

**Attachment 1 to:**

Walser K, Huber E, Meister A. Planning, budgeting and performance management at Swiss hospitals – Are Swiss hospitals at a crossroads – Will these medical specialist organisations in future develop into institutions with a business orientation? GMS Med Inform Biom Epidemiol. 2013;9(3):Doc14. DOI: 10.3205/mibe000142.

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**Appendices**

Appendix 1: Table of possible response categories for each question and response numbers

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## Appendix 1: Table of possible response categories for each question and response numbers

The following table indicates the responses of acute-care hospitals only, following the corresponding question. The values (a/b) are as follows: a = status at time of current survey, autumn 2012; b = two-year target status, with 2012 as the starting point (autumn 2014). In the headline, a figure is quoted following designation of the development level of performance management. This number corresponds to the numerical indicator used throughout the text of the article. Not all the responders responded to all the questions. This leads to the partially smaller numbers than N=69 (Totals per question line).

<i>Level of development</i> <i>Question</i>	<b>Basic control – 1</b>	<b>Response figures a/b</b>	<b>Guided analysis – 2</b>	<b>Response figures a/b</b>	<b>Integrated navigation – 3</b>	<b>Response figures a/b</b>	<b>Strategy-driven management – 4</b>	<b>Response figures a/b</b>	<b>IT-advanced leadership – 5</b>	<b>Response figures a/b</b>
<b>Question 1 – Q1</b>	Our reporting concept is financially and externally orientated.	11/7	We have a comprehensive reporting concept with reference data on finance, services, processes, patients (including a deviation analysis and the definition of measures).	9/5	Our reporting system incorporates data on quantitative and qualitative reference data about treatment quality, patient satisfaction and risk assessments.	19/17	Our reporting system incorporates strategic initiatives and benchmarking information.	12/11	Our institution provides a systematic life-cycle analysis of report information. The assessment flexibility (self-service) of our hospital's central reporting platform is high.	2/13
<b>Question 2 – Q2</b>	In our organisation, controlling is used to collect and provide information.	9/3	In our organisation, controlling is used for deviation analyses.	14/4	In our organisation, controlling involves a reporting process with a high degree of automation.	6/3	Controlling is a critical business partner, questioning and supporting the definition of measures.	15/24	Controlling is responsible for bundling controlling tasks in a reporting and analysis factory.	8/18
<b>Question 3 – Q3</b>	Our organisation mostly compiles manual reports, using Office tools (Excel).	16/6	We have a data warehouse as a central information platform, with analysis options via Excel instruments.	12/4	Our organisation has a central data warehouse with a professional front-end (especially cockpits, standard reports).	13/34	Our organisation makes use of in-memory technologies for flexible ad-hoc analysis.	5/5	A DWH/front-end strategy coordinated with the IT division and reporting governance is in place.	6/13

<i>Level of development</i> <i>Question</i>	<b>Basic control – 1</b>	<b>Response figures a/b</b>	<b>Guided analysis – 2</b>	<b>Response figures a/b</b>	<b>Integrated navigation – 3</b>	<b>Response figures a/b</b>	<b>Strategy-driven management – 4</b>	<b>Response figures a/b</b>	<b>IT-advanced leadership – 5</b>	<b>Response figures a/b</b>
<b>Question 4 – Q4</b>	Our organisation generates standard reports without specifying recipients.	11/3	At our organisation, standard reports can be generated with role-specific adaptations.	10/4	Our organisation has a multi-level reporting system consisting of management cockpits, role-specific standard reports and printed reports.	13/21	Our organisation makes use of a time- and cost-optimised system to answer ad-hoc enquiries.	15/13	Our organisation makes use of a time-adjusted and geographically flexible system of information provision, using mobile terminals.	2/10
<b>Question 5 – Q5</b>	Our organisation primarily makes use of financially orientated operational planning.	4/2	Our organisation makes use of operational planning based on long-term financial targets.	1/1	We are responsible in-house for the planning of finances, services and HR.	12/5	Our organisation derives its operational planning from strategic goals and measures.	16/16	Our operational sub-plans (financial, service and staff planning) are mostly integrated.	17/26
<b>Question 6 – Q6</b>	In our organisation, the Controlling Division is the organiser, data collector and validator.	19/7			In our organisation, the Controlling Division specifies organisational standards and acts as a competence centre for content.	5/3	In our organisation, the Controlling Division is the business partner for a critical evaluation of the planning results.	24/26	We use a work flow-based planning process.	2/14
<b>Question 7 – Q7</b>	Planning data are reported and processed using Excel.	26/12	Data collection and processing in undertaken by a centralised planning system.	10/13	Our organisation has a chart to illustrate the integrated financial planning system.	8/13	The planning system used to simulate effect relationships operates on the basis of value driver models.	2/4	Our organisation integrates the systems for long-term and operational planning and the relevant sub-plans.	4/9

Level of development Question	Basic control – 1	Response figures a/b	Guided analysis – 2	Response figures a/b	Integrated navigation – 3	Response figures a/b	Strategy-driven management – 4	Response figures a/b	IT-advanced leadership – 5	Response figures a/b
<b>Question 8 – Q8</b>	Our organisation has time-consuming and error-prone planning processes.	10/3			When combined with current data, our organisation's planning figures serve as a long-term basis for strategic corporate management.	27/18			In our company, IT support reduces the cost and increases the quality of planning.	12/28

**Table 1: Overviews of question ranges, potential response categories and distribution of survey results.**

## Appendix 2: Survey details: Information about the number of distributed questionnaires, respondents, target group and other relevant data

Sample size and response rate:

- Number of email addresses of hospital CFO's in German speaking Switzerland 210
- Number of invalid email addresses 16
- Number of questionnaires distributed online 194
- Number of answered questionnaires 69
- Response rate 35.6%

No. of clinical treatments in 2011	No. of hospitals
Less than 3,000 cases	22
3,000 to 5,999 cases	16
6,000 to 8,999 cases	5
9,000 to 30,000 cases	19
More than 30,000 cases	6
Not matching	1
Total	69

**Table 2: Size of responding hospitals according to stationary treatments in 2011.**

### Appendix 3: Regression analysis and significance tests of the current status of performance management

	The content orientation of the reporting concept		The role of controlling in reporting		The existence of a central data ware-house		The role-/level-specific orientation of reporting		What is planned and how		The role of controlling in planning		How does IT support planning		Quality/cost of hospital planning
<b>Actual status</b>															
The content orientation of the reporting concept	X	x	x	x	x	x	X	x	x	x	x	x	x	x	X
The role of controlling in reporting	0.32	0.2004	x	x	x	x	X	x	x	x	x	x	x	x	x
The existence of a central data warehouse	0.41	0.2289	<b>c</b> 0.46	0.013	x	x	X	x	x	x	x	x	x	x	x
The role-/level-specific orientation of reporting	0.38	0.8336	0.43	0.273	0.41	0.1679	X	x	x	x	x	x	x	x	x
What is planned and how	<b>a</b> 0.31	1E-06	<b>d</b> 0.58	3E-06	<b>f</b> 0.42	1E-08	<b>i</b> 0.4	9E-07	x	x	x	x	x	x	x
The role of controlling in planning	0.37	0.9248	0.44	0.403	0.48	0.2077	0.29	0.93	<b>k</b> 0.56	3E-07	x	x	x	x	x
How does IT support planning	0.24	0.0005	<b>e</b> 0.49	5E-06	<b>g</b> 0.47	0.007	<b>j</b> 0.3	3E-04	<b>l</b> 0.3	4E-12	<b>n</b> 0.37	0.0006	x	x	x
Quality/cost of hospital planning	<b>b</b> 0.44	4E-05	0.18	1E-04	<b>h</b> 0.38	0.024	0.2	3E-04	<b>m</b> 0.3	4E-14	<b>o</b> 0.35	0.001	0.28	0.4912	x

**Table 3: Regression analyses and significance testing of the current status of the performance management system.**

The letters above the regression coefficients indicate the link between the criteria in Figure 12.

#### Appendix 4: Regression analysis and significance tests of the target status of the performance management system in 2 years

Target status in 2 years	The content orientation of the reporting concept		The role of controlling in reporting		The existence of a central data warehouse		The role-/level-specific orientation of reporting		What is planned and how		The role of controlling in planning		How does IT support planning		Quality/cost of hospital planning
The content orientation of the reporting concept	x	x	x	x	x	x	x	x	x	X	x	x	x	x	x
The role of controlling in reporting	<b>a</b> 0.54 0.0006		x	x	x	x	x	x	x	X	x	x	x	x	x
The existence of a central data warehouse	0.55	0.6508	<b>c</b> 0.59 4E-05		x	x	x	x	x	X	x	x	x	x	x
The role-/level-specific orientation of reporting	0.56	0.5466	<b>d</b> 0.5 0.002		0.66	0.262	x	x	x	X	x	x	x	x	x
What is planned and how	0.25	9E-05	0.4	0.079	<b>f</b> 0.32 1E-05		0.2	1E-04	x	X	x	x	x	x	x
The role of controlling in planning	0.35	0.058	0.45	0.376	<b>g</b> 0.5 0.012		0.34	0.117	<b>k</b> 0.4 0.0132		x	x	x	x	x
How does IT support planning	<b>b</b> 0.39 0.0017		0.29	5E-07	<b>h</b> 0.54 9E-04		0.2	6E-04	<b>l</b> 0.32 7E-10		<b>n</b> 0.31 9E-06		x	x	x
Quality/cost of hospital planning	0.28	1E-05	<b>e</b> 0.37 3E-12		<b>i</b> 0.37 1E-05		<b>j</b> 0.4 3E-09		<b>m</b> 0.3 5E-16		<b>o</b> 0.37 1E-09		0.17	0.4294	x

**Table 4: Regression analyses and significance testing of the target status of the performance management system in 2 years.**

The letters above the regression coefficients indicate the link between the criteria in Figure 13.