

1 SUPPLEMENT A

3 Medical education and learning motivation in medical economics

4 Dear Sir or Madam,

5 We want to invite you to participate in an anonymous survey on medical economics, which will take
6 about 8 to 12 minutes. We thank you for your participation and estimations on the topic. The
7 background of our project is the recording of hurdles in medical education in medical economics to
8 examine current concepts and modify them if necessary.

9 With this survey, we would like to determine your assessments of your economic competencies with the
10 assessment of others.

11 With this anonymous (no storage of name or IP address) survey of the science section of the Emergency
12 Medicine Training Center in Singen, we want to collect these assessments and use them for scientific
13 evaluation. The Ethics Committee of the Stuttgart State Medical Association has approved the study.

14 Our team acts independently from professional societies, market research, and industry (no Conflict of
15 Interest).

16 Your answers will be treated confidentially. The overall results are intended for publication in a medical
17 journal. If you have any questions about the survey or the topic, please contact the study director
18 (stefan.bushuven [a] notis-ev .de).

19 We thank you for your participation!

20 With kind regards

21 Stefan Bushuven

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23 Stefan Bushuven, M.D., MME MA

24 Deputy Chairman of NOTIS e.V.

25 Specialist in anesthesiology, medical hygiene, palliative, intensive and emergency medicine, clinical risk
26 manager ISO 31000

27 Hospital hygienist at the Institute for Hospital Hygiene and Infection Prevention, Gesundheitsverbund
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32 Privacy policy

33 Participation in the survey is voluntary. However, surveys can only provide reliable results if as many
34 different people as possible participate. Therefore, we would be very grateful if you, too, would use the
35 survey to contribute your views on the study's outcome.

Depending on your browser settings, a cookie may be stored on your terminal device to enable caching of survey results and re-opening of the survey. You can delete this cookie yourself in your personal browser settings, which means that it will then no longer be possible to reopen the survey with the already cached data.

The technical creation and evaluation of the questionnaires is carried out by Dr. med. Stefan Bushuven, Stefan[dot]Bushuven[ad]notis-ev[dot]de.

First, some questions for you ...

1. To which gender do you assign yourself? *

female

male

none

not specified

2. How old are you? *

3. How old do you feel? *

4. To which profession do you belong? *

Health care professionals, medical assistants (ATA, OTA, MFA), midwives

Medical staff and physician assistants

Emergency medical service personnel (RS, RA, NotSan)

Therapeutic services (speech therapy, ergo/physiotherapy)

not specified

5. What is your level of training? *

I am a student

I have completed my training

I am a trainer myself in a medical field

not specified

6. Do you have an education in economics or medical economics (e.g., Diplom BWL or VWL, MBA, MHBA, ...) *

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- 7. What is the best way to describe your place of work? ***

Non-clinical area/doctor’s practice

Hospital: Level I

Hospital: Level II

Hospital: Level III

Hospital: University hospital

Rescue service

Consulting

Health insurance company

Research institution

Industry

not applicable
- 8. The following are some questions about the characteristics of your personality and general behavior.**

To what extent do the following statements apply to you? *

Scale: 5 point-Likert from “does not apply” to “fully applies”

I am rather reserved, reserved

I trust others easily and believe in the good in people.

I am comfortable but tend to be lazy.

I am relaxed, do not let stress upset me.

I have little artistic interest.

I get out of myself and am sociable.

I tend to criticize others.

I complete tasks thoroughly.

I get nervous and insecure easily.

I have an active imagination and am imaginative.

CHOICE OF TRAINING (SIMS-D) Short**9. If you are participating in a health economics training course, to what extent do the following statements apply to you? ***

SCALE: 7 points Likert: strongly agree, agree mostly, agree somewhat, agree moderately, agree on a little, agree very little, agree not at all

I think this training is interesting for me

I am doing this training for my benefit

I am doing this training because I have to

There may be good reasons to do the training, but I see none for myself

10. Please answer the questions related to your competencies in the application of medical economic skills and methods (e.g., preparing and evaluating balance sheets and performance measures, preparing and handling billing statements, controlling skills, personnel discussions, quality and risk management, marketing strategies, hospital and practice management, logistics, health care organization, insurance systems) *

SCALE: 7 points Likert: strongly agree, agree mostly, agree somewhat, agree moderately, agree on a little, agree very little, agree not at all

I have technical knowledge of these methods

I am well-trained in the practice of these methods

My attitude towards these methods takes patient safety into account

When I use these methods, I can improvise

I use these methods all day long

11. Please answer the questions related to the competencies of MEDICAL PROFESSIONALS in the application of medical economic skills and methods (e.g., preparation and evaluation of balance sheets and performance measures, preparation and handling of accounts, controlling skills, personnel discussions, quality and risk management, marketing strategies, hospital and practice management, logistics, health care organization, insurance systems) *

SCALE: 7 points Likert: strongly agree, agree mostly, agree somewhat, agree moderately, agree on a little, agree very little, agree not at all

They have technical knowledge of these methods

They are well-trained in the practice of these methods

Their attitude towards these methods takes into account patient safety

136 When they use these methods, they can improvise

137 They use these methods all day long

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139 **12. Please answer the questions related to the competencies of NURSING PROFESSIONALS in the**
140 **application of medical economic skills and methods (e.g., preparation and evaluation of**
141 **balance sheets and performance measures, preparation and handling of accounts, controlling**
142 **skills, staff discussions, quality and risk management, marketing strategies, hospital and**
143 **practice management, logistics, health care organization, insurance systems) ***

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145 SCALE: 7 points Likert: strongly agree, agree mostly, agree somewhat, agree moderately, agree on a
146 little, agree very little, agree not at all

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148 They have technical knowledge of these methods

149 They are well-trained in the practice of these methods

150 Their attitude towards these methods takes into account patient safety

151 When they use these methods, they can improvise

152 They use these methods all day long

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156 **13. Please answer the questions related to competencies MANAGEMENT PERSONNEL in the**
157 **application of medical economic skills and methods (e.g., preparation and evaluation of**
158 **balance sheets and performance measures, preparation and handling of accounts, controlling**
159 **skills, personnel discussions, quality and risk management, marketing strategies, hospital and**
160 **practice management, logistics, health care organization, insurance systems) ***

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162 SCALE: 7 points Likert: strongly agree, agree mostly, agree somewhat, agree moderately, agree on a
163 little, agree very little, agree not at all

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165 They have technical knowledge of these methods

166 They are well-trained in the practice of these methods

167 Their attitude towards these methods takes into account patient safety

168 When they use these methods, they can improvise

169 They use these methods all day long

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14. How do you assess the risk of a lack of competence in medical economics for a hospital?

The credible maximum harm of a lack of competence in medical economics to hospital decision-makers is *

- insignificant
- minor - but no lasting damage
- noticeable- with longer-term consequences for the hospital
- critical - with permanent restrictions for the hospital
- catastrophic - with insolvency/closure

15. How often does it happen in Germany that a hospital suffers the damage you estimate due to errors in management? *

- less frequently than once in 30 years
- more often than. once in 30 years
- more often than once in 10 years
- more often than once in 5 years
- more often than once in 2 years

16. How do you assess the risk of a lack of competence in medical economics to a patient?

The credible maximum harm of lack of competence in medical economics among hospital decision-makers to patients is *

- insignificant
- minor- but no lasting harm
- noticeable- with prolonged hospitalization
- critical - with permanent limitations
- catastrophic - with death or severe disability

17. How common is it for a patient to suffer the harm you estimate in your setting? *

- less frequently than once in 3 years
- more often than. once in 3 years
- more often than once a year

203 more often than once in 3 months

204 more often than once a month

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207 **18. Please answer the following questions about medical economics** (True / False / I do not know)

208 **. the economic key figures of a hospital include ***

209 EBITDA

210 Liquidity 3rd degree

211 Cash flow

212 Cash discount

213 Reliability

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215 **19. the following institutions of the German health care system are members of the GB-A (joint**
216 **federal committee) and send voting members to it ***

217 IQTIQ

218 KRINKO

219

220 German Hospital Association

221 GKV Central Association

222 National Association of Statutory Health Insurance Physicians

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224 **20. the general hospital financing in Germany is based on ***

225 Statutory health insurance

226 Private health insurance

227 Government investment subsidies

228 Taxes

229 Employee participation

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231 **21. The GB-A names the following quality indicators in the German hospital landscape**

232 Casemix index

233 Personnel equipment

- 234 Technical equipment
- 235 Number of IQTIQ consultations per year
- 236 Number of surgeries per room per year
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- 238 **22. the code of a DRG consists of ***
- 239 Severity
- 240 Staff commitment number
- 241 Type of treatment
- 242 Organ system
- 243 Minutes spent
- 244
- 245 **23. working hours of hospital staff include ***
- 246 Rest periods of at least 4 hours
- 247 Working hours of no more than 58 hours per week
- 248 Breaks of 30 minutes per 8 hours
- 249 Training periods of 3 days per calendar year
- 250 Vacation time of at least 30 days per year
- 251 **24. the external stakeholders of a municipal hospital include ***
- 252 Physicians in private practice
- 253 Patients
- 254 Material supply companies
- 255 Health insurance companies
- 256 Employees
- 257
- 258 **25. the shareholders of a municipal hospital usually include * the following**
- 259 Physicians in private practice
- 260 Patients
- 261 Material suppliers
- 262 Health insurance companies
- 263 Employees
- 264

265 **26. billing in the outpatient sector is carried out for SHI patients via *.**

266 EBM

267 GOÄ

268 DRG

269 Casemix - Index

270 IQWiQ

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272 **27. if a drug loses its patent protection, it is offered, among other things, as follows, e.g., as ***

273 Biosimilar

274 Biotech

275 Generic

276 Homeopathic

277 Medical device

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