

Infraday 2008

Who Decides on Market Shares of German Hospitals - Is it the Patient?

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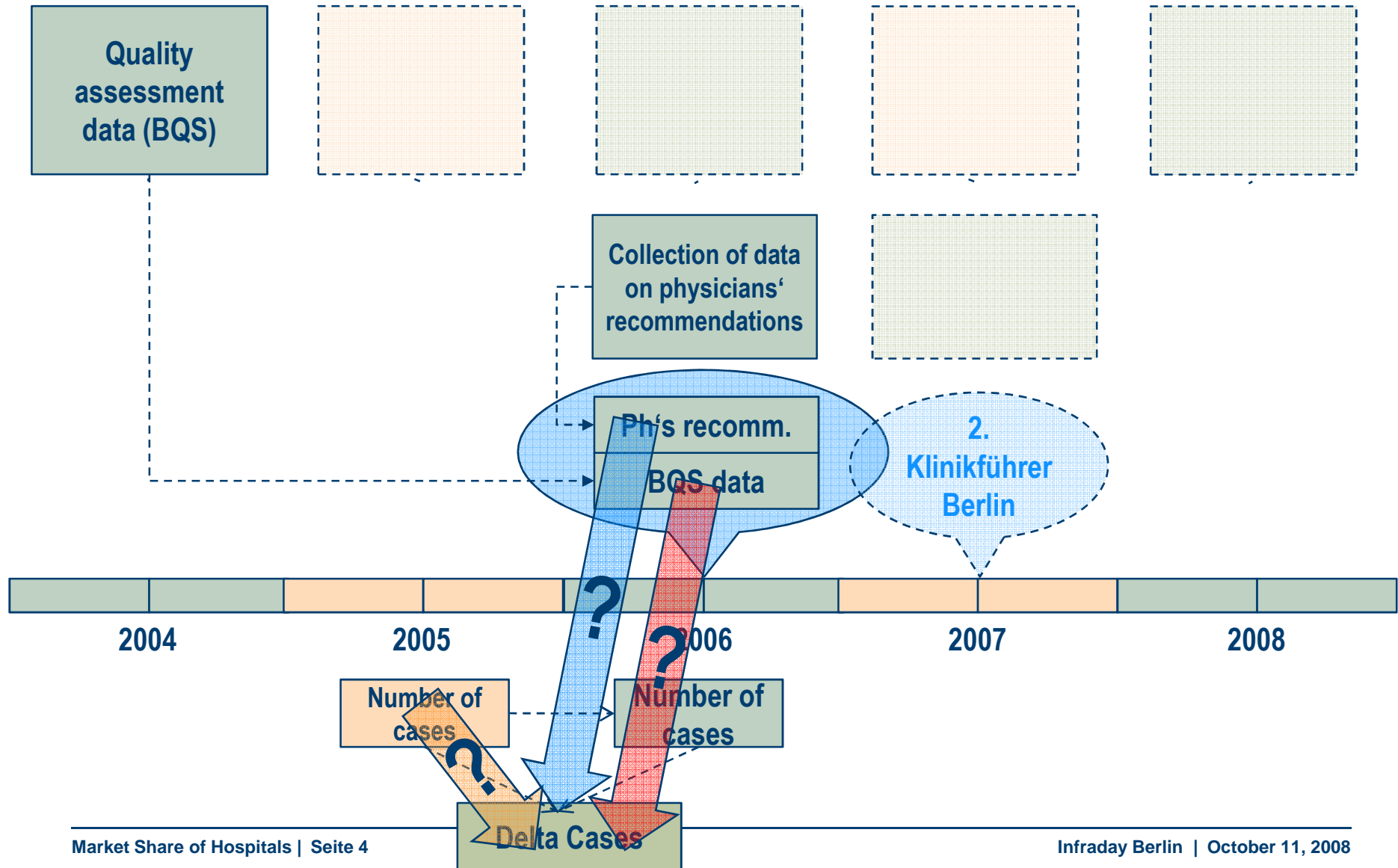
Overview



- **Background and research questions**
- **Data**
- **Results of analysis**
- **Summary and discussion**

Background and research questions

Background



Klinikführer 2006 (Hip replacement)



Der Krankenhaus-Vergleich: Künstliche Hüftgelenk

Hospitals	# of cases in 2004	Anteil der Hochrisikopatienten (3)	Alter der Patienten (4)	Quality assessment data (BQS)				Physicians' recommend.		
				Prothesenausrenkung 5	Reparatureingriffe 6	Leitliniengerechte Therapieauswahl 7	Gefährlichkeit bei Entlassung 8	Dokumentationsquote der BQS-Fälle (9)	Zertifikat (10)	Basierend auf 750 Empfehlungen von 285 niedergelassenen Ärzten 11
Bundeswehrkrankenhaus	139	45,3%	70	1,4% ✓	4,3% ✓	63,3% ✓	99,3% ✓	100,0%	KTQ	5,1%
Charité Benjamin Franklin	57	22,8%	66	k.A.	k.A.	k.A.	k.A.	95,0%	-	5,2%
Charité Mitte	277	36,8%	66	k.A.	k.A.	k.A.	k.A.	97,7%	-	2,5%
Charité Virchow-Klinikum	56	41,0%	67,5	k.A.	k.A.	k.A.	k.A.	97,7%	-	2,3%
Dominikus Krankenhaus	35	51,4%	73	K 0,0% ✓	K 5,7% ✓	K 88,6% ✓	K 100,0% ✓	100,0%	KTQ	1,3%
DRK Kliniken Köpenick	230	10,0%	59	0,9% ✓	2,6% ✓	59,1% ✓	99,1% ✓	100,0%	JCI	1,2%
DRK Kliniken Mark Brandenburg	41	12,2%	56	2,4% ✓	2,4% ✓	58,5% ✓	97,6% ✓	98,0%	JCI	0,0%
DRK Kliniken Westend	264	12,5%	63	0,4% ✓	0,8% ✓	66,3% ✓	98,9% ✓	100,0%	JCI	3,1%
Ev. Elisabeth Klinik	64	23,0%	70	3,1% ✓	6,2% ✓	74,3% ✓	98,4% ✓	101,59%	KTQ	0,8%
Ev. Königin Elisabeth Herzberge	15	53,4%	75	0,0% ✓	0,0% ✓	73,3% ✓	91,7% ✓	100,0%	KTQ	0,1%
Ev. Martin-Luther-Krankenhaus	170	17,0%	70	K 1,8% ✓	K 6,5% ✓	K 72,9% ✓	K 98,8% ✓	100,0%	KTQ	5,9%
Ev. Waldkrankenhaus Spandau	641	31,4%	69	K 0,9% ✓	K 2,3% ✓	K 81,3% ✓	K 98,9% ✓	98,77%	KTQ	16,0%
Gemeinschaftskrankenhaus Havelhöhe	k.A.	k.A.	k.A.	k.A.	k.A.	k.A.	k.A.	100,0%	-	1,2%
HavelKlinik	50	64,0%	68	0,0% ✓	0,0% ✓	82,0% ✓	100,0% ✓	100,0%	-	0,1%
Vivantes Humboldt-Klinikum										5,3%
Vivantes Klinikum Hellersdorf										6,5%
Vivantes Klinikum im Friedrichshain										0,3%
Vivantes Klinikum Neukölln										0,9%
Vivantes Klinikum Prenzlauer Berg										1,7%
Vivantes Klinikum Spandau										1,2%
Vivantes Wenckeback-Klinikum										2,1%
West-Klinik Dahlem										0,8%
Vivantes Klinikum Spandau	41	43,9%	70	2,4% ✓	7,3% ✓	56,1% ✓	97,6% ✓	100,0%	-	1,7%
Vivantes Wenckeback-Klinikum	18	61,1%	69	5,6%	16,7%	66,7% ✓	83,3%	90,0%	-	0,4%
West-Klinik Dahlem	24	41,7%	63	4,2%	4,2% ✓	95,8% ✓	100,0% ✓	100,0%	-	0,9%

k.A. = Klinik hat die Daten nicht zur Veröffentlichung freigegeben. Entfällt = Keine Patienten, auf die der Indikator zutrifft. K = Dieser Wert wird von der Klinik kommentiert. ✓ = Wert liegt innerhalb des Referenzbereiches für gute Qualität. Quelle: Iges, Tsp/Berl

- **Experimental study:**
Hibbard et al. 2005: Hospital Performance Reports: Impact On Quality, Market Share, And Reputation; Health Affairs vol 24, no. 4)
 - Low-quality hospitals improve quality after results are published. No improvement after unpublished reports.
 - Publication of quality indicators influence citizens' perceptions of hospitals' quality even after two years.
 - Effects on market shares not investigated.
- **No valid studies on the change of market shares as a result of quality information.**

Research questions

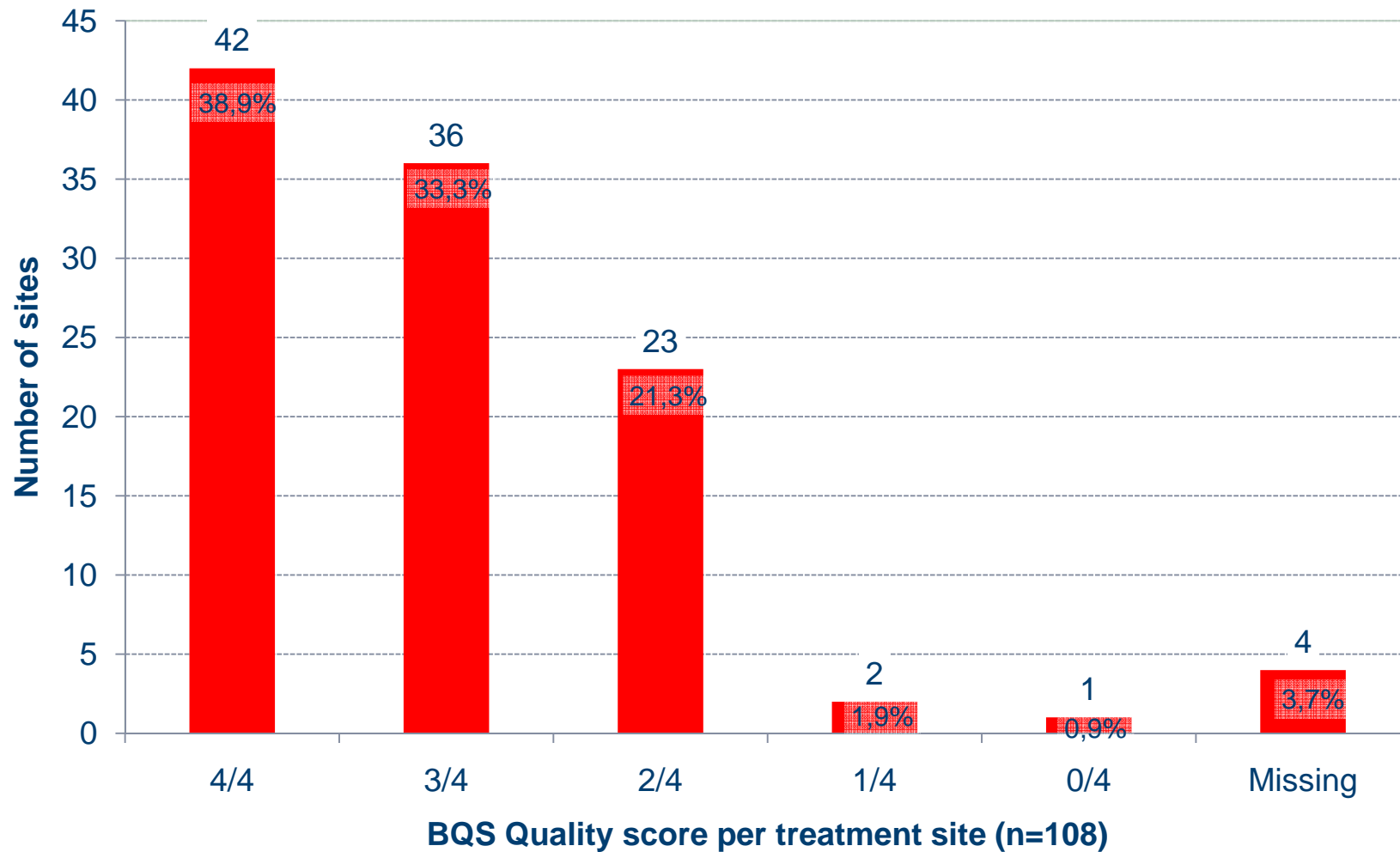
- **Is there a relationship between information of the public about quality performance of hospitals and the change in market shares of these hospitals after this information?**
 - Does quality information („Klinikführer Berlin“ / Berlin Hospital Guide) influence patients' choice?
 - Are „structural factors“ influential like the size of the treating institutions?

Data

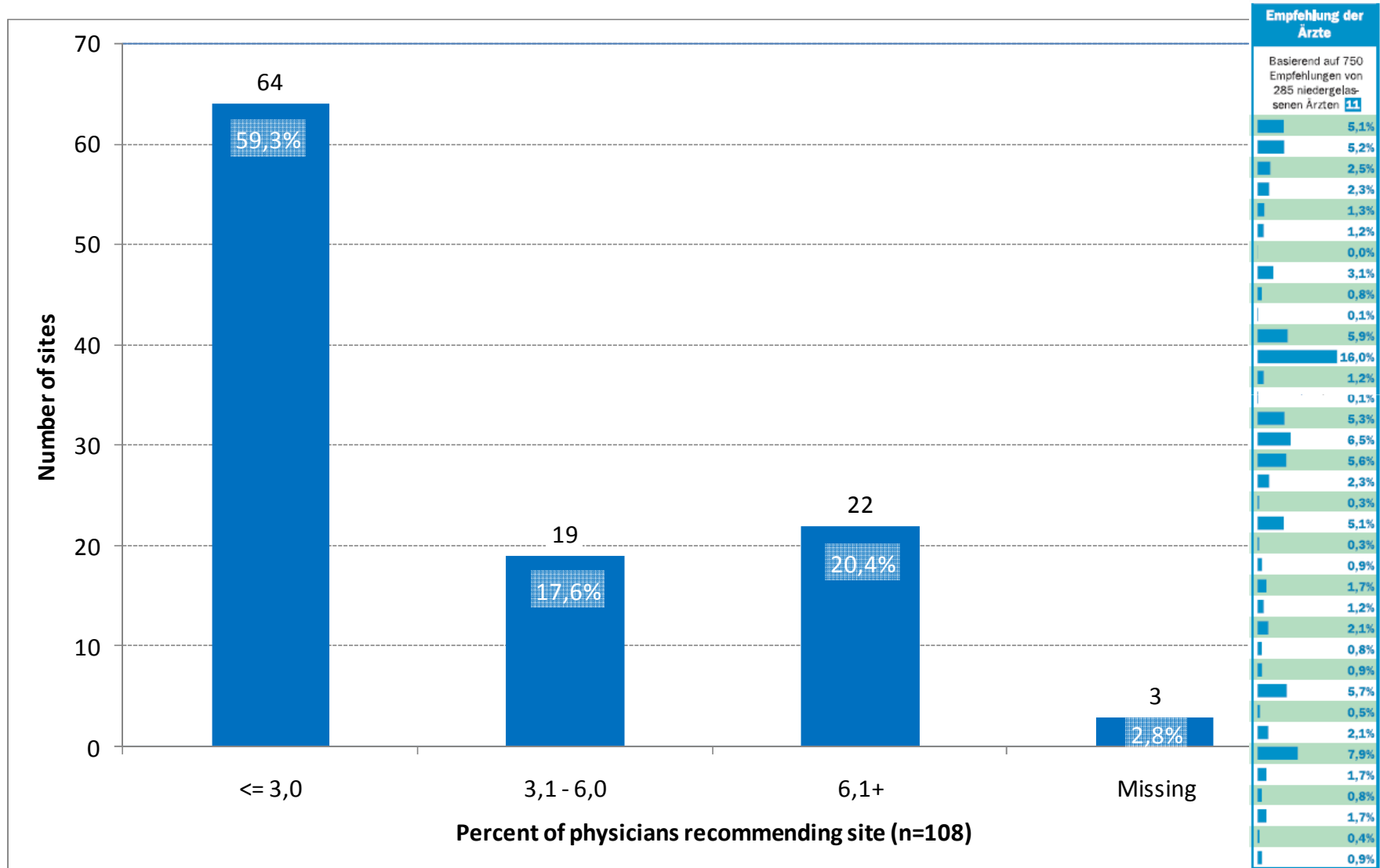
Hospitals and treatment sites

- **40 hospitals in Berlin published in „Klinikführer“ 2006 AND providing sufficient data (out of 47 hospitals cooperating with BQS)**
- **5 different treatments**
 - Birth assistance (obstetric)
 - Knee replacement
 - Hip replacement
 - Carotide surgery
 - Pace maker implant
- **Resulting in 108 different treatment sites**
- **32.858 cases in sample (out of 253.110 surgical cases resp. 694.518 cases in total in 2006)**

BQS quality performance indicators in „Klinikführer 2006“ (n=108)



Physicians' recommendations



Empfehlung der Ärzte

Basierend auf 750 Empfehlungen von 285 niedergelassenen Ärzten **11**

5,1%
5,2%
2,5%
2,3%
1,3%
1,2%
0,0%
3,1%
0,8%
0,1%
5,9%
16,0%
1,2%
0,1%
5,3%
6,5%
5,6%
2,3%
0,3%
5,1%
0,3%
0,9%
1,7%
1,2%
2,1%
0,8%
0,9%
5,7%
0,5%
2,1%
7,9%
1,7%
0,8%
1,7%
0,4%
0,9%

Quelle: Iges, Tsp/Bartel

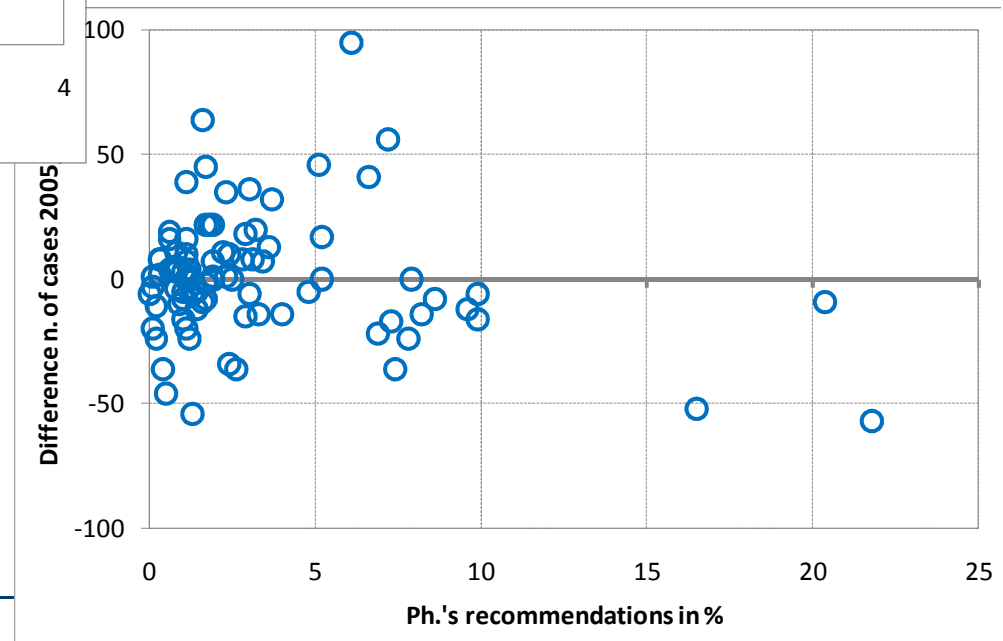
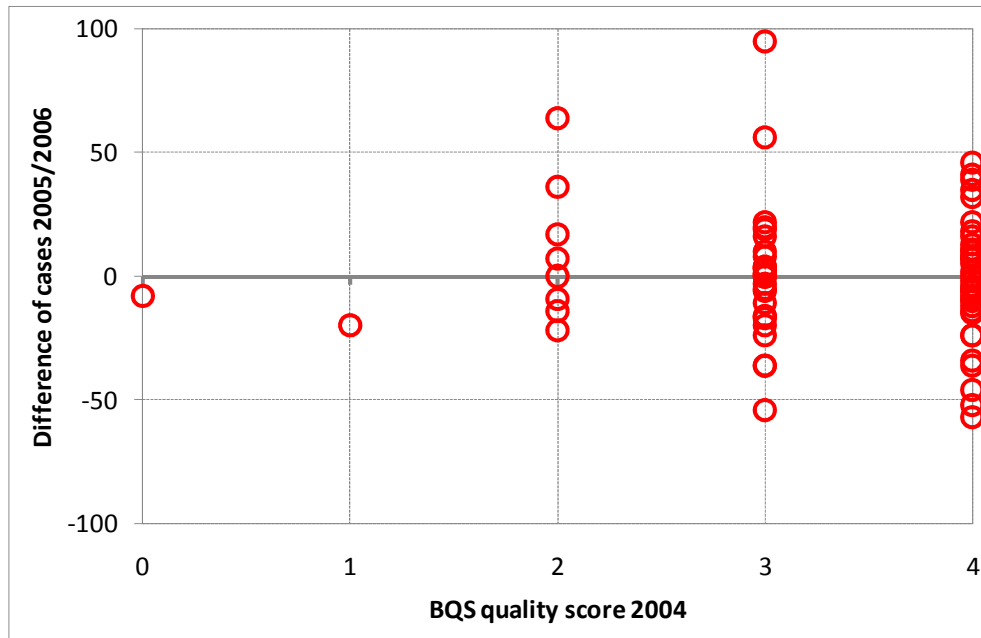
Changes in market shares



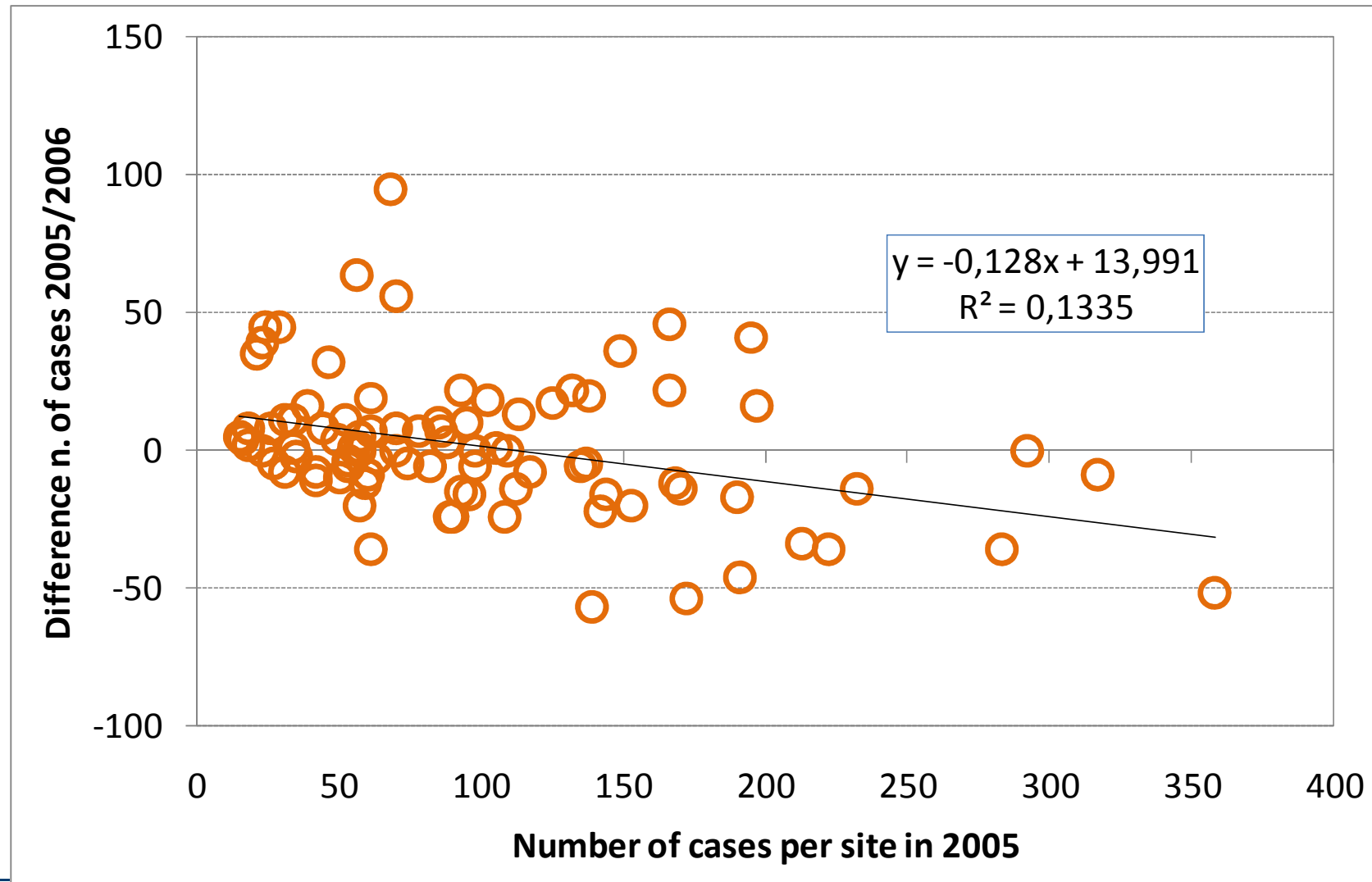
	Sum 2005	Mean	Median	Min	Max	Count	Change 2006	Change 2006
Birth attendance/Obstetrics	23.339	1.373	1.362	288	3.185	17	451	1,9%
Hip replacement	3.151	109	105	16	283	29	105	3,3%
Knee replacement	2.814	108	72	23	358	26	87	3,1%
Pace maker implantation	2.081	80	60	18	213	26	-99	-4,8%
Carotide surgery	893	89	73	15	317	10	36	4,0%
Total	32.278	299	94	15	3.185	108	580	1,8%

Results of analysis

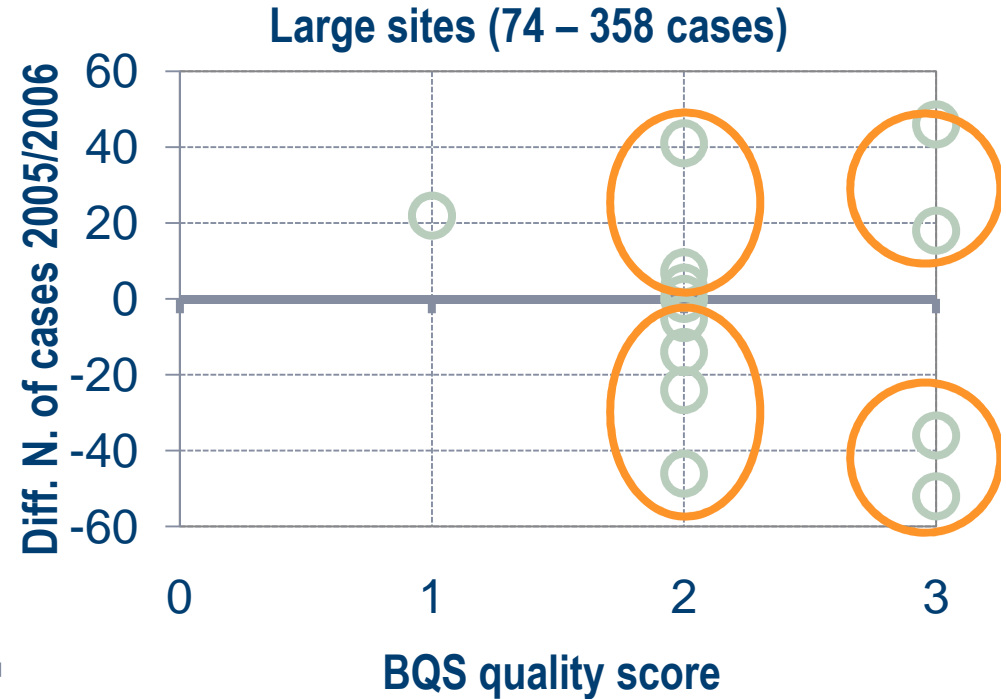
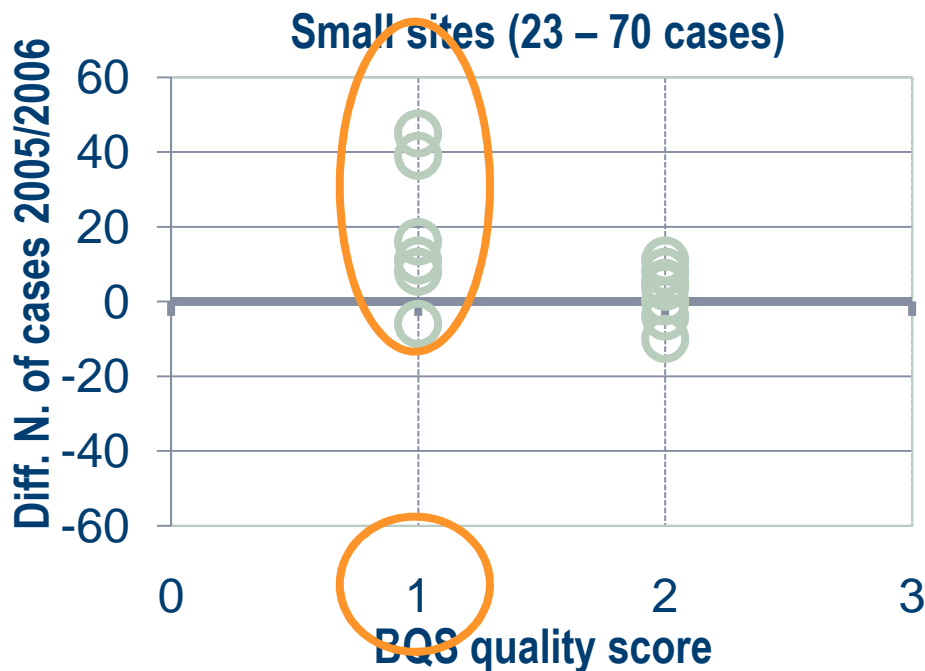
BQS scores and **physicians' recommendations** can not predict changes of market shares in **2006** (bivariate correlation; w/o birth attendance / obstetrics)



Only **n. of cases per site** can predict changes in 2006. Sites with small n. of cases are more likely to grow in 2006 (w/o birth attendance / obstetrics)



Small sites grow despite poor quality – large sites develop independent from their quality (knee replacement)



Summary and discussion

Summary of findings



- **There is strong variation between sites concerning**
 - quality scores,
 - recommendations, and
 - change of market shares.
- **There is no evidence that quality information does influence changes between market shares.**
- **Small sites grow stronger despite poor quality.**

Discussion

- **Growth of small sites is less likely a result of patients' choice but of "hidden" waiting lists at large sites.**
- **Sickness funds must reimburse ALL hospitals irrespective from their quality performance.**
- **Large sites are discouraged from growing by the German hospital reimbursement system:**
 - **If hospitals negotiate a growth of cases and can not achieve this they are less reimbursed for the case. Large sites are more cautious in negotiations because of problems to attract the extra staff required.**
- **Small sites are encouraged to grow in order to reach existing or expected „compulsory minimum volume standards“**
- **Growth of small sites is problematic for quality reasons.**
- **Next reforms should enable sickness funds to refuse reimbursement with hospitals showing poor quality.**

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