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Communication guidelines as a learning tool: An exploration of user preferences in general practice

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ABSTRACT

Objective: To explore characteristics of written communication guidelines that enhance the success of training aimed at the application of the recommendations in the guidelines.
Methods: Seven mixed focus groups were held consisting of communication skill teachers and communication skill learners and three groups with only learners. Analysis was done in line with principles of grounded theory.
Results: Five key attributes of guidelines for communication skill training were identified: complexity, level of detail, format and organization, type of information, and trustworthiness/validity. The desired use of these attributes is related to specific educational purposes and learners' expertise. The low complexity of current communication guidelines is appreciated, but seems ad odds with the wish for more valid communication guidelines.
Conclusions: Which guideline characteristics are preferred by users depends on the expertise of the learners and the educational purpose of the guideline.
Practice implications: Communication guidelines can be improved by modifying the key attributes in line with specific educational functions and learner expertise. For example: the communication guidelines used in GP training in the Netherlands, seem to offer an oversimplified model of doctor patient communication. This model may be suited for undergraduate learning, but does not meet the validity demands of physicians in training.

1. Introduction

Learning new patterns of behavior is not easy for doctors [1]. Therefore methods to influence doctors' behavior have been researched in medical education and in clinical settings. Medical education researchers investigated skills training methods [2–5] and quality of care researchers investigated strategies for implementation of clinical guidelines [6]. Findings from both research areas may be triangulated for effective training in new behavior. This may be particularly relevant for communication training, as despite extensive research in effective didactics [6] and the existence of many state of the art training programs [6,7], there seems to be little evidence that medical education has achieved a sustained improvement in doctors communication in everyday clinical practice [7–11].

Quality of care research showed that the quality of the description of the behavior that is desired from doctors, also influences the extent to which doctors behavior is improved [12]. Most quality criteria for these descriptions refer to the quality of the content of recommendations, and are not the domain of educational research [13–15]. However, the criterion that recommendations should be clear, simple, brief and easy to follow is relevant and challenging for educationalists, especially when recommendations address complex behavior, such as doctor patient communication. Neither quality of care research nor the educational literature provide much direction on how to write guidelines that are perceived as clear, simple, brief and easy to follow for behavior as complex as doctor–patient communication.

The existing 'models', 'frameworks', 'guides' and 'guidelines' that describe desired communicative behavior of doctors are a multiform set [16–23]. These documents, from hereon referred to as 'communication guidelines' vary considerably in length,

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number of recommendations, structure and extent to which underpinning evidence is described, without it being clear why these different choices were made [16].

Some authors have made suggestions for optimizing the structure of communication guidelines. Cegala and Lenzmeier Broz argue that it is helpful to present recommendations in a chronological sequence reflecting the normal course of a consultation [24]. Silverman et al. advocate a different framework. They state that their framework is organized following the physicians' principal tasks during a consultation but does not describe their sequence. Their underlying assumption is that these tasks will be performed at varying moments in different consultations [18]. There are no theoretical or empirical data, however, to support the validity of either of these approaches.

Besides guideline structure there may be other guideline characteristics that influence the extent to which guidelines are perceived as 'easy to follow'. In order to better understand how the presentation of recommendations for doctor patient communication in theoretical texts can support the quality of communication skill training, we wanted to know which guideline characteristics might have a positive impact on teaching and learning. Therefore we explored experiences with learning and teaching communication guidelines of general practice (GP) trainees and their teachers.

2. Methods

2.1. Participants

We sought the opinions of different groups of guideline users to promote diversity of data. GP supervisors (GPs supervising GP trainees in their own practice), communication skill trainers (GPs and behavioral scientists) and communication skill learners (GP trainees and medical students). The eight Dutch GP training centers were invited to take part and invite participants for a focus group held at their own institution.

To elicit unbiased opinions from the participants of lower status (learners), we asked three institutions to organize a session for GP trainees only in addition to the mixed group session. The three trainee-only groups consisted of first-year GP trainees, final-year (Year 3) GP trainees and GP trainees in both these years of training, respectively. All participants were received written and verbal information about the purpose of the focus groups and gave consent.

2.2. Data collection

The focus groups were moderated by an experienced chair. Each group discussed the guideline used primarily in their GP training center, with a guideline being defined as a document 'containing recommendations guidance and instructions about doctor–patient communication, intended to support daily practice in health care and based on results of scientific research and the consequent discussion and formation of opinion, aimed at the explicit statement of good medical practice' [25]. The participants were invited to consider which characteristics of the guideline, in their opinion, facilitated or impeded their learning of the theory underlying the guideline and to discuss the guideline's strengths and weaknesses as an instrument to support communication skill training. The findings of the first three focus group sessions led to a modification of the structure of the interview because the participants mentioned different strengths and weaknesses depending on the different functions of the guideline. So, after session 3, the participants were explicitly invited to discuss the functions of the guideline before focusing on the related strengths and weaknesses.

2.3. Data analysis

The focus group discussions were audio taped and transcribed and all transcriptions were analyzed by the first author using specialized software (Atlas-ti). An iterative process of analysis and reflection was used in accordance with the principles of grounded theory [26]. All text fragments pertaining to the research questions were coded. Next, the codes were organized in networks of interrelated codes to facilitate the identification of concepts, categories and hypotheses. To incorporate different views in the interpretation model the first six interviews were analyzed independently: one by an experienced GP communication skill trainer; three by a researcher specialized in quality of care; and one by an educational researcher. After the analyses differences of interpretation were discussed until agreement was reached.

3. Results

3.1. Participation

One GP training center was unable to participate due to time constraints. In each of the seven remaining centers, one mixed focus group was held. In these mixed groups participated six GP supervisors, nineteen communication skill trainers (eight experienced GPs, eleven behavioral scientists), seven GP trainees and four students. Twenty-seven GP trainees attended the trainee-only groups. Four of the training centers used the same communication guideline and the remaining three centers used a different one each, bringing the total to four different guidelines that were discussed. The set of included guidelines was heterogeneous, and although all guidelines were perceived by learners as guidelines, none defined itself as a guideline. A description of these guidelines can be found in Box 1. The mean duration of the focus group sessions was 90 min.

3.2. Facilitating characteristics, attributes and functions of the guidelines

The analysis revealed facilitating characteristics relating to the following five attributes: complexity, specificity, structure, type of information, and trustworthiness/validity. As we mentioned earlier in the methods section, the analysis of the first three interviews yielded seemingly conflicting facilitating characteristics. For example, 'guidelines should be easy to use by everyone' alongside 'only teachers need to be able to use the guideline'. Further analysis showed that this arose from the fact that different facilitating characteristics were associated with different functions of the guideline. In other words, both teachers and students should find the guideline easy to use for learning and teaching but only teachers need to be able to use it to assess student performance. In order to prevent this type of confusion, we changed the focus group scheme. Henceforward we started the interview by asking the participants which specific function or functions the guideline fulfilled and which guideline characteristics contributed the most to these functions. The analysis revealed different functions of a guideline that support learning and teaching communication skills (Box 2). The five attributes and related facilitating characteristics will be discussed in relation to these functions (Table 1).

3.2.1. Complexity

Optimal complexity of a guideline is related to its suitability for the intended function and to users' experience and expertise. Obviously, les complex guidelines are more easy to use. However, too much simplicity may harm other important attributes such as the validity of the guideline. The acceptable level of complexity depends on the function of the guideline: a learning model for

Box 1. Description of the communication guidelines.

The communication guidelines discussed in our focus groups all pertained to general GP consultations and not to specific situations, such as breaking bad news or dealing with psychosocial problems. In each guideline, the recommendations for communication were organized along the lines of the consecutive phases of a consultation, with specific recommendations being provided for each phase. One guideline also contained general recommendations for communication for the consultation as a whole. The guidelines differed somewhat in content and in the quality of their development, shown for example by the quality of referencing and the involvement of users (doctors) in development of the guideline. They also differed in number and nature of consultation phases and in the related recommendations. Another difference was that of function. Two of the guidelines were developed specifically as assessment instruments while the other two described a theoretical communication model. With each of these two descriptive guidelines an assessment instrument was provided mirroring the content of the communication model in question. More detailed descriptions of the guidelines can be found in the Appendix.

Box 2. Description of the functions of communication guidelines that support teaching and learning communication skills.

Functions that support individual learning
- Learning model: integrated set with recommendations on how to communicate.
- Comprehensive textbook: description of the available knowledge on doctor patient communication, providing background information for the learning model.
- Checklist: short list of recommendations on which learners can see at a glance what needs to be done.

Functions that support teaching
- Theoretical framework and common language: theoretical description naming the main concepts in doctor patient communication and describing their role in the theory that is used.
- Basis for training program: shows which skills or competences should be targeted in the communication training program.
- Feedback instrument: helps users give feedback on communication performance.
- Assessment instrument: assesses the quality of learners' communication performance

students should offer recommendations that students can apply after some training, a feedback instrument should be easy to use for teachers and students alike, but only teachers need to be able to use an assessment instrument appropriately after some instruction. Furthermore, users suggested that recommendations for medical students should pertain to basic communication skills, whereas recommendations for GP trainees should focus on which communication skill to use in which situation.

> *Learning skills, well it is really always guided by external directions. There is always a teacher who tells you what is good for you. The interesting thing is that eventually you will have to leave that track because professionals who continue along those lines in their work are not professionals. In my opinion it is an essential component of becoming a professional, the transition from conditioned learning, as in skills training, versus selective use of certain skills you have learned, in situations where they are appropriate and useful. That should be the focal point of postgraduate training.*
> *GP-trainer Free University of Amsterdam*

3.2.2. Specificity

Specificity refers to the focus of the recommendations: are there many, highly detailed recommendations for specific aspects or situations or are the recommendations more broadly applicable. Generally participants prefer a low level of detail. For a learning model or a feedback instrument, the participants indicated that detailed instructions were difficult to remember and apply and argued that a more general approach would leave room for professional autonomy when filling in the details. When the guideline provided an abstract that could be used as a checklist, short descriptions are preferred which can be taken in at a glance when support is needed during a consultation. Some situations were mentioned to require a high level of detail. For example, the participants set great store by precise and unambiguous descriptions and definitions to ensure the validity of a conceptual framework.

> *I think such a list is easier to use when it has less information. There is just too much in it. It is just one sheet but when you put it on your desk to look at now and then you see nothing because there is just too much in it.*
> *GP-trainee Nijmegen university*

> *You also have that other list with 71 categories [Calgary-Cambridge guides], before you have memorized those and performed each detail ...*
> *Behavioral scientist-trainer Rotterdam University*

3.2.3. Structure

The participants prefer guidelines that are structured according to conceptually different phases of the consultation, with different recommendations for each phase. This type of structure shows the focus of the communication in different moments in a consultation (important for a conceptual framework), distinguishes main themes from detailed recommendations (learning model) and distinguishes different components, thereby enabling learners and teachers to focus on a certain phase and its specific recommendations (basis of the program of the communication course). The current structure was the most appreciated aspect of current communication guidelines.

> *Didactically, I think that dividing it into phases offers a sort of overview and makes it easier to look at reality according to the model.*
> *GP-supervisor Amsterdam University*

> *When you say you want to master it in one year and every week or every month you add a part that you want to study in depth, then I think it is easy to learn. If you say, from the first consultation I want to follow the MAAS-global, then I think it will be a real struggle.*
> *GP-trainee Nijmegen University*

3.2.4. Type of information

This refers to the sort of information supplied by a guideline to facilitate its use and desired effects. The participants said they wish a comprehensive textbook to explain how to use the learning model it presents, with examples to illustrate and clarify the recommendations and show how to translate the recommendations to practice. A feedback instrument should produce the type of feedback that stimulates discussion about communication. As for feedback resulting from the outcomes of the assessment instrument, the participants were of the opinion that it should motivate learners to improve themselves. Users feel currently often demotivated because of an overwhelming amount of negative feedback and a lack of narrative feedback. To motivate learners,

Table 1
Preferred guideline characteristics for all guideline functions.

Attributes	Support function	Preferred characteristics for the functions	Current fit for function
Complexity	Learning model	The skills to apply the learning model can be acquired by the learners with acceptable effort	+
	Feedback instrument	The instrument is easy to use for both teachers and learners. Observers observe only one type of skill at the same time, i.e. either general communication skills or phase specific consultation skills	+/−
	Assessment instrument	A teacher can learn to use the instrument confidently with some training	+/−
Level of detail	Learning model	Focus on the main issues not on the details, leaving room for professional autonomy	+/−
	Checklist	Short formulations, all recommendations fit on one page and can be taken in at a glance.	+
	Feedback instrument	Focus on the main issues	+
Format and structure	Learning model	Clear organization distinguishing between main themes and more detailed recommendations	+ +
	Common language and conceptual framework	A structure that divides a consultation into conceptually different parts with different tasks	+ +
	Basis for the program of the communication course	A phased structure to enable learners and teachers to focus on a specific phase and its relevant skills	+ +
Type of information	Comprehensive textbook	Contains an explanation of how to use the learning model. The theory is illustrated by several examples	+/−
	Feedback instrument	Feedback stimulates discussions of communication skills.	+
	Assessment instrument	Feedback stimulates learning by giving narrative as well as normative information and by limiting the amount of negative feedback	− −
Trustworthiness and validity	Common language and conceptual framework	Precise and unambiguous wording	+
	Learning model	Application of the model results in good doctor patient communication	−
	Assessment instrument	The score should reflect the quality of the communication. It should not depend on the observer or on whether the assessee has jumped through all the hoops. This could be promoted by increased attention for interactions, nonverbal communication and the motives underlying the doctor's communication	− −

Attributes and their preferred characteristics for different support functions of the guideline and the extent to which users feel that these guideline characteristics are currently optimized for the required function.
++, users tend to consider this characteristic of the guideline as fit for this function; strong positive opinions are common; +, users tend to consider this characteristic of the guideline as fit for this function; +/−, users differ in their opinion, either because of differences in personal preferences, or because users are consider this characteristic as fit for function in some guidelines but as unfit in other guidelines; −, users tend to consider this characteristic of the guideline as unfit for this function; − −, users tend to consider this characteristic of the guideline as unfit for this function; strong negative opinions are common.

feedback should be narrative as well as normative with an appropriate balance of positive and negative feedback.

> *I think if it, if there would be a substantial series of examples in it, then you can look for yourself what is right for you (. . .) I think you can get something from it, that you see examples and you think, yes, that's what is meant by that. For I think like exploration, yes, well I still don't really know what to do there. At a certain point it gets clearer when you read some illustrative sentences like, oh so that is what they mean.*
> *GP-trainee Nijmegen University*

> *I find that the feedback I get from watching the videotapes is very good. Together with my GP trainers or in group, but the assessment by the institute is not very useful. It is a bit like, yes, it is just not looked at, it is just that our score is returned to us. That doesn't help me much. You do not know why something goes wrong. There is no explanation. At least not enough.*
> *GP-trainee Nijmegen University*

3.2.5. Trustworthiness and validity

These concepts are used in the same sense as they are used in relation to assessment. The participants want validity and trustworthiness to apply not only to the assessment function of the guideline but to other functions as well. Trustworthiness and validity of the conceptual framework should be based on precise and unambiguous definitions of concepts and recommendations. Participants emphasized that for a guideline to offer a valid model of good doctor patient communication, there should be proof that the recommendations do indeed enhance the quality of communication. Similarly, a good assessment outcome should reflect a high quality of communication and not an observer's idiosyncratic personal preferences or the fact that the assessed has managed to jump through all the required hoops. Student, trainers and even many of the teachers tended to be negative about the trustworthiness and validity of the guidelines as learning model or assessment instrument.

> *. . . you may score low on all points and still have a good consultation. This is that strange discrepancy that you feel there is between the consultation and the checklist or the other way round. Terrible consultation but you covered all the items. You have just worked your way down the list.'*
> *GP-trainee Maastricht University*

3.3. Satisfaction with guideline characteristics

Overall our participants considered the characteristics of their guideline more often as fit for their function than not, although there were differences in opinion for several characteristics. Users

considered a small minority of the characteristics as unfit for function. They were particularly negative over the fitness of the guidelines for assessment purposes and over the trustworthiness and validity of the guidelines. They were very positive over the structure of the guidelines that supports several functions, over the fitness of the guideline as a common language and conceptual framework and as a basis for a training program.

4. Discussion and conclusions

4.1. Discussion

4.1.1. Main findings

This study shows that there are five key attributes of communication guidelines that influence their usefulness for learning and teaching communication guidelines: complexity, specificity, format and structure, type of information, and trustworthiness and validity. These attributes do not represent single set of ideal guideline characteristics, because the guideline characteristics that support learning or teaching depend on the function of the guideline in the training program and the level of the trainees, i.e. the ideal characteristics of a learning model for medical students are different from those of a feedback instrument for GP trainees. Overall learners and teachers tend to be positive over the suitability of the guidelines for their functions. However, there is still considerable room for improvement, especially in relation to the use of guidelines as assessment instruments and in the trustworthiness and validity of the guidelines.

4.1.2. Findings in relation to the literature

The five attributes of communication guidelines we identified as influencing the effectiveness of communication training are in line with the literature on implementation of clinical guidelines. High complexity is known to have a negative impact on implementation [12]. Doctors state that they prefer briefness, i.e. a low level of detail in clinical guidelines [14]. Which type of information a guideline should give, for example in which detail scientific underpinnings should be presented, is topic of discussion in guideline development [15]. Marriott et al. and Tunis et al. confirmed the relevance of trustworthiness and validity: guidelines originating from a trusted source whose recommendations are believed to actually promote the quality of health care have a greater chance of being implemented [27,28]. Systematically evaluating evidence and formulating valid recommendations is a challenge in guideline development. This may be even more true for the communication domain, with its pluriform constructs such as patient centeredness [29]. Moreover, effect studies often lack the details on the communication skills that were trained [24] or clear end points [30]. The literature on implementation of guidelines does not offer much advise on guideline structures, but within education research Mayer [31], and Bannert [32], have shown that a text with a clear structure is easier memorized than an unstructured text. Our analysis revealed a preference for a chronological structure based on conceptually different phases of the consultation each with different tasks, which combines the conceptual framework advocated by Silverman et al. [18] with a preference for a structure based on the consecutive phases of the consultation as suggested by Cegala and Lenzmeier Broz [24].

In the attributes of the guidelines there seems to be a tension between complexity and validity. Learners and teachers prefer guidelines with a low complexity and a high validity, but feel that currently guidelines are not sufficiently valid. We interviewed the same groups of participants on guideline characteristics that support applicability of the guideline in clinical practice. Both learners and teachers were much more negative about the fitness of the guidelines for clinical practice than about the characteristics that influence how difficult it is to learn the behaviors described in the guideline [33]. The criticisms regarding fitness for practice were strongly related to their criticisms on the validity of the guidelines. Suggestions that were made to improve these, would all increase the complexity of guidelines. Participants suggested several ways to developing situation specific guidelines for example by paying attention to differences between patients, or by describing several courses of actions depending on the content of the consultation. Participants would also prefer guidelines to pay more attention to nonverbal communication [33].

Currently, communication guidelines describe GP communication tasks in detail, but generally ignore interactions between the doctor's and the patient's communication and between communication and the content of the consultation [16]. Also, non-verbal communication is mostly ignored, despite its potentially strong impact on the quality of a consultation [16,34,35]. In addition little attention is paid to the different endpoint one may want to achieve with communication [30]. Addressing these issues is likely to lead to more valid communication guidelines. It might also lead to a highly complex set of differentiated guidelines, that is to difficult to master. The challenge therefore is to find an appropriate balance between simplifying communication theory into recommendations for behavior that are sufficiently easy to use and at the same time fit in with the complexity of real practice consultations. Solutions for this problem should probably be sought in by focusing on main themes instead of detail and by using a clear organizing principle. The Calgary Cambridge guides [18], for example, have a clear organizing principle and pay more attention to non-verbal communication compared to most guidelines. It was nevertheless not much approved by several of our participants, due to the high level of detail of its 71 steps to be performed in a consultation.

4.1.3. Strengths and limitations

We collected data from a rich sample, including different learners and teachers, and different guidelines, which resulted in a variety of facilitating characteristics. The heterogeneous nature of the guidelines under discussion allowed us to explore a wide range of guideline characteristics. The fact that none of the guidelines explicitly defined itself as a guideline, may however have negatively influenced the participants' attitudes toward their being used as guidelines. A limitation of this study is that the results reflect the participants' opinions instead of objectively measured effects on training. The attributes that we identified appear to be generic and applicable to different settings, whereas the facilitating characteristics are more likely to depend on specific training contexts. For example, Kurtz et al. reported that their interns preferred a small checklist which they could carry from room to room in their white coats, whereas our trainees, who have their own consultation rooms, prefer larger sheets, which they can put at a corner of their desk [36].

4.2. Conclusion

Which guideline characteristics are preferred by users depends on the expertise of the learners and the educational purpose of the guideline. In the context of general practice vocational training users have concerns about the validity of the guidelines and about their suitability for use in assessment.

4.3. Practice implications

4.3.1. Implications for education

Developers of communication guidelines and accompanying educational materials should take account of the attributes of complexity, specificity, format and structure, type of information, and trustworthiness and validity. They should ascertain which

type of support for learning and teaching is required for a particular communication skill course and develop educational materials to fit that course. The guideline by Silverman et al. is illustrative of this. It consists of an integrated comprehensive textbook, an assessment instrument and a checklist [18,36]. Which characteristics are most likely to enhance the usefulness of a guideline in a specific training setting can be gathered from conversations with learners and teachers. It is very important to determine learners' levels of expertise and adapt materials accordingly. This may seem very labor intensive but in the end the benefits will make it worth the effort.

The many functions of communication guidelines in learning and teaching show the importance of written educational materials. When learners are provided with good materials that present, explain and underpin recommendations of communication guidelines which can be used for training sessions and teacher-independent learning, there is every reason to assume that the investment in the development of these educational materials will prove to be cost effective.

4.3.2. Implications for further research

The recommendations made on the basis of the results of this study are derived from focus group discussions and the literature and have not been tested in communication skill training. Such empirical tests could be performed in studies using a design-based approach [37] to validate our findings. The results of this study suggest that the communication guidelines currently in use in GP training in the Netherlands may be more appropriate for undergraduate training than for postgraduate training. There is an extensive body of research into communication training for students and doctors who have had no previous exposure to communication skill training. Today, however, there is a growing group of doctors who have had basic communication skill training in medical school. In consequence, research should focus on ways to advance doctors' communication skills to a higher level during postgraduate and further training. The results of this study raise doubt about the suitability for this of the communication guidelines that are currently in use in GP training.

Competing interests

P.R. is co-author of one of the guidelines [38] under discussion in this article.

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Appendix A

List of guidelines discussed in this study, with short descriptions of the guideline

1. Laconto. J.C.M. Bloemen, L.H.C. Tan. Utrecht: SVUH. 1994

   Theoretical background: not described, content appears to be patient centered.

   Content: Combines recommendations for a focused and systematic consultation with those for doctor patient communication.

   Structure: There are three chronological consultation phases, with six to seven recommendations for good GP-patient communication within each phase.

   Situation: the guideline is meant for all consultations in general practice.
2. MAAS-global manual (Dutch version). Jacques van Thiel, Paul Ram, Jan van Dalen Maastricht: Maastricht University. 2000. http://www.hag.unimaas.nl/Maas-Global_2000/index.htm

   Theoretical background: not described, content appears to be patient centered. Good doctor patient communication is defined as the situation in which both parties are seeking to align their mutual goals and are aware of the meaning of the information exchanged.

   Content: Combines recommendations for doctor patient communication with recommendations for medical technical skills.

   Structure: There are recommendations for separate consultation phases (seven phases), general communication (six items) and medical technical skills (4 items).

   Situation: The guideline is meant for consultations that are relatively complete and uncomplicated, such as when the patient presents with only one complaint and the consultation does comprise all phases.
3. Syllabus: consultations in general practice. Marion Schmitz, Chris Claus. Amsterdam: VU University Medical Center, Department of Vocational Training for general practice. 2000.

   Theoretical background: not described, content appears to be patient centered.

   Content: Recommendations for doctor patient communication.

   Structure: There are recommendations for four separate consultation phases. The goals that should preferably be achieved by following these recommendations are described for each phase.

   Situation: Not described, the guideline seams to be meant for GP-patient consultations in general.
4. The consultation model. Amsterdam: Academic Medical Centre Amsterdam, Department of Vocational Training for general practice. Author and date not mentioned.

   Theoretical background: not described, content appears to be patient centered.

   Content: Recommendations for doctor patient communication and recommendations regarding medical problem solving.

   Structure: There are recommendations for three separate consultation phases. For each phase the appropriate attitude toward the patient is described.

   Situation: Not described, the guideline seams to be meant for GP-patient consultations in general.

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