



The effect of Dutch hospital mergers on quality of care

Context

Since 2004 \approx 30 hospital merger assessments

- Majority unconditionally cleared, 1 remedy, 3 voluntary price cap, 1 prohibition

Claimed rationale

- Improving quality
- Volume standards



Questions?

- Is the claimed quality improvement achieved?
- What are the important drivers for the quality improvements?

Literature \rightarrow Mixed results +, =, -

Research design

Qualitative analyses

- 3 cases
- Interviews with board of directors, specialists, quality manager, insurer

Quantitative analyses

- Which quality indicators to use?
 - Outcome measures, hospital vs treatment level
 - several years, measurement instrument constant in time
- Difference-in-differences approach
- 14 cases (merged in period 2007-2013)

Results qualitative research

Quality effects

Scale effects

24/7 sub specialization

Volume standards

Training status

Less agile organization

Shock effects

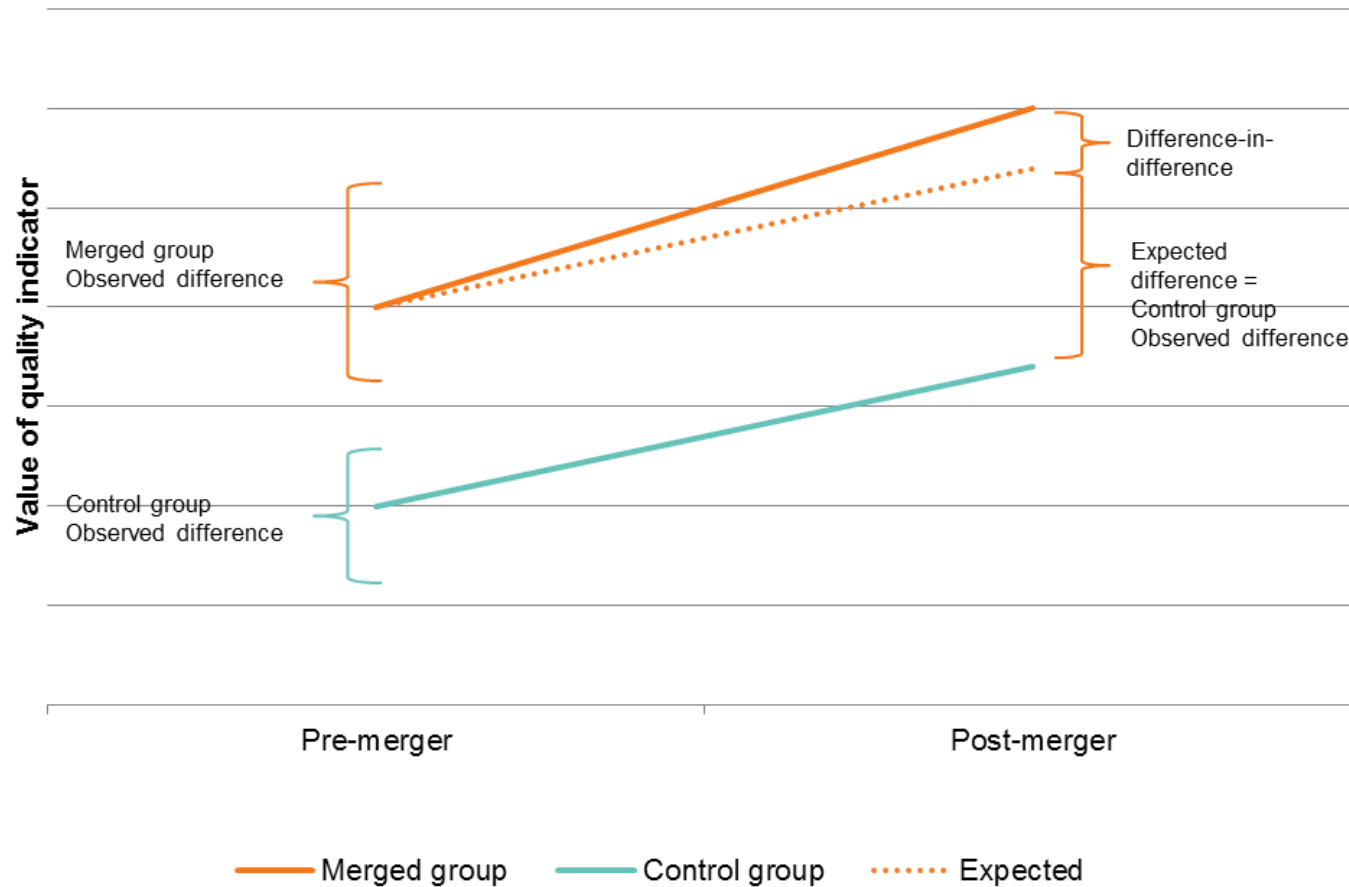
Improvement of organization and processes:

- Organizational structure
- ICT
- HRM policy
- Quality policy
- Healthcare pathways
- ...

Uncertainty and distraction from the primary process

Quantitative research

Difference-in-differences approach



Quantitative research

Indicators

- 97 indicators
- Outcome indicators
 - E.g. measurement of pain
- Customer quality indicators
- Waiting time
- Mortality rates

Results quantitative research

Hospital level (n=12)

- Screening of malnutrition in adults → lower
- Pain measurement in nursing ward → lower
- Longer waiting times (diagnostics, outpatient clinic)
- Mortality rate (unweighted) increases

Results quantitative research

Treatment specific indicators

- Healthcare outcome indicators → no effect
- Patient experiences → no effect
- Waiting times treatments → no effect
- Waiting times outpatient clinic : 1 → shorter; 3 → longer
- Waiting times diagnostics : 1 → longer

Results quantitative research

- Lower premerger score influences the results → trend towards industry average

	No trend	Trend
Pain measurement in nursing ward	positive	negative
Waiting time treatment	shorter	no effect

- No effect for a different control group
- Correction for multiple comparisons → only three significant effects

Conclusion

- No indications for positive effects of hospital mergers on quality of care
- Results can be case specific
- Management focusses on intermediate results (sub specialization, volume) without a link to the measured quality indicators.
- A merger to catch-up?

What next?

- Consequences for merger assessment
 - Critical on quality claims
 - Should be based on case-specific facts and evidence
 - Quality improvement must be merger specific
 - Effects should be timely
- Ex post study on price effects of hospital mergers

Thank you