

# Abstracts

## The Cancer Early Detection and Registry Law: A step toward informed decision-making?

*Ulla Walter, Maren Dreier*

**Keywords:** Cancer Early Detection and Registry Law (KFRG), cancer early detection, informed decision-making, counseling

### Summary

The article gives an overview of the Cancer Early Detection and Registry Law and outlines the challenges associated with making an informed decision.

### Background and inquiry

In 2013, the Law on the Further Development of the Early Detection of Cancer and Quality Assurance through Clinical Cancer Registries (Cancer Early Detection and Registry Law, KFRG) came into force. This is associated with a new policy orientation that through the introduction of informed decision-making can be described as a paradigm shift. The article addresses the following questions:

- What changes have the KFRG produced with respect to organized and opportunistic screenings?
- What role has the National Cancer Plan played?
- Why is an informed decision-making process offered for cancer early detection procedures?
- What requirements must be met in order to make an informed decision?
- How should information materials be designed?
- How can an informed decision be supported?
- To what extent are these conditions being realized in Germany?

- How does an informed decision-making process affect participation?

## Methods

The article is based on a narrative review.

## Findings

With the Law on the Further Development of the Early Detection of Cancer and Quality Assurance through Clinical Cancer Registries (Cancer Early Detection and Registry Law, KFRG), based on the recommendations of the National Cancer Plan, alignment with the European guidelines for quality assurance in cancer screening programs was achieved. In this way, organized screening in Germany is being expanded to early detection of colon cancer and cervical cancer. The possible risks associated with examinations, as well as the existence of disputed evidence related to early cancer detection, demand an informed decision-making process. Therefore, population-based offers of cancer screening are explicitly linked to the provision of balanced information on pros and cons to insured individuals.

Open and unbiased information and advice is a critical prerequisite to making an informed decision. The necessary facts should thus be balanced, easily understood and objectively conveyed. Numerous recommendations have been made in this regard. However, existing materials continue to show significant deficiencies. The extent to which an informed decision-making process affects participation rates remains unclear.

## Conclusions

With the KFRG, an important step on the path to informed decision-making has been taken. However, a certain amount of time will be necessary before the change is fully embraced by all parties involved, including insured individuals, physicians, other professionals, policy-makers and scholars.

Many questions remain to be answered in the implementation of informed decision-making. These relate to the targeted design of informational materials for subgroups; the appropriate expansion of advisory services and the development of additional decision-making support; the development of knowledge on the preferences of target groups and the impact of the process on participation rates; and the

investigation of informed decisions. Future experiences and analyses will illuminate the extent to which the concept can be truly realized, and whether further distinctions will need to be made.

### **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 12–27.

## **What hinders and what promotes participation in cancer screening tests?**

*Sylvia Sänger*

**Keywords:** Cancer screening, participation, informed decision, screening programs, health literacy, health information, patient information

### **Summary**

The article gives a short overview focusing on cancer screening, as well as on the state of discussion with respect to decision support, doctors' explanations of the benefits and risks of cancer screening tests, and the health literacy of the insured population. The empirical analysis portion addresses the conditions necessary to enable an informed decision, with respect to the insured individual himself or herself; the doctor providing an explanation; and the content, preparation and communication of the information.

### **Background and inquiry**

Insured individuals should be able to make an informed decision on cancer screening test participation on the basis of information about the procedure's benefits and risks. The article deals with the following questions:

- How much pre-existing knowledge do insured individuals have about cancer screening tests?
- Are people aware of the statutorily regulated cancer screening tests?
- Who takes advantage of the tests, and why?

- How are doctors' explanations of the tests evaluated?
- What information is desired by insured individuals, and in what form should this be conveyed?
- What information channels are preferred?

## Methods

The data was drawn from the 21st Gesundheitsmonitor survey, carried out in 2012. A total of 930 men and 865 women were surveyed. Analysis of the data utilized descriptive methods and depictions, as well as chi-squared tests and regression analyses.

## Findings

Making an informed decision on participation on cancer screening tests based on a weighing of benefits and risks would be impossible for the majority of insured individuals, if only because of their pre-existing conceptions about such procedures. Only one-third of respondents knew that these tests are associated with risks. The degree of familiarity with cancer screening tests is high, especially within the age group at which the tests would ordinarily take place. However, this does not mean that all types of tests are perceived in the same way. The highest participation rates were seen for breast exams for breast cancer and mammography – thus, tests with an invitation procedure.

Doctors play a key part in insured individuals' decision to participate in cancer screening tests. However, only half of the respondents had been informed by their doctor about benefits and risks. Experts consider statistical information on benefits and risks, as well as on the reliability of and error rates associated with cancer screening tests, to be important for decision-making. For insured individuals, other information such as the description of the examination process plays a larger role. Although on the one hand, insured individuals do want to see the relevant statistics, in most cases they also understand that these may be of little practical use in making their own decision.

The issue is explained to patients through information channels ranging from doctors to the print media, radio and television, and special Internet offers. There is no single information channel that is equally suitable for all insured individuals. Preference for particular information channels also varies by age, education level and social class.

## **Conclusions**

The keys to an informed decision to participate in a cancer screening test include education and the promotion of health literacy among the insured population; the availability of target-group-adapted, evidence-based information; support for decision-making through the provision of information at varying levels of depth; and the sensitization of doctors in communicating risks, with appropriate incentives provided for this service.

## **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 28–54.

## **Mammography screening and informed decision-making: More questions than answers**

*Marie-Luise Dierks, Norbert Schmacke*

**Keywords:** Mammography screening, knowledge, attitudes, risk perceptions, risk communication

## **Summary**

The study addresses the state of knowledge among women in Germany with respect to mammography screenings for early breast-cancer detection, as well as their evaluation of the benefits and risks associated with participation in screening procedures.

## **Background and inquiry**

Population-based mammography screening has been the subject of growing controversy. The article addresses the following research questions:

- As a result of the intensified public and scientific discussion, has anything changed with respect to women's current state of knowledge?
- What do women think about early-detection mammography?
- Why do they participate?
- What is their assessment of the opportunities and risks of this offer?

- How well-informed do they feel about the procedure?
- How do they themselves weigh the benefits and risks?

## Methods

At the end of February 2013, a total of 5,000 randomly selected individuals insured by BARMER GEK, from the age cohort born between 1949 and 1968, were questioned using a written survey instrument. This included:

- Women who were assumed to have been invited to take part in a screening at least once in recent years, and
- The next generation of women now becoming eligible for the tests.

A total of 1,881 women responded to the survey (a return rate of around 38%). Factors influencing the issues examined in the survey were considered on the basis of bivariate cross tabulation, and verified using the chi-squared test. A threshold of  $p \leq 0.05$  was set as a significance level.

On the last page of the questionnaire, the women were given the chance to record their own observations. Respondents made extensive use of this opportunity. This open, freely provided information was systematically integrated into the analysis.

## Findings

Among those surveyed, 85 percent reported experiences with mammography screening, including 20 percent of the women under 50 years of age. Motives for participation included the following: Women want to do the best thing for their health; want not to have to blame themselves should they become ill; and want the relief associated with a normal test result. A total of 30 percent of the women respondents agree with the statement that “participation in early-detection mammography helps prevent women from developing breast cancer.”

Asked about the number of deaths that would be prevented if 1,000 women took part in mammography screenings every two years for a period of 20 years, the women offered an average figure of 237 (median = 100). The overestimation of the benefit is high (the “correct” number is five, according to the informational materials provided in conjunction with mammography screening), while the underestimation of the risk of false positives is even higher. Women’s personal assessments of the benefits and risks show that more than

90 percent see a very high benefit and a low level of risk. However, their perceptions of the benefits are not wholly uncritical – just 8 percent regarded the procedure as offering 100 percent benefit and 0 percent risk.

## Conclusions

Among the women surveyed, knowledge as to the benefits and risks of mammography continues to show significant gaps. The message that “early detection helps,” repeated now for many years, seems to have been internalized by women to such a significant degree that they see evidence of possible disagreeable results in the form of false-positive findings as intrinsic to the procedure, and take for granted the benefits in terms of protection against cancer. As a consequence, there is a duty not only to explain benefits and risks of screenings in a balanced and comprehensible way, but also to find new informational materials and channels that will enable women to genuinely make their own decisions while taking account of uncertainties and unknown factors.

## Published in

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 55–91.

## Early detection is an offer, not a mandate.

A debate between Ingrid Mühlhauser and Johannes Bruns

### Moderator

Christian Weymayr

**Keywords:** Cancer check-ups, cancer screening, cancer prevention, screening, patient information

### Summary

Twenty years ago, it was still said that “screenings are good,” and that “everyone should just do it.” Those days are past. Today, the media persistently reports on how unclear the benefits and how significant

the harm associated with some measures can be. Science has also gained new insights, new early-detection programs have been launched, and we have come to see that citizens should be informed without being actively persuaded.

- What, therefore, is the state of affairs today?
- What has been achieved, and what remains to be implemented?
- How unified or divided are experts in evaluating developments to date?

With the aim of exploring these questions, a debate on the issue of cancer prevention and early detection took place on the premises of the Bertelsmann Stiftung on 6 February 2014. Participants included health care scholar Prof. Dr. Ingrid Mühlhauser of the University of Hamburg, who has for many years held a critical stance with regard to early detection, as well as the managing director of the German Cancer Society, Dr. Johannes Bruns, who as a member of the oncology physician community represented providers of early-detection screening services. The discussion was moderated by medical journalist Dr. Christian Weymayr, author of the book “The Myth of Cancer Prevention” as well as of various patient informational materials on the issue of cancer prevention.

## **Conclusions**

The participants were in agreement on various points. Since the two represent different camps, these concordances can largely be viewed as an expert consensus:

- Palpitation of the prostate and the breast should no longer be services covered by statutory health insurance.
- The cervical-cancer prevention offer should be modified and transferred to a quality-assurance program, especially with regard to the HPV vaccination, a procedure regarded as fundamentally useful.
- Quality assurance is generally necessary.
- Balanced information about prevention measures should be provided.
- Doctors should not be the primary information source for prevention services they themselves provide.

The participants offered differing evaluations on the following points:

- Bruns would retain colonoscopy and mammography as services covered by statutory health insurance, while Mühlhauser has reservations.
- Mühlhauser regards skin-cancer screening as dispensable, while Bruns has reservations.

#### **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 92–106.

### **Shared decision-making at the doctor's office: Expectations and reality**

*Bernard Braun, Gerd Marstedt*

**Keywords:** Participatory decision-making, shared decision-making, doctor-patient communication, patient information, patient participation

#### **Summary**

The article gives a brief summary of the state of research on shared decision-making, and reports in detail on empirical findings on the individual use of and experiences with this process in the doctor's office.

#### **Background and inquiry**

In view of heterogeneous and in part even contradictory research findings, the article addresses the following questions: Has the desire for shared decision-making appeared in a greater number of patients in the last decade? Are patients' wishes for a participatory decision-making process directed more toward information or toward participation itself? What are key factors influencing different patient desires? Is shared decision-making a normal process for the majority of patients today, taken as a matter of course? Is this true also of patients with chronic illnesses? What positive or negative experiences have patients had with shared decision-making?

## **Methods**

Data for the analysis was drawn from Gesundheitsmonitor surveys from the years 2001 to 2012. Despite different sample sizes, which depending on the survey ranged between 1,500 and 1,800 individuals, a representative sample of the German population between 18 and 79 years of age was available throughout. The study highlights data from December 2012, as the issue of shared decision-making took on a substantively more important role in that survey. In analyzing the results, descriptive analytical methods and figures (diagrams) were used, as well as bi- and multivariate methods (regression).

## **Findings**

Since 2001, more than half the participants in the surveys have expressed a desire for a joint doctor-patient decision-making procedure, with this level staying relatively constant. It is surprising that a minority expressing support for a paternalistic model has remained stubbornly at the same quantitative level seen more than 10 years ago.

In making the distinction between the desire for information and the wish to engage in collaborative decision-making, it can be seen that while a large majority of patients today wants detailed explanations of disease causes and treatments, the desire for participation in the final decision itself is significantly rarer.

Preferences for a decision made solely by the physician are expressed primarily by older people and by respondents with comparatively low education levels. Women and the chronically ill are less often willing to give up direction of their own treatment, and act in a more self-assured manner, at least verbally.

When visiting the doctor, many patients are not aware of the full spectrum of choices available to them, and thus of the availability of alternative therapies that differ with respect to risks and benefits, and which are suited to different individuals to different degrees. By their own account, well over half of the survey participants have never personally experienced a situation of this kind at the doctor's office. All of these patients are thus convinced that there is an "ideal" therapy, or only a single effective method.

Opportunities for patient influence in the course of medical procedures are becoming significant: The ongoing articulation of a wish for participation shows a high degree of success in many cases. A more intensive patient-education process can affect physician behavior and bring about improvements in care.

It appears worrying, however, that the presence of a chronic illness has almost no influence on the incidence of shared decision-making – a clue that doctors often seek to avoid a participatory decision-making process even in cases of chronic illnesses.

### Conclusions

Respondents' consistently high level of interest in shared decision-making, combined with patients' comparatively low level of real experience, shows that the implementation of shared decision-making in the context of everyday care is by no means complete, and that in the future, desired effects in terms of therapeutic outcomes and treatment costs might be achieved without great expense. Only with a long-term change in doctors' attitudes and actions, creating a culture of collaborative decision-making that provides support services throughout the doctor-patient contact (for example, by offering evidence-based decision support), will doctors and patients who wish to engage in shared decision-making see measurable benefits.

### Published in

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 107–131.

## How good is primary care? Patient judgments and influencing factors

*Jan Böcken, Gerd Marstedt*

**Keywords:** Outpatient care, primary care, quality of care, quality assurance, quality of results, patient satisfaction, doctor-patient communication, doctor-patient conversation, waiting times

### Summary

The article reports on the results of a representative Gesundheitsmonitor survey, in which patient experiences with various features of outpatient care were collected with initial reference to indicators of structural and process quality. These were then combined with survey results assessing the experienced quality of care.

## **Background and inquiry**

Improving the quality of medical care, and particularly of primary care, is the focus of diverse efforts on the part of health policymakers and researchers, medical associations and health-insurance organizations. Patients' judgements of quality are important in this context, as the experienced quality of care influences the behavior of patients with regard to compliance, the changing of doctors due to dissatisfaction, and participation in prevention and early-detection screening programs. With this background in mind, the study investigates how various aspects of care such as waiting periods for appointments and in the doctor's office, cooperation with specialists and particularly doctor-patient communications affect the perceived quality of care, and whether differences in this regard are dependent on socioeconomic or health-related factors.

## **Methods**

In analyzing the data, a variety of indicators from the Gesundheitsmonitor survey (21st edition) were considered. The data collection took place at the end of 2012. A total of 1,795 men and women between 18 and 79 years of age took part. Data analysis was carried out using frequency distributions as well as bivariate and multivariate methods.

## **Findings**

The aspects of structural quality ascertainable through the survey (waiting times, physician familiarity with the patient's medical history) showed no particularly problematic deficits. Indeed, a rather positive picture emerged. In the area of process quality, three features were included: communication and information at the doctor's office; experiences in situations that suggested a shared decision-making process; and problems with respect to cooperation with specialists and in the coordination of treatment. A positive picture is also evident with respect to these indicators, although individual deficits are in some cases significant. For example, patients show little activity with regard to shared decision-making situations, in which the doctor encourages questions or recommends a broader information-gathering process.

Indicators related to the quality of results included the following: negative experiences in recent doctor interactions (for example, the

prescription of an ineffective drug), satisfaction with the doctor and his or her practice, and the perceived change in state (health condition) after a recent illness and course of treatment. In this regard, older people and the chronically ill express a higher level of satisfaction with their doctors despite subjectively more frequent perceived deficiencies in treatment, and rarer perceived improvements in health. The multivariate analysis furthermore shows that the indicators of structure and process quality show consistently highly significant effects for all examined features associated with the quality of results. If using the number and size of the significant odds ratio as a benchmark, then the doctor-patient communication is of primary importance for the quality of results in primary care, while the issue of wait times takes second place.

## **Conclusions**

Patients' well-being depends on good communication between doctor and patient, and good communication can evidently not be taken for granted. The causes for this relate to training structures as well as to organizational structures within everyday medical practices, which allow little space for dialogue, rely on a technological orientation for daily work, and employ compensation structures for doctors that seem to provide few incentives for communication. Communication should thus be promoted more intensively at university, advanced training, and further-education settings. This is a necessary though not sufficient condition in ensuring good care.

The results also show that further promotion of integrated care structures is needed, despite all methodologically necessary restraints. The concepts of integrated care popularized in recent years primarily by health-insurance organizations have in general lost momentum, and to a large extent remain isolated local and regional approaches today. Legislative and administrative activity is required in order to give this model new life through the provision of targeted incentives.

## **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 132–157.

# **Experiences, satisfaction and expectations of different population groups with respect to the German health system – current findings and implications**

Viviane Scherenberg

**Keywords:** Satisfaction, expectations, experiences, fears, trust, quality, future of health care, performance, medical care, German health care system, population groups

## **Summary**

In light of the dynamic processes of change in health care and their impact on insured populations, the article offers a short overview of the scholarly discourse, followed by empirical findings on the experiences, satisfaction levels and expectations of various population groups with regard to the German health care system.

## **Background and inquiry**

In German studies, no comparison between the experiences, the satisfaction levels and the expectations of certain insured groups, including a look at changing trends, has previously been carried out. Consequently, the article addresses the following questions: How generally satisfied is the population with the health care system? Are expectations and fears based on concrete experiences? What health-care policy implications can be derived from a comparison?

## **Methods**

The data used for analysis is drawn from the 2007 and 2012 Gesundheitsmonitor surveys. Analysis is focused on the 2012 questionnaire in order to examine current perceptions with a reference to sociodemographic factors. In addition, the change in attitudes toward health care over the course of five years was analyzed. Along with descriptive evaluations, group differences were examined.

## **Findings**

More than half the population is satisfied or even very satisfied with the health care system. In this regard, members of the lower social classes emerge as significantly less satisfied as compared to the upper classes. However, only a small part of the population as a whole is dissatisfied or very dissatisfied. It is noteworthy that in the concrete as-

sessment of daily care practices, negative judgments were significantly more common for subjectively perceived factors (for example, waiting times for office appointments or the duration of doctor-patient conversations). In addition, future expectations were assessed significantly more negatively than current or recent experiences. In this regard, it was evident here too that in all areas, members of the lower class were significantly more pessimistic about the future, and expressed more fears. Negative expectations and fears are also clearly evident within the population with statutory insurance, as well as among women, persons under 60 years of age and the middle class.

With regard to dissatisfaction, significant effects were observable related to the characteristics of social class, type of insurance (statutory), age (under 60 years) and gender (women). In a notably positive result, the quantity of chronically ill individuals who were satisfied or very satisfied with their health care has significantly increased, indicating that care for the chronically ill insured population has improved.

### **Conclusions**

The analysis shows that global statements about satisfaction have low explanatory power, and deliver an overly optimistic picture. Consequently, subjective descriptions of satisfaction in combination with concrete statements about experiences and expectations, as well as the direct measurement of objective qualitative indicators related to different population groups, take on a broad significance.

### **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 158–175.

### **Do workplace-absenteeism rules lead to unnecessary doctor visits?**

*Christoph Kowalski, Anika Nitzsche, Detlef Hollmann, Holger Pfaff*

**Keywords:** Workplace-absenteeism rules, inability to work, doctor visits, incapacity certificate, absenteeism, company doctors

## **Summary**

The article addresses the question of whether the necessity of submitting a work-incapacity certificate after a particular number of sick days leads to medically unnecessary doctor visits.

## **Background and inquiry**

Given the persistently high number of doctors' visits, the question arises whether modified legislation or collective-labor agreements addressing the necessity of procuring work-incapacity certificates might lead to a reduction in doctor visits. In addition, the article addresses the degree to which the working environment influences the number of doctor visits. If the work environment is poor, and a significant level of mistrust between employer and employees exists, the role of the doctor as a social arbiter is assumed to become more pronounced.

## **Methods**

The analysis, using data collected in the 21st Gesundheitsmonitor survey in 2012, was limited as a result of the survey's structure to full- and part-time employees in conventional employment (thus, the self-employed were excluded). For all descriptive analyses, the data was weighted according to national representative criteria. Respondents were asked about their use of a doctor solely to obtain a work-incapacity certificate.

A logistic regression analysis on this variable was performed with the aim of examining the relationship between the strictness of occupational absenteeism rules and the use of doctors, as well as the significance of social capital in physician use.

## **Findings**

Full-time employees whose employers demand a work-incapacity certificate beginning with the third day of work missed due to illness or later, or even require no certificate at all, use doctors significantly less solely for the issuance of these certificates than do people whose employers demand certificates beginning with the first day absent. Moreover, the analysis shows that employees who work in companies with higher levels of social capital, and thus in better working environments, use physicians less often for the purpose of obtaining a doctor's certificate.

## **Conclusions**

The results presented here should drive discussion as to whether other legal or collective-labor-agreement rules on absenteeism might contribute to a decrease in potential misuse of the health care system. In this context, the role of the company doctor should also be reconsidered; in questions of workplace fitness and workplace requirements, this figure should have access to the detailed information ordinarily held by the patient's primary-care physician.

## **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 176–190.

## **Experiences, assessments and use of homeopathy by statutorily insured individuals**

*Christina Sartori, Nicole Osterkamp, Cordula Uebing, Klaus Linde*

**Keywords:** Homeopathy, use of homeopathic services under statutory health insurance programs, evaluation of homeopathic treatment, experiences with homeopathic treatment

## **Summary**

The article presents patients' expectations and experiences with homeopathic practitioners. It is based on a written survey of individuals with statutory health insurance who have made use of homeopathic services in various forms.

## **Background and inquiry**

While the effectiveness of homeopathy is a subject of scientific controversy, this method of treatment is popular with patients. Neither homeopathic consultations nor the choice of homeopathic remedies belong to the standard care regimen under the statutory health insurance system. However, homeopathic services are offered in the context of special contracts with the Kassenärztliche Vereinigung (KV, National Association of Statutory Health Insurance Physicians) or with the Deutscher Zentralverein homöopathischer Ärzte (DZVhÄ,

German Central Association of Homeopathic Doctors). These offers vary significantly with respect to patients' ability to select doctors.

The study examines whether patients who have opted for different contracts or no contract also differ with regard to their assessment and evaluation of homeopathy. In order to ascertain the grounds for patients' choice of a homeopathic therapy, the study compared the evaluations of homeopathy by insured individuals who had recently visited a homeopathic doctor and by those who had recently visited another type of doctor.

## Methods

The source of data for the study is a written survey of 6,930 individuals insured by BARMER GEK. The individuals were divided into three groups:

- Patients who, by the deadline, had enrolled in BARMER GEK's homeopathy contract with the DZVhÄ, which includes an approved list of doctors;
- Insured individuals for whom an initial homeopathic consultation under the KV contract had been processed in the last two years; and
- Patients for whom no homeopathic fees had been processed in the last two years.

Along with health-status and sociodemographic questions, the questionnaire contained questions relating to experiences dealing with homeopathy. Return rates varied between the three above-described groups. It should be noted that the findings cannot be applied to all statutorily insured individuals or all patients insured by BARMER GEK. Descriptive analytical methods and multivariate techniques (regression) were used.

## Findings

The survey shows no significant differences between participants who selected one of the two models with patients' ability to select doctors. By contrast, there are evident differences between these participants and those who have not as yet utilized any homeopathic services under their statutory health insurance coverage. These differences are evident with respect to sociodemographic characteristics, health status, and the evaluation of and attitude toward homeopa-

thy. Patients for whom no homeopathic fees had been processed in the last two years (group 1) are on average older, and the share of women is smaller than in the other groups. Differences are also evident in terms of education. This group shows a smaller incidence of mental disorders, inflammatory joint and spinal illnesses, neurodermatitis and other chronic illnesses than the other two groups. Participants in group 1 have less experience with homeopathy, are less often aware of the scientific controversy over the efficacy of homeopathy, and are more critical of homeopathic practices than are participants in the other two groups. More than 80 percent (regardless of group classification) have seen their general health, mental state or their physical discomfort somewhat or significantly improved through homeopathic treatment. While doctors overall receive good evaluations, there are significantly better assessments for doctors who utilize homeopathic treatments. In this regard, it appears that the doctor's consultation style plays a role in the satisfaction with and trust in the physician.

### **Conclusions**

Similar answers are given by participants who have enrolled in BARMER GEK's homeopathy contract with the DZVhÄ, with its approved-doctor model, and by insured individuals for whom a homeopathic initial-consultation claim under the KV contract has been processed in the last two years (although the two models differ significantly with regard to patients' choice of doctors). A possible explanation for this surprising finding could be that the two models are offered on a geographically distinct basis. This means that patients who are interested in a homeopathic treatment do not have a choice between the two models. In contrast, these two groups differ on many points from insured individuals for whom no homeopathic medical claims have been processed in the last two years. It should be emphasized that knowledge about the scientific controversy is apparently not critical for trust in homeopathy.

It is evident that the better evaluation accorded to homeopathic practitioners is linked closely with the doctors' consultation style: Attentive listening without time pressure plays an important role for patients. Further studies could more intensively address the importance of the doctor's focus and the factor of "making time for the patient" in relation to successful medical outcomes. It appears that giv-

ing doctor-patient discussion a more significant place in medical training than is today the case would be a desirable goal.

#### **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 191–209.

### **Sore throats and chronic tonsillitis in children and adolescents – Surgery or conservative treatment?**

*Hans-Dieter Nolting, Julian Rellecke, Guido Schiffhorst, Karsten Zich*

**Keywords:** Tonsillitis, tonsil surgery, tonsillectomy, decision-making, doctor-patient communication, patient information

#### **Summary**

Patients insured by BARMER-GEK who received tonsil surgery as a result of recurrent tonsillitis were asked about their medical history, the process of decision-making and the results of the operation. For the purposes of comparison, a group of insured individuals with a similar pattern of symptoms (but who had not undergone a tonsillectomy) were surveyed.

#### **Background and inquiry**

The complete removal of the tonsils is the most common operation performed on children and adolescents in the hospital setting. The benefit of palatal tonsil removal with respect to the quantitatively most important indication, chronic or recurring tonsillitis, is not supported by qualitatively high-value studies to the extent that may be desired. While the implementation of the procedure is generally straightforward, there is a low risk that serious complications may occur. The focus of the study is the investigation of the process leading to the indication of treatment, or the decision for or against surgical removal of the palatal tonsils.

## **Methods**

An online, written survey of two groups of individuals insured by BARMER GEK, ranging in age between three and under 18 years of age (or their parents), was carried out. The first group consisted of insured individuals (intervention group, IG; n = 2,370) who had had their palatal tonsils removed within the 18 months previous to the survey as part of an inpatient stay, following a primary diagnosis of chronic tonsillitis (J35.0). The second group included insured individuals who on the basis of their medical history – as assessed by documented doctors' diagnoses and drug prescriptions – showed a pattern of symptoms fundamentally similar to that of the intervention group, but had not undergone tonsil surgery. This comparison group (CG) was drawn from the insured population through propensity score matching in a relationship of two to one (n = 4,820).

Through a letter from BARMER-GEK, the populations were invited to participate by visiting a website and answering an online survey. Participation rates were 18 percent in the intervention group and 9 percent in the comparison group. After adjustments, 403 insured individuals in the intervention group and 343 individuals in the comparison group remained available for analysis.

## **Findings**

Respondents who had undergone tonsil surgery had previously showed a significant symptom burden, and had been strongly and adversely affected by the consequences of their illness (for instance, through school absenteeism). For example, 41 percent met the criteria of seven or more sore-throat episodes in the year before the surgical procedure. The most important motive behind the decision for surgery was the expectation that the problem could in this way be solved at last, along with the experience that other treatments (taking antibiotics) had not helped. Ninety-three percent said that the doctor, parents and the insured individual had all agreed that the operation should be carried out at that time. The respondents predominantly describe themselves as very well informed by their doctor with respect to the pros and cons of the surgery. Satisfaction with the results of the operation is very high. Eleven percent reported postoperative bleeding, which made a further procedure necessary.

The respondents in the comparison group, by contrast, are significantly less burdened by tonsillitis-related symptoms and episodes of

illness. Only 12 percent have already discussed the concrete possibility of a tonsillectomy with the doctor. Despite the lower illness burden, the respondents in the comparison group are to a large extent informed as to the advantages and disadvantages of a tonsillectomy.

### **Conclusions**

Because of the low participation rates, all investigation findings must be interpreted with caution. With this caveat, the findings show that the indication for tonsillectomy is in most cases carefully made – that is, limited to patients with strongly pronounced symptoms and significant impairments. In addition, consultation with doctors as well as the explanation of indication criteria and procedure risks appear to be predominantly positive. The high degree of satisfaction with treatment outcomes on the part of patients' parents underlines these findings. In the comparison group, which showed significantly lower incidence of sore throats, there was no sign that tonsil surgery is recommended prematurely or on insufficient grounds.

### **Published in**

Böcken, J., B. Braun and R. Meierjürgen (eds.). *Gesundheitsmonitor 2014. Citizen Orientation in Health Care. Cooperative project of the Bertelsmann Stiftung and BARMER GEK*. Verlag Bertelsmann Stiftung. Gütersloh 2014. Pp. 210–234.