city of Eindhoven were GPs worked with report cards. Based on the findings in chapter 4 we conclude that the introduction of standardized ‘products’ (DTCs), transparency of quality and negotiable prices and volumes for DTCs have led to improvement of efficiency, lower prices and marginally improved accessibility of care on a product level. Nonetheless substantial volume increases within the so called ‘B-segment’ outweigh the gains in efficiency of care and therefore total costs in the period 2006 to 2009 rose at an unsustainable fast rate. In addition, we see that once DTCs enter the B-segment, efficiency gains - compared to previous years of these DTCs and other DTCs within the same year - decrease, probably due to a shift of focus for these DTCs by hospitals towards volume growth instead of realizing additional efficiency improvements for these DTCs. In chapter 5 we show that the current level of transparency in the hospital market is too limited to result in substantial volumes of patients and/or GPs that choose for the ‘best’ hospital. For patients (and GPs) to act in the role of envisioned ‘change agent’, easily accessible, risk-adjusted outcomes of quality of care are needed.

In part III of this thesis we described potential strategies to (further) improve value of care. In chapter 6 we measure the developments in costs and quality of care in the different health care sectors using the value-based competition theory. In chapter 7 we present a new method to make the trade-off between accessibility and quality of care for one specific diagnosis (breast cancer). In chapter 8 we use the methodology of chapter 7 to gauge how the hospital landscape in the Netherlands would look like if one would optimize the value of care. Based on the findings in chapter 6 we conclude that in the first years after the health reform it seems that primarily the principles of the value-based competition theory (outcome measurement, bundled payments, competition between providers - as described by Michael Porter) improved efficiency and quality of care (at a product level) rather than health plans that selectively purchase care products. The main finding of chapter 7 is that via concentration of breast cancer care in the Netherlands in 15 to
44 centers the quality of care can be improved and that this outweighs the lessened accessibility of care according to patient preferences. Therefore by concentrating breast cancer care in fewer centers the total value of breast cancer care can be optimized. In chapter 8 we gauge how the Dutch hospital landscape would look like if one would optimize the societal value of hospital care using the methodology of chapter 7. We come to the conclusion that there seems to be an mismatch between the current hospital landscape and patient preferences; the current hospital landscape for complex care may be too dispersed, while for basic care it may be too concentrated and care could be provided in non-hospital settings in the proximity of patients.

We come to the conclusion that the current way of contracting hospitals via pay-for-performance systems is not a viable strategy to significantly improve value of care. Where value measurement once looked like a theoretical perceptive, the latest developments show that value measurement is feasible for the majority of care by using administrative data within the year 2012 already. In addition, for diagnosis where administrative data may not be the most valid source for value measurement clinical registries (such as the NICE for ICU care and the National Trauma Care registry for trauma care) can provide these insights, together with Patient Reported Outcome Measures (PROMs). To really improve value in health care, health plans should purchase integral health care products using three principles that are already routine in other parts of the economy: 1) define a meaningful health care product 2) measure the outcomes (costs and quality) of this product 3) pay for these outcomes rather than activities. By using this new way of contracting in combination with reducing redundant hospital capacity, it should be possible to make the next step in health care reform: realizing a cost growth that is in line with demographic trends and technological innovations while at the same time improving quality of care.