




# BMJ Open Investigating the role and applicability of patient versions of guidelines in oncology and deriving recommendations for the development, dissemination and implementation of patient versions in Germany: protocol for multiphase study

Monika Becker <sup>1</sup>, Stefanie Böhn,<sup>1</sup> Nora Meyer,<sup>1</sup> Susanne Blödt,<sup>2</sup> Günther Carl,<sup>3</sup> Markus Follmann <sup>4</sup>, Stefanie Frenz,<sup>5</sup> Thomas Langer,<sup>4</sup> Monika Nothacker <sup>2</sup>, Nancy Santesso,<sup>6</sup> Corinna Schaefer,<sup>7</sup> Dawid Pieper<sup>1,8</sup>

**To cite:** Becker M, Böhn S, Meyer N, *et al.* Investigating the role and applicability of patient versions of guidelines in oncology and deriving recommendations for the development, dissemination and implementation of patient versions in Germany: protocol for multiphase study. *BMJ Open* 2022;**12**:e059040. doi:10.1136/bmjopen-2021-059040

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2021-059040>).

Received 05 November 2021  
Accepted 16 February 2022



© Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

## Correspondence to

Monika Becker;  
[monika.becker@uni-wh.de](mailto:monika.becker@uni-wh.de)

## ABSTRACT

**Introduction** The German Guideline Program in Oncology (GGPO) has published patient versions of clinical practice guidelines for more than 10 years. However, a systematic evaluation of these is lacking. The project aims to investigate the role and applicability of patient versions by considering the perspectives of experts, patients and healthcare providers to derive recommendations for the development, dissemination and implementation of patient versions in Germany.

**Methods and analysis** The project comprises two main modules. In module 1, we will first obtain information on methods and approaches for the development, dissemination and implementation of patient versions by conducting systematic searches in Medline and screening the websites of guideline organisations. We will include any articles, such as methodological or empirical reports, published in German or English since 2000, that address methodological aspects related to patient versions. Further, we will conduct 20 interviews with experts from international and German organisations who are involved in the development of patient versions. In module 2, we will first conduct interviews to explore patients and healthcare providers' perceptions of patient versions of the GGPO. For the group of patients and the group of healthcare providers, we aim to conduct 25 interviews each. Second, we will conduct focus groups, separately for breast, prostate and colon cancer. The recruitment of participants for the interviews and focus groups will primarily be done through a previous survey about patient versions in oncology. The results will be used to derive recommendations for enhancing the development, dissemination and implementation of patient versions by involving the relevant stakeholder groups.

**Ethics and dissemination** Ethical approval for the qualitative parts of the project was given by the Ethics Committee of Witten/Herdecke University (number 160/2021). Participants will be required to provide

## Strengths and limitations of this study

- We will address the perspectives of both patients and healthcare providers to evaluate patient versions of guidelines in oncology in Germany.
- To obtain information on the development, dissemination and implementation of patient versions, we will conduct systematic literature searches and explore the perspective of experts in the field of developing patient versions.
- We will develop recommendations for the development, dissemination and implementation of patient versions in Germany by involving the relevant stakeholders.
- Although we will focus on patient versions in oncology, several results might be useful for patient versions in general.
- Some information we will generate may be specific for a particular patient version and may not apply to all patient versions.

informed consent. The project findings will be published in peer-reviewed journals and presented at scientific conferences.

## INTRODUCTION

Clinical practice guidelines (CPGs) are systematically developed statements that provide evidence-based recommendations to guide appropriate healthcare.<sup>1 2</sup> Although CPGs are primarily produced for healthcare providers, guideline-based information may be equally helpful for patients when making health decisions. Furthermore, such information may strengthen health literacy and

may support the communication between patients and healthcare providers. Therefore, several guideline organisations develop patient versions of CPGs for many years now.<sup>3,4</sup> However, it was shown that patients and members of the public often fail to understand the general concept of CPGs.<sup>5,6</sup> Further, patient and public attitudes to both CPGs and patient versions of CPGs were found to be very heterogeneous.<sup>7</sup> Several patients expressed their concerns that the information may not apply to their situation. In some studies, CPGs were found to be empowering, while in other studies participants were worried that they are rationing care and limiting decision-making. The awareness of CPGs and patient versions of CPGs in public was seen as generally low.<sup>7</sup>

Internationally, there is a notable heterogeneity regarding the terminology in the field of patient versions of CPGs.<sup>4</sup> Used terms are, for example, ‘patient version’, ‘patient guideline’, ‘lay version’ or just ‘patient information’. In the following, we will use the term ‘patient version’.

Patient versions are specific formats of evidence-based patient information. They are subject to various definitions and criteria.<sup>8,9</sup> An essential characteristic of patient versions is that they are based on CPGs and ‘translate’ guideline recommendations into laypersons’ plain language to make them accessible for patients and members of the public. However, little is known about to what extent patient versions are helpful, for example, in informed choice and shared decision-making.<sup>6,10</sup> Although patient versions can be developed for various diseases and healthcare areas, particularly in oncology, several studies show that information needs of patients are high but often unmet.<sup>11–14</sup> Patient information can help gain control after a cancer diagnosis, which can result in confidence in treatment decisions and understanding the consequences of the disease and treatment of one’s life.<sup>15</sup>

Within the German Guideline Program in Oncology (GGPO), patient versions have been mandatory for more than 10 years. In the development of those, quality criteria on reliable patient information have been considered.<sup>16–18</sup> Currently, the GGPO provides 26 patient versions (state 10/2021). However, these have been criticised for not addressing all information needs.<sup>19</sup> To date, a systematic evaluation of patient versions and their impact on patients is lacking.<sup>20</sup>

We are not aware of studies that consider the different perspectives of patients, healthcare providers and developers regarding patient versions altogether. Further, to our knowledge, there is a lack of information regarding dissemination and implementation strategies of patient versions being used.

## Objectives

The project aims to investigate the role and applicability of patient versions by considering the perspectives of experts, patients and healthcare providers to derive

recommendations for the development, dissemination and implementation of patient versions in Germany.

## METHODS AND ANALYSIS

The AnImPaLLO project ‘*Applicability and Implementation of patient versions of guidelines in oncology*’ was set up by the Witten/Herdecke University in cooperation with relevant stakeholders in the field of patient versions (further referred to as project partners). Thus, we include patient representatives and organisations that are involved in the development of patient versions in Germany. The project partners are the GGPO, the Association of the Scientific Medical Societies in Germany (AWMF)-Institute for Medical Knowledge Management, the German Agency for Quality in Medicine (ÄZQ) and two large national patient organisations for prostate cancer and women with cancer (*Bundesverband Prostatakrebs Selbsthilfe, Frauen-selbsthilfe Krebs-Bundesverband*).

### Study design

The project comprises two main modules, each main module includes two submodules. In module 1, we will first investigate the methods and approaches for the development, dissemination and implementation of patient versions by systematically reviewing the international literature and conceptual/method papers. Further, we will conduct interviews with experts in the development of patient versions. We will explore their specific knowledge and experiences in the development, dissemination and implementation of patient versions. The aspect of development will also comprise information regarding updating of patient versions. In module 2, we will explore patients and healthcare providers’ perceptions of German patient versions in oncology. Thereby, we will conduct interviews on various patient versions of the GGPO, followed by focus groups for breast, prostate and colon cancer, respectively.

The results of both modules will be used to derive recommendations for enhancing the development, dissemination and implementation of patient versions in Germany by involving an expert panel consisting of persons with expertise in the development of patient versions as well as representatives of relevant stakeholder groups. **Figure 1** provides an overview of the project course and illustrates the modular structure.

### Module 1a

The protocol for module 1 adheres to the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P).<sup>21</sup> As PRISMA-P aims to guide the development of protocols for systematic reviews evaluating healthcare interventions, we deviated from the original checklist by omitting items (eg, outcomes and prioritisation) due to the methodological focus of our planned systematic review.

To obtain information on methods and approaches for the development, dissemination and implementation of

Figure 1: Overview of the project course

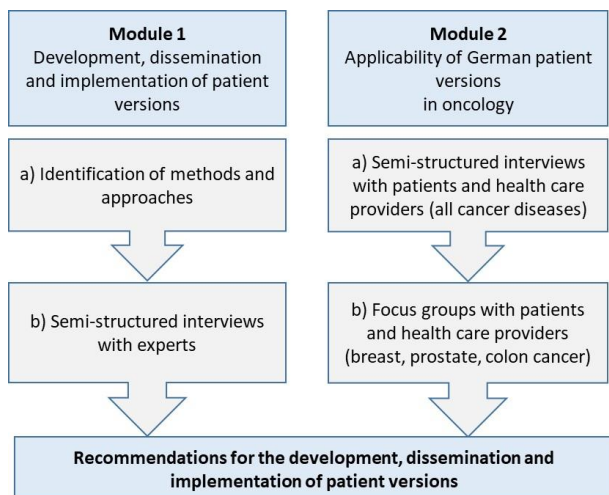


Figure 1 Overview of the project course.

patient versions, we will search the websites and publications of 17 organisations known for developing patient versions (online supplemental appendix A).<sup>4</sup> Moreover, we try to identify other potentially relevant documents on the websites of further organisations listed as members of the Guidelines International Network (<https://g-i-n.net/organisation/>).

Additionally, we will perform a systematic literature search. We will search Medline via PubMed and OVID (see online supplemental appendix B for full search strategy). We will search for references published from 2000 until the date of the search as the field of patient versions fairly new. Our search strategy will consider the international heterogeneity regarding the terminology of patient versions. References will be eligible for inclusion if they meet all of the following criteria:

- ▶ Dated from the year 2000 onwards.
- ▶ Methodological or empirical reports, commentaries, editorials or other reports describing, evaluating or comparing strategies or methods.
- ▶ Addressing the methodology of developing, disseminating and/or implementing patient versions.
- ▶ Published in German or English.
- ▶ Full-text version available.

We will exclude articles related to other forms of patient information tools that are not directly linked to a CPG, such as decision aids or educational material.

We will identify further relevant articles by screening the reference lists of relevant references and snowballing.<sup>22</sup> Additionally, we will ask experts in this field for further literature. Two independent reviewers will screen all identified titles and abstracts for eligibility. The two reviewers will carry out full-text screening of the included references independently and will document the reasons for excluding references. Disagreements will be resolved through discussion until reaching consensus.

### Data collection

One reviewer will extract the findings in standardised tables and a second reviewer will check these data. To do so, additionally to information on the date of publication, the authors and their corresponding guideline organisation or medical society, we will extract information on the development, dissemination and implementation of patient versions in general or regarding a specific patient version. Again, disagreements will be resolved through discussion until reaching consensus.

### Data analysis

We will narratively synthesise the information and content generated by the literature search.

### Module 1b

To explore the perspective of experts in the field of developing patient versions, we will conduct semistructured interviews via telephone or videoconferencing (eg, Zoom) with national and international guideline organisations. We will interview representatives of organisations regarding their experience in the development, dissemination and implementation of patient versions.

### Study population

A total of up to n=20 interviews are assumed as being sufficient for data saturation. We plan to conduct 17 interviews with international and three interviews with national experts. We will draw the 17 organisations on the international level as described above<sup>4</sup> because they published more than four patient versions and are hence considered to have expertise in their development. We will include additional organisations frequently working on patient versions by recommendations of experts in the field and personal knowledge. We may also identify relevant organisations through the literature screening conducted in module 1a.

On the national level, we will interview a representative of the ÄZQ, as this organisation is mainly involved in the development of patient versions in Germany. The ÄZQ has been responsible for the mandatory development of patient versions in the GGPO and the National Program for Disease Management Guidelines for more than 10 years. More recently, other organisations are involved in developing patient versions in the GGPO. Besides, some medical societies in Germany also produce patient versions. Accordingly, we aim to conduct at least two more interviews with representatives of other organisations in Germany with experience in this field to ensure that the results do not come from just one national institution. We will identify these by searching the database on patient versions from the AWMF with the filters 'Status: Current' and 'Document type: Patient Version'. We will include medical societies that published the highest number of patient versions since 1 January 2018. Organisations developing oncological patient versions in Germany will be named by the GGPO.

### Recruitment

After the identification of eligible guideline organisations at the national and international levels, we will contact the organisations through email and request to name a representative willing to participate in an interview. Next to expertise in the development of patient versions, further inclusion criteria of the interview participants are age  $\geq 18$  and sufficient knowledge of the German or English language.

### Interview guide

Literature commonly used and relevant in the field of patient versions will provide thematic support in the preparation of the interview guide for this module. The project team at Witten/Herdecke University will send a draft of the interview guide to the project partners for review. We will discuss any comments or recommendations from the project partners and, if necessary, make amendments before the final interview guide is translated into English. Both interview guides will be pretested and subsequently adapted if necessary. We will use the first two interviews as a pretest.

Personal information about gender, age, occupation and experience in the development of patient versions will be queried at the beginning of the interview to be able to put the statements into context and, if applicable, to identify differences between the interviewees. We will ask questions about aims, formats and topics, and ask about the development process of patient versions and challenges occurring alongside. Further, we will ask for information about target groups of patient versions and how they are addressed. We will query facilitators and barriers in the development, dissemination and implementation of patient versions. We will collect responses on the public availability of methods on patient versions and whether these are presented in a way understandable to laypersons, for example, adequate explanations on different grades of recommendations. Finally, we will request an outlook on the future importance of patient versions, especially regarding demographic change and digitalisation.

### Data collection

Persons who will perform the interviews will be trained in advance. They will conduct the interviews by telephone or videoconferencing and record them using an audio recording device. Subsequently, the interviews will be transcribed verbatim by an external institution.

### Data analysis

We will process the sociodemographic data of the interviewees descriptively using Excel 2016.

We will analyse the interview material using qualitative content analysis according to Mayring.<sup>23</sup> We will create a coding guideline and code the transcripts using MAXQDA analysis software. The first interviews will be analysed towards possible necessary adaptations of the interview guide.

Data will be structured according to a predefined category system. We will develop main categories deductively based on the core topics and questions of the interviews. During the analysis of the material, we will inductively complement and refine the scheme with further categories or subcategories. The results will be discussed in the research team.

### Module 2a

To explore the perspective of patients and healthcare providers, we will conduct semistructured telephone interviews. First, we will ask questions about experiences with and expectations of patient versions in general and, second, we will ask the interviewees about their perception of a specific existing oncological patient version. In preparation for the interview, the participants will receive a specific patient version and will be asked to familiarise with it prior to the interview.

### Study population

We will include persons with a diagnosis of cancer in the past. Further inclusion criteria will be age  $\geq 18$  years and sufficient knowledge of the German language. As healthcare providers, we will include health professionals who are directly involved in the care of patients with cancer (eg, physicians, psycho-oncologists and nurses). For the group of patients and the group of healthcare providers, we target 25 interviewees each. Depending on the information yield, we will recruit further participants until no more important topics occur.<sup>24</sup>

### Recruitment

The recruitment of patients and healthcare providers will primarily be done via an online survey with patients and healthcare providers about the awareness and role of patient versions in oncology. The survey was undertaken under the leadership of the AWMF in the run-up to our project. At the end of the survey, the participants were asked whether they would like to participate in an in-depth interview. The survey with patients was conducted between November 2020 and May 2021, while the survey with healthcare providers has run between April and June 2021. Seven hundred and twelve patients and 400 healthcare providers completed the survey. Overall, about 100 patients and 10 healthcare providers have expressed interest to participate in our study.

In addition, we will recruit participants by distributing a call for participation in our study via the internet through our project partners (eg, via websites, newsletters, social media). Moreover, healthcare providers will be recruited via a random selection of certified and non-certified oncology centres nationwide. Certified cancer centres are those that are certificated by the German Cancer Society (<https://www.krebsgesellschaft.de/german-cancer-society.html>). Both certified and non-certified centres will be identified by the German Hospital Directory (<https://www.german-hospital-directory.com>). Initially, relevant hospital units (eg, outpatient clinic, psycho-oncology)

will be contacted by telephone to identify persons who are directly involved in the care of patients. Subsequently, we will send more detailed information on the project via email if requested.

The selection of participants will be performed according to the principle of maximum variation<sup>25</sup> to reflect a wide range of participants' characteristics. The patient's characteristics are age, socioeconomic status, cancer diagnosis and stages of the disease, member of a self-help organisation and private or statutory health insurance. Participating patients who have completed the interview will receive an incentive of €20. Healthcare providers will be selected according to their profession and experience in the treatment of patients with oncological diseases as well as the type of centre (certified or non-certified) and healthcare sector (inpatient or outpatient).

#### Choice of patient versions

Of the existing oncological patient versions, we will exclude the patient versions addressing early detection of cancer and focus on those that are not older than 5 years, as CPG recommendations which are mentioned in patient versions might be outdated after 3–5 years.<sup>26 27</sup> Patients will be assigned to patient versions according to their cancer diagnosis. If there is no patient version for their type of diagnosis or if it is outdated, patient versions on the cross-sectional topics of supportive therapy or psycho-oncology will be offered. Healthcare providers will receive a patient version relevant to the patients they care for. The participants may choose a digital (pdf document) or a brochure of the patient version.

#### Interview guide

The procedure for developing the interview guides will be in accordance with module 1b. They will be tailored to the respective interview group. Results of the survey of the AWMF mentioned above will be considered in the interview guides. The survey results will be published separately. The interview guide for patients includes questions on the assessment of the relevance and trustworthiness of the content, completeness and importance of the information, reasons for searching for information and for what purposes the information is used. To investigate the applicability, questions about how the patient version may support patients in making decisions related to their cancer treatment or in coping with the disease/self-management (communicative effectiveness), based on the concept for evaluations of patient information by Garner *et al.*<sup>28</sup> will be raised. To assess the readability (text and presentation) and the comprehensibility (interaction between text and reader), targeted questions on knowledge and risk perception related to selected statements in the patient versions will be included. The interview guide for healthcare providers contains similar questions apart from aspects relating to comprehensibility. In addition, the guide includes questions on the awareness of the patient versions and whether and how they are made available in the clinical setting. Furthermore, we will ask

questions about the assessment of the influence on the quality of care. Both interview guides will be pretested and subsequently adapted if necessary. We will use the first two interviews as a pretest.

#### Data collection

The data collection will be performed in accordance with module 1b.

#### Data analysis

The data analysis will be performed in accordance with module 1b.

#### Module 2b

On completion of the preceded modules, we will conduct mixed focus groups with patients and healthcare providers, separately for the most common cancer entities breast, prostate and colon cancer. The aim is to obtain additional in-depth information especially through the dialogue between patients and healthcare providers. For each entity, we will conduct two focus groups with 8–12 participants each. The restriction on three cancer entities is made due to reasons of feasibility. An additional criterion for this choice is the possibility of being able to delineate gender-specific aspects.

We plan to conduct the focus groups in person. If this is not possible due to the pandemic situation, we will conduct online focus group discussions. To date, there are several experiences with online focus groups.<sup>29–31</sup> Accordingly, influencing factors on group interactions and data collection as well as specific requirements for data protection will be considered if this should become relevant.

#### Study population

We will include patients diagnosed with breast, colorectal or prostate cancer, age  $\geq 18$  years and sufficient understanding of the German language. Inclusion criteria for the healthcare providers are the same as described in module 2a.

#### Recruitment

We will recruit participants in accordance with module 2a. In addition, we will also ask interviewees (patients with breast, prostate or colon cancer and healthcare providers who are involved in the care of these patients) of module 2a if they are willing to participate in a focus group. All participants will receive an incentive of €50. Further, we will reimburse the travel expenses if necessary.

#### Guide for the focus group discussions

Informed by the interviews in the other modules, we will develop a guide for the focus group discussions. Again, all members of the project team will be involved in the conception. The guide will take up specific aspects from the interviews and focus on how patient versions could be effectively used in the communication between patients and healthcare providers and how their application could be encouraged.

### Data collection

The data collection will be performed in accordance with module 1b.

### Data analysis

The data analysis will be performed in accordance with module 1b and will be done separately for each entity.

### Development of recommendations for the development, dissemination and implementation of patient versions

On basis of the results of the preceding modules, we will derive recommendations for the development, dissemination and implementation particularly of oncological patient versions in Germany. For this purpose, we will involve an expert panel consisting of persons with expertise in the development of patient versions as well as representatives of relevant stakeholder groups, for example, patient representatives, patient organisations, the Federal Joint Committee, the GGPO, the AWMF, the ÄZQ, the Federal Ministry of Health, the German Health Literacy Network, German Network for Healthcare Research, the German Society for Epidemiology, the Institute for Quality and Efficiency in Health Care, Foundation for Health Knowledge and the German Network for Evidence-based Medicine. We expect that the dissemination and implementation of the recommendations will be supported by involving these stakeholders.

We will invite to a 1-day workshop. In preparation for the workshop, the project team at Witten/Herdecke University will develop drafts for recommendations based on results from analyses of the interviews, focus groups and relevant literature and the corresponding identified areas requiring improvement. We will discuss the recommendations with the project partners to agree on a final proposal for recommendations with justification based on the findings for each recommendation. Subsequently, we will send the proposal to the panel.

During the workshop, we will discuss and refine the recommendations with the whole panel. We will develop the final recommendations through a formal consensus process, with each recommendation requiring over 75% agreement. A trained and independent moderator will guide the workshop. We assume that the recommendations will comprise specific aspects related to patient versions in oncology but also aspects that affect patient versions in general.

We will disseminate and promote the recommendations to author groups in Germany, which are engaged in ongoing or forthcoming projects for developing CPGs and/or patient versions.

### Patient and public involvement

Patients or the public were involved in the design, conduct, reporting or dissemination plans of our research.

### ETHICS AND DISSEMINATION

Ethical approval for the qualitative parts of the project was given by the Ethics Committee of Witten/Herdecke University (number 160/2021). For the interviews and

focus groups, we will ask the participants to sign an informed consent and data protection form. Although we may present the names of organisations from module 1b, the interview partners and their relationship with the specific guideline organisation will stay confidential. For the transcription of the audio tapes and the analyses, we will pseudonymise personal data.

The findings of the project will be published in peer-reviewed journals and presented at scientific conferences. To present the findings of qualitative research, we will use the Consolidated Criteria for Reporting Qualitative Research.<sup>32</sup> For the presentation of the findings of the literature review, we will adhere to the PRISMA reporting criteria, where applicable.<sup>33</sup>

### DISCUSSION

Our study will enable a better understanding of factors influencing the applicability as well as the development, dissemination and implementation of patient versions by directly questioning the relevant stakeholders. By identifying potential for improvement, the project can contribute to the further advancement of patient versions in Germany. Furthermore, the determination of adequate strategies for dissemination and implementation can support the wide use of patient versions and more patient-centred care.

To our knowledge, this is the first study on patient versions that will take different perspectives of patients, healthcare providers and guideline developers into account. We will focus on patient versions in oncology. However, we expect that several results are useful for the development and implementation of patient versions in general as we will likely generate recommendations that will affect also more general aspects of patient versions. Although the recommendations resulting from the project will be related to the German context, they can usefully contribute to the international debate on patient versions.

A limitation of the study is that we will restrict the focus groups to breast, prostate and colon cancer which are the most common cancer entities in Germany. For patients with other oncological entities, for example, rare cancers, there may be other information needs and aspects that should be emphasised. However, within the interviews with patients and healthcare providers, we will include various entities. Accordingly, we will consider different patient versions. These were developed using the same methods and have some generic sections that are included in all patient versions such as 'living with cancer'. However, they were written by various authors, have various lengths and in part different focuses. Particularly, the patient versions with cross-sectional topics such as supportive therapy or psycho-oncology address patients with cancer in general and give more complementary information. This means that we are on the one hand able to generate information from a broader range of patient versions and cancer entities. On the other hand, some information

may be specific for a particular patient version and may not transfer to all patient versions.

In our project, we will focus on oncological patient versions that are not older than 5 years. However, particularly in the often rapidly changing field of oncology, CPGs and patient versions might comprise recommendations that are already outdated after a much shorter time. Although oncological CPGs within the GGPO are updated at regular intervals, there might be recommendations that are no more valid shortly after publication. There is the option of preparing an amendment, both for CPGs and patient versions. However, keeping all recommendations up to date is difficult due to a lack of resources. We expect the aspect of up-to-dateness of CPGs and patient versions and how to handle that issue will be discussed, for example, when it comes to the trustworthiness of the content. Although outside the scope of our project, it will be interesting to follow the implications from patient versions that arise from living guidelines.

#### Author affiliations

<sup>1</sup>Institute for Research in Operative Medicine (IFOM), Witten / Herdecke University, Cologne, Germany

<sup>2</sup>Institute for Medical Knowledge Management c/o Philipps University Marburg, Association of the Scientific Medical Societies in Germany, Marburg / Berlin, Germany

<sup>3</sup>German Prostate Cancer Support Group, Bonn, Germany

<sup>4</sup>Office of the German Guideline Program in Oncology (GGPO), c/o German Cancer Society, Berlin, Germany

<sup>5</sup>Frauenselbsthilfe Krebs Bundesverband, Bonn, Germany

<sup>6</sup>Department of Health Research Methods, Evidence and Impact, McMaster University, Hamilton, Ontario, Canada

<sup>7</sup>German Agency for Quality in Medicine, Berlin, Germany

<sup>8</sup>Institute for Health Services and Health System Research (IVGF), Brandenburg Medical School Theodor Fontane, Rüdersdorf bei Berlin, Germany

**Contributors** MB, SBü and NM wrote the first draft of the manuscript. MB revised the manuscript. MB, SBü, NM, SBI, GC, MF, SF, TL, MN, CS and DP contributed to the conceptualisation of the study design. DP contributed to drafting the manuscript and supervised the process. All authors discussed and edited the final document.

**Funding** This work was funded by the Innovation Committee at the Federal Joint Committee (innovation fund grant number 01VSF20022).

**Competing interests** MB is involved in the development of patient versions in oncology in Germany. SBI and MN are representatives of the AWMF which receives constant financial support from the German Cancer Aid to support the GGPO and are involved in the methodological counselling of CPGs in oncology and other CPGs. MF is a representative of the publisher of the patient versions in oncology in Germany and is involved in the methodological counselling of CPGs and patient versions in oncology. TL is a representative of the publisher of the patient versions in oncology in Germany. CS was involved in the development of patient versions in oncology in Germany until 2019 and is responsible for the development of patient versions in the National Program for Disease Management Guidelines (NDMG) and the methodological refinement of those.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

#### ORCID iDs

Monika Becker <http://orcid.org/0000-0002-3569-321X>

Markus Follmann <http://orcid.org/0000-0003-3790-5578>

Monika Nothacker <http://orcid.org/0000-0003-4928-7391>

#### REFERENCES

- 1 Institute of Medicine (IOM). Clinical practice guidelines we can trust. National Academy of sciences, 2011. Available: <http://www.nap.edu>
- 2 Qaseem A, Forland F, Macbeth F, *et al*. Guidelines international network: toward international standards for clinical practice guidelines. *Ann Intern Med* 2012;156:525–31.
- 3 Boivin A, Green J, van der Meulen J, *et al*. Why consider patients' preferences? A discourse analysis of clinical practice guideline developers. *Med Care* 2009;47:908–15.
- 4 Santesso N, Morgano GP, Jack SM, *et al*. Dissemination of clinical practice guidelines: a content analysis of patient versions. *Med Decis Making* 2016;36:692–702.
- 5 Fearn N, Kelly J, Callaghan M, *et al*. What do patients and the public know about clinical practice guidelines and what do they want from them? A qualitative study. *BMC Health Serv Res* 2016;16:74.
- 6 Liira H, Saarelma O, Callaghan M, *et al*. Patients, health information, and guidelines: a focus-group study. *Scand J Prim Health Care* 2015;33:212–9.
- 7 Loudon K, Santesso N, Callaghan M, *et al*. Patient and public attitudes to and awareness of clinical practice guidelines: a systematic review with thematic and narrative syntheses. *BMC Health Serv Res* 2014;14:321.
- 8 van der Weijden T, Dreesens D, Faber MJ, *et al*. Developing quality criteria for patient-directed knowledge tools related to clinical practice guidelines. A development and consensus study. *Health Expect* 2019;22:201–8.
- 9 Graham K, Schaefer C, Santesso N. How to develop information for guidelines for patients and the public, 2021. GIN. Available: <https://g-i-n.net/wp-content/uploads/2021/04/Developing-patient-information-final-for-pdf-publication-1.pdf>
- 10 Owen-Smith A, Coast J, Donovan J. The usefulness of NICE guidance in practice: different perspectives of managers, clinicians, and patients. *Int J Technol Assess Health Care* 2010;26:317–22.
- 11 Faller H, Koch U, Brähler E, *et al*. Satisfaction with information and unmet information needs in men and women with cancer. *J Cancer Surviv* 2016;10:62–70.
- 12 Halbach SM, Ernstmann N, Kowalski C, *et al*. Unmet information needs and limited health literacy in newly diagnosed breast cancer patients over the course of cancer treatment. *Patient Educ Couns* 2016;99:1511–8.
- 13 Kent EE, Arora NK, Rowland JH, *et al*. Health information needs and health-related quality of life in a diverse population of long-term cancer survivors. *Patient Educ Couns* 2012;89:345–52.
- 14 Rood JAJ, Eeltink CM, van Zuuren FJ, *et al*. Perceived need for information of patients with haematological malignancies: a literature review. *J Clin Nurs* 2015;24:353–69.
- 15 Blödt S, Kaiser M, Adam Y, *et al*. Understanding the role of health information in patients' experiences: secondary analysis of qualitative narrative interviews with people diagnosed with cancer in Germany. *BMJ Open* 2018;8:e019576.
- 16 Ärztliches Zentrum für Qualität in der Medizin (ÄZQ), Office des Leitlinienprogramms Onkologie (OL), AWMF-Institut für Medizinisches Wissensmanagement (AWMF-IMWi). Erstellung von Patientenleitlinien zu S3-Leitlinien/NVL im Rahmen der Leitlinienprogramme. Methodenreport. 2. Auflage, Version 1 [online]. Available: <http://doi.org/10.6101/AZQ/000445>
- 17 Deutsches Netzwerk Evidenzbasierte Medizin e.V. Gute Praxis Gesundheitsinformation - Ein Positionspapier des Deutschen Netzwerks Evidenzbasierte Medizin e.V. [online]. Available: [https://www.google.com/url?sa=t&rc=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiO7NPTuKvAhWKyaQKHSPoCRsQFjAAegQIARAB&url=https%3A%2F%2Fwww.ebm-netzwerk.de%2Fde%2Fmedien%2Fpdf%2Fgpgi\\_2\\_20160721.pdf&usq=AOvVaw1-dq9xTVtsxZEFFo\\_f05zx](https://www.google.com/url?sa=t&rc=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiO7NPTuKvAhWKyaQKHSPoCRsQFjAAegQIARAB&url=https%3A%2F%2Fwww.ebm-netzwerk.de%2Fde%2Fmedien%2Fpdf%2Fgpgi_2_20160721.pdf&usq=AOvVaw1-dq9xTVtsxZEFFo_f05zx)
- 18 *et al* Lühnen J, Albrecht M, Mühlhauser I. Leitlinie evidenzbasierte Gesundheitsinformation, 2017. Available: <https://www.leitlinie-gesundheitsinformation.de/>



- 19 Mühlhauser I, Meyer G. Evidenzbasierte Medizin - Klarstellung und Perspektiven. *Dtsch Arztebl* 2016;113:A 486–8.
- 20 Schaefer C, Zowalla R, Wiesner M, et al. [Patient guidelines in oncology: objectives, procedures and first experiences with this format]. *Z Evid Fortbild Qual Gesundheitswes* 2015;109:445–51.
- 21 Shamseer L, Moher D, Clarke M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ* 2015;350:g7647.
- 22 Greenhalgh T, Peacock R. Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *BMJ* 2005;331:1064–5.
- 23 Mayring P. *Qualitative inhaltsanalyse: grundlagen und techniken*. Beltz Verlag, Weinheim und Basel, 2015.
- 24 Saunders B, Sim J, Kingstone T, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant* 2018;52:1893–907.
- 25 Patton M. *Qualitative evaluation and research methods*. 3rd ed. SAGE Publications, inc, 2002.
- 26 Martínez García L, Sanabria AJ, García Alvarez E, et al. The validity of recommendations from clinical guidelines: a survival analysis. *CMAJ* 2014;186:1211–9.
- 27 Shekelle PG, Ortiz E, Rhodes S, et al. Validity of the agency for healthcare research and quality clinical practice guidelines: how quickly do guidelines become outdated? *JAMA* 2001;286:1461–7.
- 28 Garner M, Ning Z, Francis J. A framework for the evaluation of patient information leaflets. *Health Expect* 2012;15:283–94.
- 29 Dos Santos Marques IC, Theiss LM, Johnson CY, et al. Implementation of virtual focus groups for qualitative data collection in a global pandemic. *Am J Surg* 2021;221:918–22.
- 30 Lally RM, Eisenhauer C, Buckland S, et al. Feasibility of synchronous online focus groups of rural breast cancer survivors on web-based distress self-management. *Oncol Nurs Forum* 2018;45:E111–24.
- 31 Nicola D, Patricia G, Karen C. STEER: factors to consider when designing online focus groups using audiovisual technology in health research. *Int J Qual Met* 2019;18:1–11.
- 32 Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19:349–57.
- 33 Page MJ, Moher D, Bossuyt PM, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021;372:n160.