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Triangulation of Methods to assess the Impact of Evidence Reports

E. Dorendorf, A. Gerhardus
Dept. of Epidemiology & International Public Health
School of Public Health,
Bielefeld University

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Background I

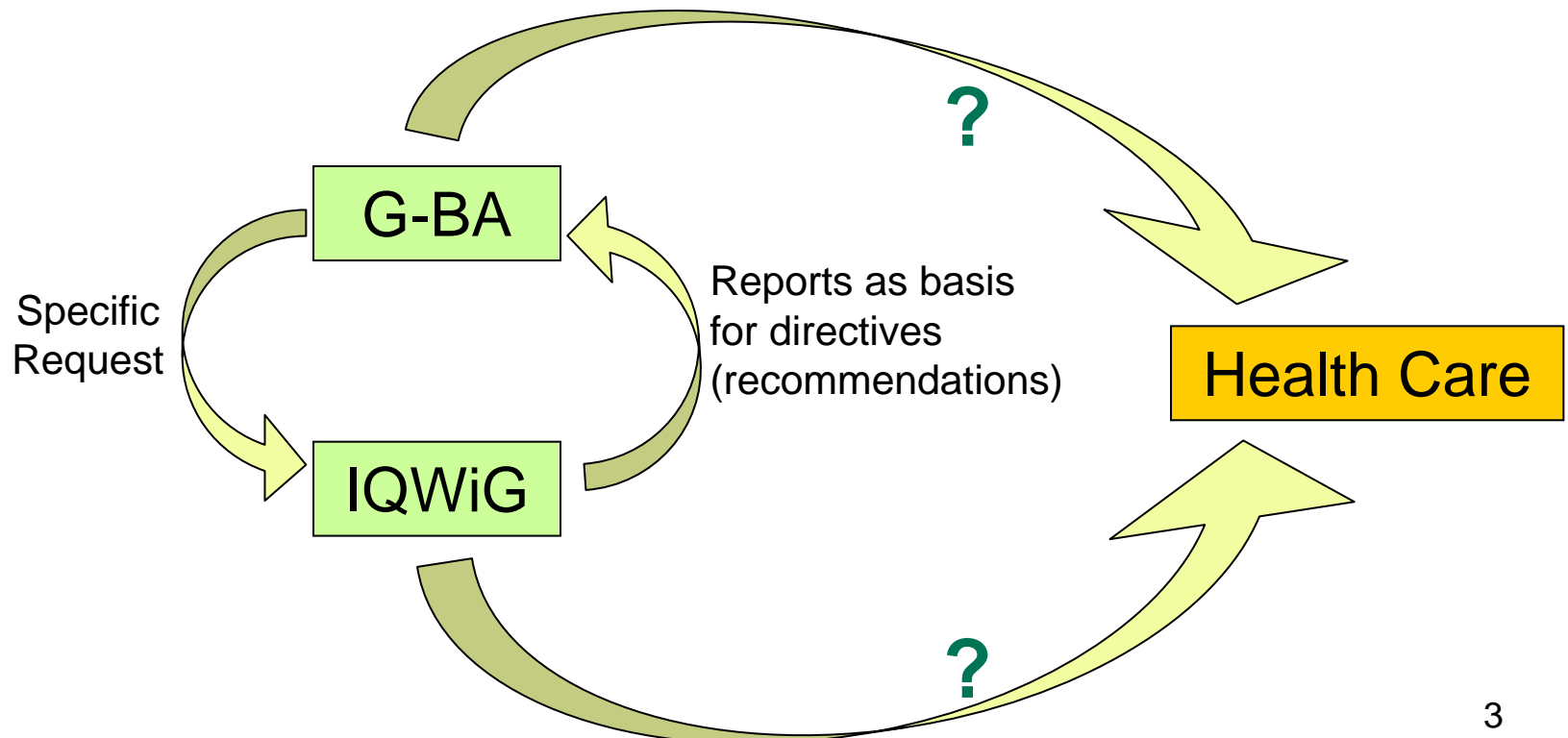
- Instruments of evidence based medicine are increasingly used to guide health care for people with chronic diseases in Germany.
- In 2006, the Institute for Quality and Efficiency in Health Care (IQWiG) prepared an **Evidence Report on rapid-acting insulin analogues** for the treatment of diabetes mellitus type 2.



What was the report's impact on health care?

Background II

- The Institute for Quality and Efficiency in Health Care (IQWiG) was established as an independent scientific unit by the Federal Joint Committee (G-BA) in 2004.



Example „Rapid-acting insulin analogues for diabetes mellitus type 2“

15.02.2006 ⇒ Publication of IQWiG's Final Report

Conclusion of the report:

no convincing evidence of a superiority of rapid-acting insulin analogues

Decision support for ...

18.07.2006 ⇒ G-BA decision on the reimbursement of the insulin analogues by the statutory health insurance (90% of population included)

Modification of Directive:

Exclusion of prescription (in the case of being more expensive), with exceptional cases

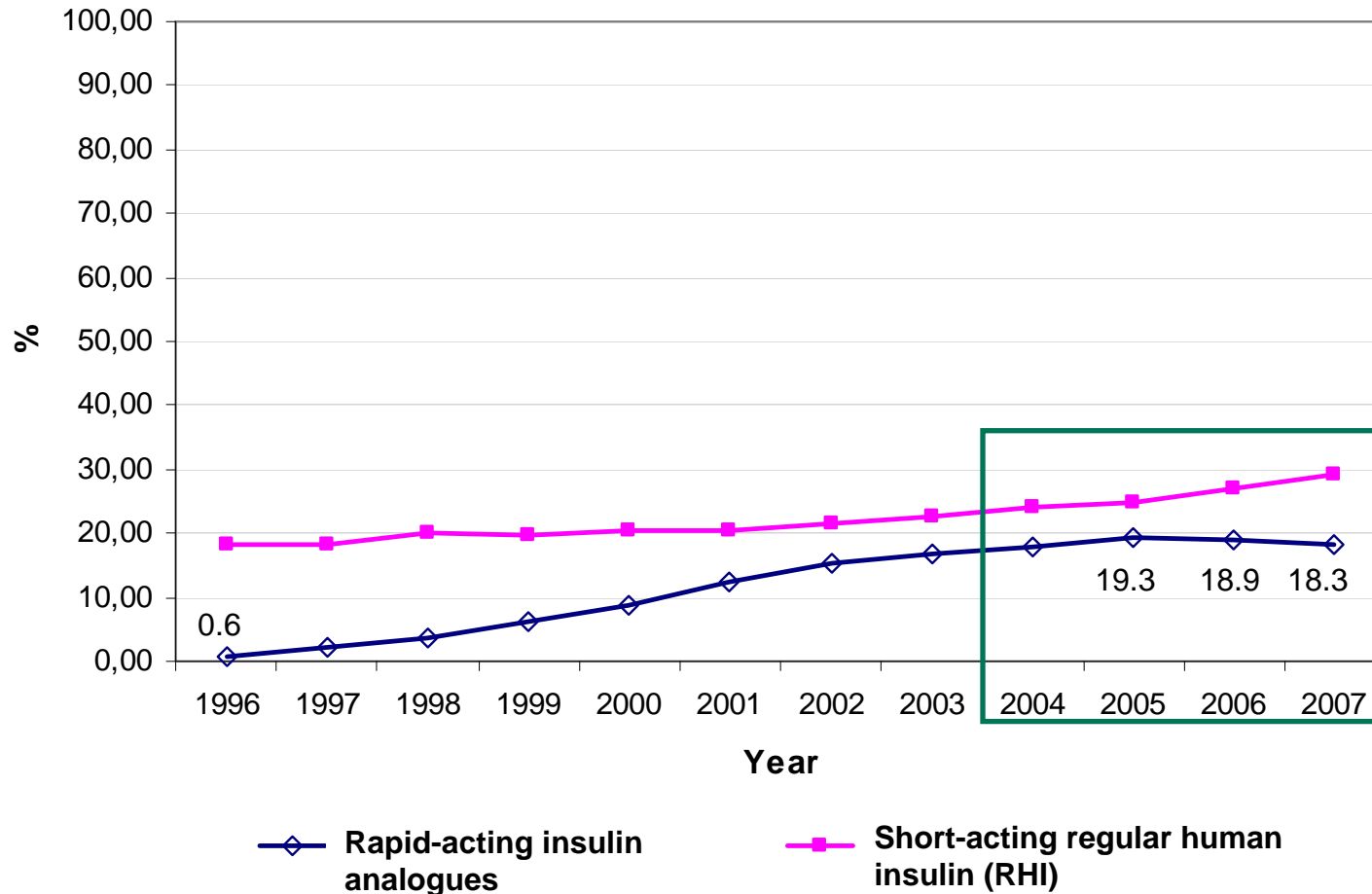
Methodology – Triangulation of Methods I

- A **systematic literature review** showed that an impact assessment based on just one method can result in misinterpretation
 - ↳ Therefore a „**Triangulation of methods**“ as a combination of qualitative and quantitative methods is essential
(Dorendorf & Gerhardus 2007)

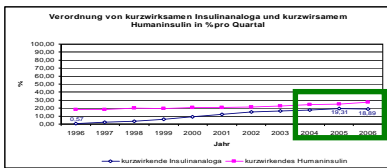
Methodology – Triangulation of Methods II

Question	Method
a) Is there a change in the prescription volume of rapid-acting insulin analogues after the publication of IQWiG's Final Report?	Analysis of outpatient prescription data (source: AOK Research Institut WIdO)
b) Which motivations are responsible for the (modified) prescribing behaviour?	Surveys & semi-structured interviews (of diabetes specialists)
c) Which factors explain occurring / not occurring changes?	Document analysis

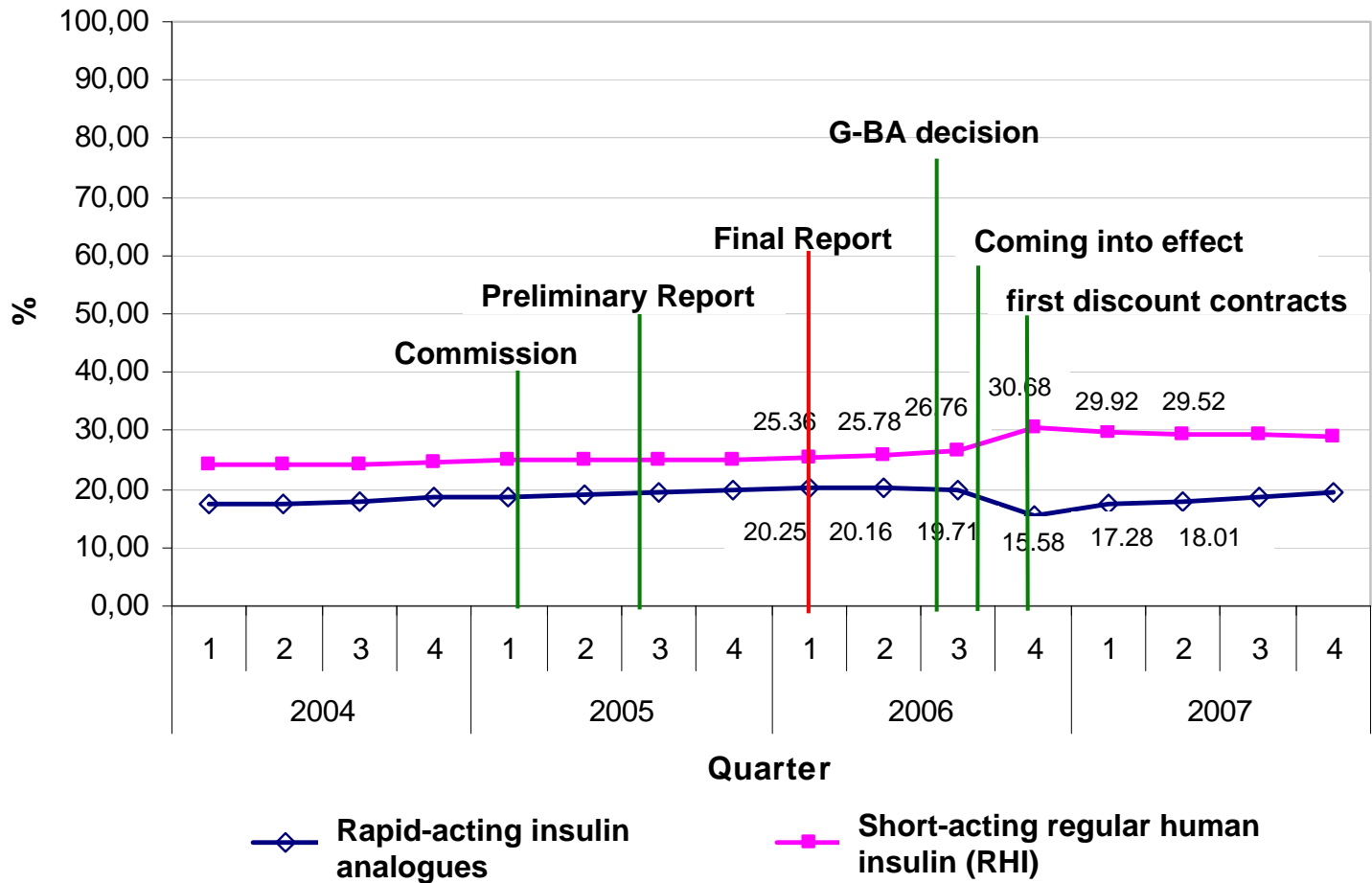
a) Prescription volume of rapid-acting insulin analogues (1996-2007)



Source: WIdO



a) Prescription volume of rapid-acting insulin analogues (2004-2007)



Source: WIdO

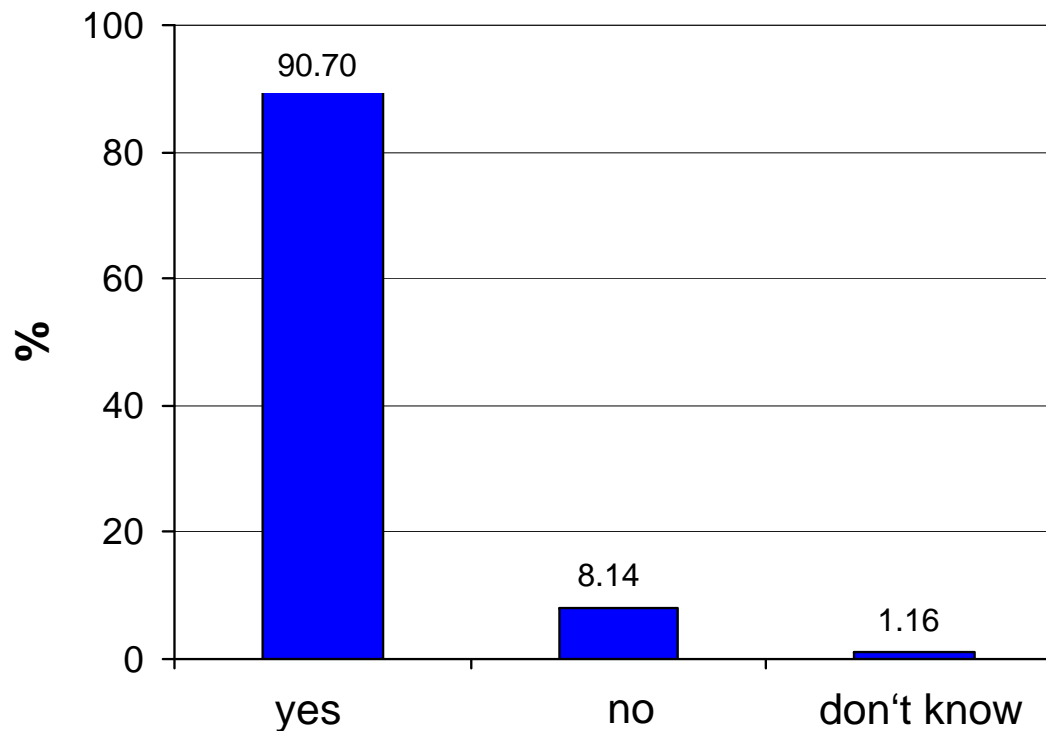
a) Intermediate conclusion

Is there a **change in the prescription volume** of rapid-Acting insulin analogues after the publication of IQWiG's Final Report?

- moderate decrease after IQWiG's Final Report was published
- stronger decline following the G-BA decision
- after first discount contracts, prescription volume of rapid-acting insulin analogues increased again

b) Interview outcomes (physicians requested in 2008)

Do you know IQWiG's Final Report „Rapid-acting insulin analogues for the treatment of diabetes mellitus type 2“?

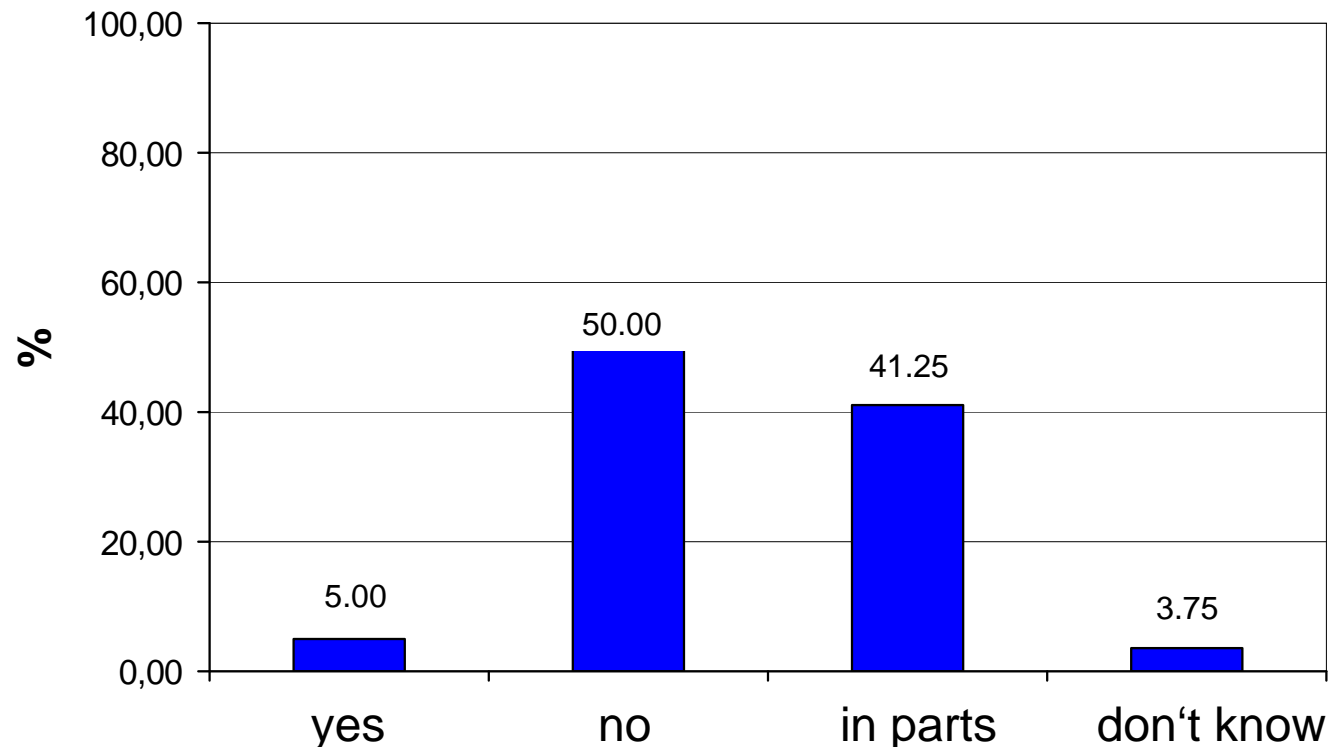


Source: own calculation; n=86 (total number of respondents: 87)

(general practitioners; physicians working as GP's and as diabetes specialists in the outpatient sector; and diabetes specialists working in the out- and inpatient sectors)

b) Interview outcomes (physicians requested in 2008)

Do you agree with the recommendations of the Final Report?

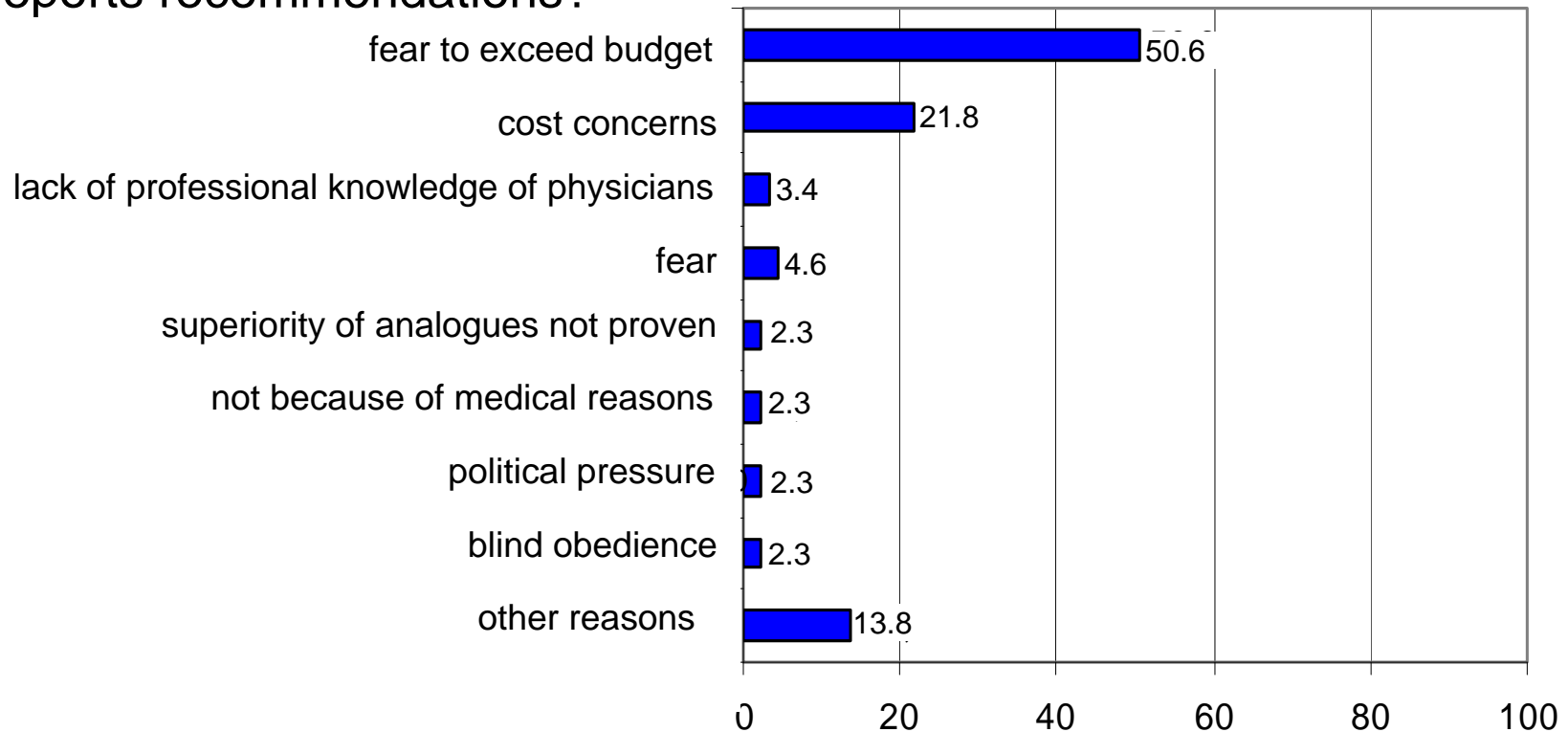


Source: own calculation; n=80 (total number of respondents: 87)

(general practitioners; physicians working as GP's and as diabetes specialists in the outpatient sector; and diabetes specialists working in the out- and inpatient sectors)

b) Interview outcomes (physicians requested in 2008)

In your opinion – what are the reasons for the execution of the reports recommendations?



Source: own calculation; n=80 (open questions categorized, multiple answers possible) %

(general practitioners; physicians working as GP's and as diabetes specialists in the outpatient sector; and diabetes specialists working in the out- and inpatient sectors)

b) Intermediate conclusion

Which motivations are responsible for the (modified) prescribing behaviour?

- most important factor: cost (budget) concerns
- IQWiG's recommendations did not convince the physicians

c) Document analysis

Media reaction:

„Pharmaceutical manufacturers and health insurance companies arranged discount contracts without hesitation, when the G-BA decision became legally binding in October.“ (Thüringer Allgemeine 14.11.2006)

„Recommendations in defiance of welfare of patients“ (Diabetes News, BVND and BVDK February 2006)

„Restrictions for diabetics“ (Allgemeine Zeitung 20.02.2008)

„Severe intervention in the freedom of therapy – Diabetes-Association and physicians see ‚fast‘ insulin already at the end – because of cost concerns“ (Allgemeine Zeitung 20.02.2008)

Summary

1. IQWiG's Final Report as well as the G-BA decision have been perceived.
2. The prescription volume of rapid-acting insulin analogues decreased temporarily, ...
3. although the majority of physicians disagree with the recommendations.
4. Most important factors for the change in prescription behaviour are budget / cost concerns.
5. The recent increase of the prescription volume of rapid-acting insulin analogues is most likely related to discount contracts.

Conclusions

- IQWiG's **recommendations did not convince** the physicians
- **G-BA decision** and also the following **discount contracts** were the **decisive factors for the development** in health care
- Impact assessment: Health care data \Rightarrow very enlightening
- Only by the help of „Triangulation of Methods“ one can realize, which motives and factors are behind the development of this data

Literature

- Federal Gazette No. 184, p.6527 (28.09.2006)
- Dorendorf E, Gerhardus A (2007): A systematic Review of the Impact of HTA Reports. Poster T-026. In: IV Annual Meeting HTAi – Book of Abstracts.
- IQWiG (2005): Rapid-acting insulin analogues for the treatment of diabetes mellitus type 2. Final Report. Assignment No. A05-04.
- Schwabe, U. & Paffrath, D. [eds.] (2008): Arzneiverordnungsreport 2007. Aktuelle Daten, Kosten, Trends und Kommentare. Springer Medizin Verlag: Heidelberg.
- AOK Research Institute (WIdO)
- www.gba.de
- ...

Thank you for your attention!