

Manual for training and coding

# MAPPIN'SDM<sub>revised</sub>

Multifocal approach to the '**sharing**' in SDM

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## Contents

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Introduction.....	5
Stage of research on SDM measurement .....	6
The MAPPIN'SDM method.....	7
Using the manual.....	12
The rater training.....	16
Description of the indicators.....	19
References.....	42
Attachments.....	43

### Introduction

This manual provides guidance on the usage of the MAPPIN'SDM observation instrument which has been developed to assess the mode and extent of patients' involvement in their own medical decisions. It is to be applied to doctor-patient consultations about medical decisions. The observation instrument is part of a comprehensive inventory which enables the assessment of communication on decisions from all relevant perspectives (doctor, patient, observer). In addition to the observation instrument there are two questionnaires comprising identical items for addressing doctor and patient.

The manual addresses participants of MAPPIN'SDM rater trainings and users of the observation instrument, for example in the context of communication analyses for research studies. Moreover, it addresses researchers who are seeking deeper insight into SDM (in particular MAPPIN'SDM) measurement methods and want to retrace the development of the inventory, and participants in communication training courses for medical decision-making. The manual was conceived to give all user groups sufficient and comprehensible information. It was a deliberate decision not to conceive separate documents as a way of solving the difficulty of varying interest profiles, (such as a short, easy to read version for use by physicians who take part in communication trainings). Instead, passages with more methodological content not essential to communication trainees were marked for easier orientation in the document. This decision is in line with the methodology of doktormit trainings which work on the basis of transparency, implying that information that is sought for is manageable whilst information that is not relevant to an individual will not be processed anyway. Hopefully, the chosen layout will help readers distinguish between the two kinds of material and encourage them to use the manual in accordance with their own individual interests.

Patient involvement is the core construct of the shared decision-making method – in contrast to the traditional style of paternalistic communication between doctor and patient. The traditional style of making decisions, where the physician acts like a father in taking on the patient's responsibility is presumed to miss both parties' needs and to impact negatively on the quality of the decision. In this context "quality" means that decisions are made by evidence informed patients in congruence with individual values.

'Democratic' communication is assumed to facilitate realization of a mutual exchange of medical knowledge, epistemic convictions, subjective values, previous experiences, and expectations. SDM requires the two competencies of mutual involvement in shared communication and consideration of the criteria of evidence based patient information (EBPI). The latter comprises international guidelines on how information about the benefits and drawbacks of medical measures should be given to patients to enable an unbiased understanding of the 'risk information'. The criteria are based on either ethical guidelines or scientific evidence.

SDM enables patients with a pronounced desire for autonomy to shoulder a large part of the responsibility. Patients who lack confidence in their own critical assessment ability have the opportunity to ask for more guidance. What distinguishes this approach from the traditional paternalistic communication model is not so much the degree of patient involvement in the medical decisions but rather the extent to which the patient is involved in decisions on the very question of his involvement, i.e. in decisions on the communication process (meta communication). Observation using MAPPIN'SDM focuses on whether the players succeed in negotiating and clarifying role distribution explicitly and thereby providing good basic conditions for the information process. A consultation in which the doctor takes the responsibility can meet the SDM criteria if an agreement to this end has explicitly been made with the patient.

### Stage of research on SDM measurement

Evaluation of SDM with regard to its effects on decision quality requires reliable methods for measuring SDM. The instruments that exist so far are not yet suitable for this purpose.

Systematic reviews on SDM measurement methods agree in their appraisal of existing instruments as unsatisfactory [Giersdorf 2004, Elwyn 2001, Simon 2007, Légaré 2007]. This appraisal of the international stage of research also applies to German research. As a result of the German 'patient as partner' projects (BMGS 2001-2005) all the available Instruments for measuring SDM were translated into German. Problems of existing measurement approaches identified by the systematic reviews are listed below:

- Only few instruments address the quality of communication itself. Patient satisfaction / understanding / knowledge / preferences etc. do touch the SDM concept but they do not meet its core.
- The level of psychometric validation of some instruments is satisfactory as regards reliability but convincing validation studies are lacking [Simon 2007].
- None of the instruments tries to capture the interaction taking place between the parties involved. The subject of measurement is either the perception of the quality of communication or the relationship, or the completeness with regard to the sequence of process steps that should be fulfilled for an ideal decision. The issue of exchange (implying the extent to which the parties relate to each other) remains unconsidered, as does the question of whether there is a shared understanding of the central components and communicative aspects.

So far, studies have failed to recognize two further highly relevant problems of the used measurement methods:

- A lot of studies have revealed that the results of SDM measurements administered from different perspectives (third persons' observations of SDM, subjective perception of patient or physician) do not, or only poorly, correlate [Saba 2006, Freiden 1980, Starfield 1981, Krones 2008, Kasper 2007, Shields 2005, Steward 2000, Martin 2003 Ogden 2002, Johnson 1988].
- Although claiming to provide information that is relevant to patients facing medical decisions, existing SDM measurements have so far not considered the quality of the information, thereby creating the absurd impression that patient involvement could take place without the patients being appropriately informed according to the guidelines of evidence based patient information.

Summing up, we can say that up to now, a definition and corresponding measurement methods that consider and integrate both the EBM criteria and the interactional character of the communication concept have been lacking. The latter implies the establishment of a shared understanding of the communicated meaning from different viewpoints, a 'sharing of meaning' [Kasper 2011].

### The MAPPIN'SDM method

#### Short overview of the MAPPIN'SDM approach

The development of MAPPIN'SDM was triggered by three aims:

**Firstly**, the MAPPIN'SDM observation instrument is in several respects a further development of the OPTION scale [Elwyn 2005] which it replaces with this more reliable, more comprehensive measurement method. However, this was not the most important goal of this development.

**Secondly**, MAPPIN'SDM is a research instrument that provides the opportunity to calculate convergent validities between assessments from different perspectives (doctor, patient, third person).

**Thirdly**, based on the inventory it is possible to calculate a compound SDM score that meets the concept's assumptions ( $SDM_{MASS}$ ).

#### The structure of the MAPPIN SDM approach

MAPPIN'SDM means: **"Multifocal approach to the 'sharing' in the shared decision-making"**. The inventory comprises all the relevant measurement perspectives towards the communication in question as well as the two possible measurement constructs (SDM behaviour, SDM result).

These are applied to the three relevant measurement units (doctor, patient, dyad = doctor & patient as one unit). MAPPIN'SDM represents a comprehensive measurement approach integrating all perspectives, constructs and measurement units which were hitherto realized only separately in SDM measurement methods. This development answers the need for a systematic and exhaustive approach that captures and correlates all existing approaches.

#### Three perspectives

'Perspective' in this context means the viewpoint from which judgement of the communication is administered. In contrast to all existing instruments (which allocate SDM judgement either to the physician, the patient or a third person) MAPPIN'SDM realizes all three perspectives within the same inventory using an identical set of indicators.

#### Two constructs

MAPPIN'SDM takes into account the fine but important difference between two constructs underpinning the existing SDM measurements (Construct in this context refers to the subject of measurement): **1. The extent to which a behaviour is performed to involve the two parties in the decision-making process: SDM Behaviour.** This issue can be judged not only by the patient and the doctor but also by a third person. The crucial question is: "Do doctor or patient undertake efforts to make the particular SDM issue explicit. (*and in doing so involve each other in the communication*)?" **2. The extent of involvement achieved: the perceived (communication) result in terms of SDM.** This issue can only be judged by parties immediately present and part of the consultation. The crucial question is: "Did you feel involved in the communication on the particular issue during the consultation?". This means that, while the third person can only judge the communication (mediated) based on the first construct, parties immediately part of the communication can judge both constructs, for instance: behaviour: "The options were listed" or result: "Now I know my options", which might not always be the same.

### Three units of measurement

Measurement unit refers to the (social) object upon which the measurements are made. In general, unilateral observation of communication cannot lead to valid judgements, in particular as the issue (involvement) is the product of an interpersonal cooperation. In addition to communication behaviour performed by the doctor as focused by the OPTION scale [Elwyn, 2003], MAPPIN'SDM takes into account contributions by the patient as well as the communication of doctor and patient as a unit (dyad). It is assumed that the quality of a decision does not depend solely on whether certain aspects are brought up, but also which of the parties brings up that specific aspect or to what extent both parties participate in the discussion of individual aspects. Full assessment of the process necessitates consideration of both dyad members.

### Seven foci

From these considerations result seven foci (see table). Focus is defined as the lowest common denominator of perspective, construct and unit (see table). The construct "behaviour" can be defined for three different perspectives (third person, doctor, patient) and also for three different units (doctor, patient, dyad), while the construct, "result", can be defined for two perspectives (not for third person) and two units (physician, patient). Strictly speaking, complete variation of the system would lead to another four foci which were not operationalized (instruments) since measurement of units and constructs by crossing over perspectives seemed rather complicated and was not required by the specific research questions. Foci 4 and 6 address "behaviour" as judged / perceived by doctor (4) and patient (6). Example: focus 6: "All options were listed", focus 7: "Now I am aware of all the options available to me". These measurement foci (4 and 6) are unusual since both patients and physicians can more easily respond to questions focusing on their perception of the result than on those reconstructing their observable behaviour. However, these two foci were operationalized to provide opportunity to interrelate a third person's and subjective (patient's or doctor's) judgements based on identical constructs. Bearing in mind the strongly diverging results from third person and patient [Kasper 2007] it should be figured out, whether these could be due to differing constructs, which is not the case.

### Two instruments

These various foci of measurement are operationalized in two instruments, one of which is to be used as an observation based instrument (ideally using video documents), the other one to be administered (ideally directly after a consultation) by either patient or physician in the form of a questionnaire. This manual deals with the use of the observation instrument. However, the two questionnaires are attached at the end of the document.

### Nine SDM indicators

All seven foci are based on an identical set of 9 aspects (in the revised version, previously 15 [Kasper et al. 2012]), covering an international consensus on competencies essential for SDM.

Since these competencies are captured as behaviours this does not mean that they would automatically lead to a sharing. Appearance of such behaviour just shows a person making efforts to achieve involvement. That is why we call these competencies 'indicators'. All 11 indicators from the OPTION scale [Elwyn 2003] were adopted either by keeping their basic idea or, in some cases, even the wording. An authorized German translation already existed [Elwyn 2003] but, based on theoretic, language or

communication considerations, some items had to be refined slightly so that they would fit better into the (MAPPIN') SDM concept. These decisions are documented in detail in a comprehensive paper which records all the steps of the translation process [Kasper 2011]. In contrast to all existing instruments MAPPIN'SDM considers the criteria of evidence based patient information (EBPI [Bunge 2010]). For this purpose new indicators had to be defined. Moreover, the appraisal of existing indicators (OPTION) was specified according to EBPI criteria and explanations provided in further chapters of this manual. (e.g. Indicator 3b). Readers already familiar with the OPTION scale can retrace changes below. (All indicators are commented on in detail in "Description of the indicators": p. 18 ff).

*Indicator 3a, b, c:* deals with the issue of discussing the medical options. This indicator was already considered in the OPTION scale through two items (4, 5) and was supplemented and restructured in the MAPPIN'SDM. Appraisal, whether and to what extent the information is provided systematically and in a retraceable manner (3a) now refers to the whole sequence of discussing the options (rather than the 'listing the options' part only). MAPPIN 3b aims at appraising the exhaustiveness of the information as regards content and the process of deliberating the options and is similar to the OPTION item 5. Not yet considered in OPTION and other SDM measurement instruments, indicator '3c' focuses on the quality of the information in terms of the criteria of evidence based patient information [Bunge et al. 2010], e.g. to what extent sources of information or recommendations are indicated. According to the EBPI criteria the latter information is standard [Bunge 2010]. Other criteria refer for example to the presentation of numbers or explicit statements about the quality of the given evidence. Rather than being just a concept for organizing a dialogue the SDM concept is also concerned with information quality, so all EBPI criteria should be complied with here, too.

*Indicator 9* considers the question of whether the doctor has understood the patient's viewpoint correctly. It corresponds to the already existing Indicator 8 in the OPTION scale (the question on the patient's understanding). Since per definition SDM is a mutual exchange of information, reassurance about correct comprehension of the given explanations is required on both sides of the dyad.

*Indicators 8 & 9:* In the OPTION scale, the aspect of whether there was sufficient opportunity for questions is considered in a separate item. However, rating practise has shown that reassurance regarding the other person's understanding is mostly achieved using questions. For this reason, the question item was integrated into the broader item about 'checking understanding' (8 & 9) on both sides of the dyad (patient & physician)

Some of the OPTION items were adopted keeping the idea but had to be rephrased to better capture the intended meaning. e.g. OPTION item 11 "The clinician indicates the need for a decision-making (or *deferring*) stage." became MAPPIN'SDM indicator 5: "The clinician opens the decision stage leading to the selection of an option (*If applicable, deferment is a possible decision*)."

Some of the original OPTION items underwent a conceptual specification or shift in meaning to make them more coherent with the inherent logic of an SDM process. They had to be relocated. For example, the OPTION item 10, the explicit negotiation of the role distribution within the consultation, is more meaningful when closely connected with the SDM key message. Encouraging a patient to take an active role remains rather artificial and even dubious if not justified by the statement that from the medical point of view it is not possible to identify any single optimal path for the patient. The role distribution item was thus fused with the key message item.

Changes in the MAPPIN'SDM caused by the revision 2013 (from Version 1.0 to version 2.0): The simplification of the taxonomy from 15 to 9 SDM indicators (or we should perhaps say 11, since indicator 3 consists of a, b, c) only means a restructuring of the sub-criteria underpinning the MAPPIN'SDM concept. No changes were made to the basic concept. All criteria of version 1.0 are still present in version 2.0. What led to the revision were experiences during a rater training indicating some problems regarding the distinctiveness of a couple of items. These problems required increased effort in making specific arrangements about double coding to arrive at a satisfying reliability. By simplifying the taxonomy we also aim at simplifying and improving the rater training and reliability scores.

**MAPPIN'SDM: overview of the system**

Focus	Perspective	Instrument	Construct	Unit
1	observer	observation instrument	behaviour	doctor
2				patient
3				dyad
4	questionnaire	result		
5			behaviour	
	not operationalized	result		
6	patient	questionnaire	behaviour	dyad
7			result	
		not operationalized	behaviour	doctor
			result	

### **Quality of the observation based instrument**

Ratings conducted by trained raters based on this manual have proven highly reliable. The three validation studies that were already conducted showed that although applying a system of pronounced complexity raters were able to achieve high inter-rater reliability (IRR). Results for IRR were comparable or even better than those reported for the OPTION scale [Elwyn 2003]. This might be due to the completion of the SDM indicators and communication foci. The introduction of additional categories facilitates the assignment of specific phenomena to the right category. Moreover, the specification of definitions in the coder manual by discourse in an interdisciplinary team of developers might have contributed to higher reliability. The manual includes clear guidance for differentiating all scoring levels, using possible double codings, and considering the relevance of the order of indicators in the sequence of the SDM indicators within a decision-making process. Encouraging experiences during the work with this instrument support the assumption of exhaustivity of the 9-SDM indicators with their 11 separable aspects.

### Using the manual

#### Structure of the observer guide

1. The three variations of each indicator addressing the three measurement units (doctor, patient, dyad) are shown in a table using different backgrounds (dark grey = focus<sub>doctor</sub>, medium grey = focus<sub>patient</sub>, light grey = focus<sub>dyad</sub>). The indicators are the observation items.
2. Below each item is a definition of the indicator. Explanation is provided to illustrate the relevance of the indicator in the process of shared decision-making. The explanation also provides details about different sub-components of the indicator, distinction from other indicators, and varying degrees of performance.
3. In the following table the indicator is illustrated using concrete communication examples for each level of performance. Many of the examples are taken from our pool of consultations about multiple sclerosis treatment decisions. However, some quotations refer to other medical problems, e.g. consultation with the dentist or the GP.
4. Comments regarding the relevance of timing a behaviour in accordance with the course of the consultation and of possible double coding are in bold italics.

#### The meaning of the scores

0	The behaviour is not observed.
1	The behaviour is observed as a minimal attempt
2	The basic competency is observed.
3	The behaviour is observed to a good standard.
4	The behaviour is observed to an excellent standard

*Score »0« means:* No attempt to communicate the particular issue is observed at the right moment within the course of the consultation.

*Score »1« means:* The indicator is observed as a minimal attempt. This can for instance be an incomplete or rather implicit question or statement.

*Score »2« means:* The communication of the specific aspect is observed as a basic competency.

*Score »3« means:* Communication of the specific aspect is observed to a good or high standard. Explicit statements with additional explanations and/or descriptions referring to the issue in question are of a good standard.

*Score »4« means:* Comprehensive and remarkably insightful communication of the specific aspect is observed. Explicit statements with additional and extensive but also useful explanations and or descriptions referring to the issue in question should be coded as excellent performance.

#### How to code the dyad

The idea of cooperation and partnership means that the process is open with regard to which of the parties initiates and performs specific decision-making steps. The traditional focus always looks at whether the doctor displays a particular behaviour. However, it might mean even more involvement if the patient

initiates this behaviour himself. All things considered, it is crucial whether one of them takes steps to promote the decision-making process. The latter is the focus of the dyad, which should be either equal to or better than the best of the two scores of patient and doctor. A better score can be given when the parties' contributions at least partly complement each other rather than being redundant, e.g. the patient starts listing the options and the doctor continues by adding an option the patient hasn't yet listed. A minimal attempt to engage in one of the 9 behaviours is not enough to upgrade the performance of the other party substantially and thereby lead to a higher score for the dyad.

### General coding rules

The sole subject of the appraisal is decision processes, for instance a therapeutic or diagnostic question. A number of medical decisions can be made within a consultation or perhaps none at all. As a first step the decision sequence of reference has to be agreed on by defining accurate time marks on the video document. One possible procedure is that the decision that is considered most relevant in a consultation can be identified and then appraised. It is also possible to judge more than one process and to weight the SDM score in proportion to the consultation time of the specific sequence. Other methods for weighting SDM performance in the case of multiple decisions are also conceivable. However, it is recommended to prohibit appraisal of different decisions as one process, or to carry out appraisal of consultations that are without even one medical decision. If Indicator 1 is inappropriate or absent, this can make it difficult to recognize or to agree on the moment of initiation of a decision-making process. Researchers then have to try to infer the time point on the basis of the course and content of the consultation, e. g. in the case of a treatment decision by identifying the end of the medical history. It can happen that decision processes are more or less completely neglected, e. g. when the doctor initiates a diagnostic measure or decides on it without involving the patient in an information process. The raters should code such decisions indicator by indicator under consideration of this obvious lack of communication competency.

Responses (reactions) of one party to an action of the other party have to be considered by scoring the responding party only if the responder's action goes beyond the response impelled by the initiator. If, for example, the doctor initiates Indicator 7 by asking the patient: "Is this way of providing the information OK for you, or shall we switch to another medium?" and the patient just answers "It's OK", it is difficult for a rater to imagine less of an answer. The patient score is thus "o". If, on the other hand, the patient answers by stating: "I prefer it this way. If we do it a different way I will not be able to remember it", this would be considered as patient activity for Indicator 3 leading to scores on both sides of the dyad.

### Rarely observed indicators

According to our own and others' experience some of the indicators that are included in the MAPPIN'SDM inventory are seldom observed.

This applies in particular to:

- Indicator 7:* - coming to an agreement on the preferred mode of information exchange
- Indicator 8:* - checking the patient's understanding of information provided to him
- Indicator 9:* - checking the doctor's understanding of information the patient contributed to the consultation

Recognition of these indicators is a challenge to the rater. They thus require special consideration within a rater training. Seldom events can easily be overlooked when they come as a surprise. (Apart from that, low or absent variance of a category leads to underestimation of actual rater agreement for statistical reasons [Wirtz & Caspar 2002]). There is naturally a reliability problem where seldom event categories are concerned. However, since the pool of indicators is defined on the basis of theoretic rather than empiric assumptions the observer's attention has to be trained to recognize these indicators anyway. As a prerequisite for providing the opportunity to choose a suitable information mode (Indicator 3) it is for instance desirable that doctors have different variants available for the provision of patient information (e.g. decision aids). This applies in particular to prototypical medical problems such as stroke prevention in GP practices. However, in reality most physicians have not yet reached this standard and are not able to offer an alternative mode for informing their patients. Nevertheless, the competency should be considered in trainings and coded even if only as a minimal attempt.

### **Possibility of double coding**

In certain conditions, communication behaviours can indicate more than one competency. In such cases the same behaviour can give reason to score on different indicators. The manual provides guidance for deciding on possible double coding.

This is for instance possible for:

*Indicators 3b & 8:* - discussing the options & ensuring comprehension

*Indicators 4 & 5:* - exploration of expectations and worries &  
- initiation of the decision stage

*Indicator 3c & 8:* - discussing the source of a recommendation (quality of the information &- ensuring comprehension

Double coding can also be justified in other than the aforementioned constellations. However, the opportunity of double coding should be used sparingly and not instead of a clear coding decision by the observer. By increasing the discernability of the indicators the revision of the MAPPIN'SDM led to a decrease in the need for double coding.

### **The chronology of the SDM consultation, coding depending on, or independent of, the consultation course**

The first six MAPPIN'SDM indicators (1, 2, 3a-c, 4, 5, 6) represent the chronological sequence of the single steps within an SDM consultation. In order to be accepted a competence has to be shown at the right position within the SDM process. Specific rules regarding withdrawal of points for late appearance of an behaviour are provided in detail in the chapter descriptions of the indicators.

However, the actual course of the decision-making process can change the basis of reference for appraisal of some of the 15 indicators.

This applies for instance to:

*Indicator 3a (listing the options):* Depending on how many options are available in a certain case the idea of what it would mean to list these options in a complete and comprehensive manner might vary. In an extreme case, when just one treatment option is available, the doctor would have to state: "Apart from the option to defer the decision there is only one possible treatment available in

your case.” If more options are available Indicator 3a would require additional structuring to help the patient organize his plan of options.

*Indicator 5 (initiating a decision)*: Depending on whether in the previous course of the consultation a choice was already expressed or whether up to this moment the possible options had only been discussed Indicator 5 requires a different strategy. In the first case, a feedback by the doctor on his understanding of the patient’s preference (making the implicit agreement explicit) would be appropriate. If the process still seems open an initiation of the decision could mean giving a summary of the remaining options. Examples are provided in the manual.

Three indicators have to be coded independently of the time point of their appearance within the consultation or can rather be relevant during the whole consultation (indicators 7, 8, 9) where a particular expectation of the rater regarding the correct time point to show a competence is can be more a barrier.

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### The rater training

#### Training material

Selection of communication examples for training rater competencies should be made very carefully. The aim is to achieve as heterogeneous a spectrum of communicative competencies as possible so that the participants can become familiar with the characteristics of different communicative qualities and levels. Since the structure of medical decisions varies between indications and settings, similarity of training materials and the consultations that will later be analysed is important. Raters trained using a certain material might need supplementary training to be able to reliably judge consultations from other health care contexts that have other specific conditions. It could be, for instance, that parts of the information are given by another carer in the unit, or that for particular reasons decisions are not taken but only prepared during the consultation in question. It can then be difficult to recognize specific indicators or criteria or to judge them reliably. Supplementary training enables renewed agreement on criteria for scoring and defining the decision sequences. It is usually necessary for raters to obtain information on the evidence basis of scientific knowledge from experts in the relevant medical field, for example concerning what are the available options or what the option of doing nothing in the face of a certain medical indication would mean?

#### Target criterion

Provided the training material has been carefully selected and all trainees have EBM competency the sole aim of the training is to achieve satisfactory inter-rater agreement, the aspired levels and coefficients of which can be decided on the basis of reference literature [Wirtz & Caspar 2002]. We assume that an average reliability of .80 based on a test sample of sufficient size is an acceptable result. This value reflects the result of a consensual validation achieved by all participants in the training. The training is a social process that takes place in a group. In other words, excellent individual performance is not relevant since the definition of the target criterion is based on the whole group.

#### Required time for trainings

It is difficult to estimate the time required for successful completion of a MAPPIN-SDM rater training. For some readers it might be important to learn that in our experience, despite its much greater complexity, MAPPIN does not require more training time than OPTION. This is assumed to be due to the higher accuracy of the coder manual and the exhaustivity of the indicator set which minimize uncertainties in rater assessments and save time otherwise needed for cognitive search processes and discussion of ambiguous explanations in the manual. Under optimized conditions a training might be realizable within five working days but this time can vary widely depending on the group and the material.

### Selection of rater trainees

To enable good results participants in rater trainings should meet various preconditions. Professional experience of social perception competencies such as basic psychotherapeutic skills is an ideal qualification for MAPPIN'SDM observer trainings but there should at least be a pronounced interest and motivation to discuss communicative phenomena in a group persistently and intensively. Observer agreement can only be achieved if all group members are capable of an open discourse. In addition to good basic medical knowledge and familiarity with health care procedures raters need good methodical skills in evidence-based medicine. They should in particular be able to apply the criteria of evidence-based patient information (EBPI [Bunge 2010, Kasper 2010]). Here MAPPIN differs clearly from other instruments (e.g. OPTION) which leave the question of the quality of the information out of consideration. Since patient involvement is not exhausted by creating an atmosphere of partnership but also requires that the best available relevant knowledge is shared with the patient in an understandable way, raters also have to be capable of appraising the information. If EBM or EBPI competencies are possibly lacking this has to be taken into account during the training. An important trainee selection criterion for this *elaborate and expensive* training is thus not only their availability at the time of the actual training but also in the future for analysing communication documents.

### Didactics

A detailed curriculum has been developed and evaluated for training raters in the use of the MAPPIN'SDM inventory. Information on this is available from the authors. The aim and scope of this manual does not allow for the provision of details on the didactics of observation (rater) trainings.



### Description of the indicators

- For reasons of brevity the masculine pronoun 'he' is used in the following explanations (as throughout the manual) but it should of course be understood as also including the feminine pronoun 'she'.
- Each indicator is explained using concrete communication examples for all scoring levels. These are to be understood as cumulative, i.e. each new level builds up on the lower levels and accordingly assumes their competencies. In other words, only those skills that are additional to the aforementioned skills are named.
- A corresponding training video was developed and produced in German and English. It demonstrates excellent performance of each of the following 9 indicators applied to a decision on immunotherapy in multiple sclerosis. The video shows a neurologist talking to a patient. The consultation is role play based on a prepared script.

### Indicator 1: Defining the problem

The <b>clinician</b> draws attention to an identified problem as one that requires a decision-making process.
The <b>patient</b> draws attention to his concrete problem as one that requires a decision-making process.
<b>Clinician and patient</b> agree on a concrete problem as one that requires a decision-making process.

This first competency consists in skills for defining the subject of the decision at issue.

- It is important to make clear which concrete problem requires a decision making process. Example 1: *multiple sclerosis*: "an inflammatory process of neural destruction. The question of immunotherapy arises". Example 2: *stroke risk*: "the risk of blood congestion and blockage in small vessels of the brain to vascular closure leading to rupture. The question of a prophylactic treatment to thin your blood arises ". As the examples show, it is not just the diagnosis that has to be clarified but also the underlying process that gives cause for deciding on an intervention. Any risk associated with a specific condition should be named explicitly.
- A good performance includes discussion of the individual situation, i.e. the specific course and condition of the disease, as well as the patient's mental condition with regard to urgency and indication of treatment in a general sense, e.g. *immunotherapy in MS*: "The frequency of relapses you are currently experiencing might indicate pronounced inflammatory activity. In such cases the chance of benefiting from immunotherapy is higher"; e.g. *stroke prophylaxis*: "Due to your age you belong to a group of people with an enhanced risk of stroke." E.g. perinatology "It's understandable that after your experience during your last birth you are now sceptical about the natural course."
- On the other hand it has to become clear what the decision at issue is about (e.g. whether or which treatment; or whether additional diagnostics and which).
- It is also essential to define possible purposes of a medical measure(s) on which a decision is to be made. Example: *immunotherapy in MS*: "You cannot expect immunotherapy to make existing impairments disappear. Immunotherapy can possibly slow down or even stop the progression of such impairments." Beyond naming realistic expectations with regard to the medical results, mentioning of potentially important individual criteria, such as in a dental medical decision: aesthetics, costs, function, medical results, would meet this criterion.
- Explanations on how and by which mechanisms a treatment could affect the condition at issue (mediating mechanism) score best if they are linked to the individual course of the disease or condition of the patient. Example: *stroke prophylaxis*: "A stroke becomes less likely when we reduce blood viscosity. We should now discuss whether thinning of the blood in your case would be wise or too dangerous."

***Depending on whether there were previous appointments between the two parties, as on the context and specific circumstances leading to the current consultation the decision process can be initiated in a variety of ways. Even if the individual components required for a good performance are displayed in alternation with parts of the anamnestic process and are thereby performed step by step by doctor and patient together this can be rated a high performance. However, it is important to express these components explicitly and to demonstrate them at the beginning of the consultation, in particular before listing the options (Indicator 3).***

### 0 The behaviour is not observed:

The concrete problem requiring a decision is not defined or is defined too late.

#### Example

- *Clinician*: "I've had a look at your medical results and I think we ought to do something."
- *Patient*: "Do you think I should take drug A or drug B? What do I have to do?"

### 1 The behaviour is observed (minimal attempt):

The problem is defined and it becomes clear that it is time for a decision about which kind of measures should be taken.

#### Example

- *Clinician*: "Our job today is to come to a decision on immunotherapy for you."
- *Patient*: "My condition has got worse and I'd like to come to a decision today on a long-term therapy for my MS."

In the three following, three further composites are exemplified, each of them leading to additional scoring points regardless of the specific combination in which they are observed in a concrete consultation:

- Making reference to the individual disease course
- Discussion of purposes and possible criteria underpinning the decision
- Describing the mechanism of the measure and/or character of the specific disease process

### ● The basic competency is observed:

In addition to point 1, reference is made to the patient's specific condition (individual course of the disease or condition and to the purpose of the potential measure).

#### Example

- *Clinician*: "... Your medical results show a relapsing-remitting course and a fast progression... Immunotherapy can slow down deterioration of your condition."
- *Patient*: "... I know that there are several different drugs available for my MS type."

### ● The behaviour is observed (good standard):

In addition to point 1, details are provided on the mechanism of the medical measure under consideration.

#### Example

- *Clinician*: "... Immunotherapy intervenes in the body's own immune system. It has an anti-inflammatory effect. That could prevent further damage to your nervous system."
- *Patient*: "... I know that these drugs are anti-inflammatory."

### ● The behaviour is observed (excellent standard):

In addition to point 1, either realistic expectations about medical results are presented or the spectrum of potentially relevant criteria guiding the decision on the patient's side.

#### Example

- *Clinician*: "... you cannot expect any of the lesions in your brain or your movement difficulties to disappear. A therapy would be based on the attempt to stabilize your present condition". Or: "As your baby's current position is a breech presentation, we have to discuss the further management of your pregnancy with regard to criteria such as your attitude towards natural birth compared to a section, predictability, the relevance you put on possible risks for the baby or for yourself, or an eventual next pregnancy."
- *Patient*: analogous

### Indicator 2: SDM key message

The <b>clinician</b> states that there is more than one way to deal with the identified problem ('equipoise').
The <b>patient</b> indicates that there is more than one way to deal with the concrete problem.
<b>Clinician and patient</b> discuss that there is more than one way to deal with the concrete problem.

A precondition for democratic decision-making in accordance with SDM is a mutual understanding on the part of both parties of "equipoise", a term implying that the clinician's medical knowledge does not qualify him – in the place of the patient – to know which treatment is right. SDM is indicated when more than one option is conceivable or justifiable. In addition to evidence-based information on the pros and cons of a treatment, clarification is therefore needed regarding what the possible benefits and drawbacks actually mean to the patient. Consequently, this core condition of SDM implies an invitation to the patient to become involved. On the other hand, without the underpinning conviction regarding the core condition of SDM this invitation would be no more than an empty phrase. This could rather imply the doctor was engaging in "cosmetic" communication and simply asking the patient to comply with the course of the discussion. It can therefore be stated that an agreement regarding equipoise between the parties is both catalyst and 'conditio sine qua non' of SDM. By coming back to this essential issue on several occasions during the consultation it is possible to render the indicator more clear and credible.

- The basic competency is given if it is stated explicitly that from the health professional's point of view there are several conceivable ways to deal with the concrete problem.
- If this condition is also introduced and explained as the basic justification of patient involvement a higher level of competency is visible. Deeper discussion and justification of the equipoise condition or efforts to encourage the patient to take the responsibility are rated more highly. Excellent behaviour, for example, might be as follows: e.g. *immunotherapy for MS*: "No doctor can tell you how your MS will develop. Perhaps you will have a large number of relapses in the coming years. Or perhaps you will have none for 15 years. And no one can say whether you will belong to the group that is helped by therapy. As a doctor I can only make statements on the likelihood of a positive effect for different groups. For example, that in a group of 100 patients XY therapy will prevent relapses in 12 of them. No one can say whether you will be one of the 12 or one of the 88. And no one else knows how important it is to you to have less relapses and what you would do to achieve that. That is why your assessment of the situation is required."

***It is important to demonstrate this competency already early on in the consultation, in particular before listing the options (Indicator 3). However, renewed mention of it at a later point in the consultation can be justifiable and lead to a higher score.***

### 0 The behaviour is not observed:

The SDM key message is not communicated or it is communicated too late.

#### Example

- *Clinician*: "I recommend that you ... / Our institute knows what's good for you."
- *Patient*: "I am here to learn from you what I have to do."

### 1 The behaviour is observed (minimal attempt):

The distribution of roles within the information- and decision making process is addressed explicitly but not the complete key message itself. Parts of the key message might be expressed, such as by discussing the difficulty to make a prognosis of the natural disease course or the uncertainty regarding the actual efficacy of a drug in an individual case before or after.

#### Example

- *Clinician*: "I can't tell you which is the best way for you." Or: "It's your decision. You have to clarify what counts for you."
- *Patient*: "I alone know what is right for me." or "There is more than one way to deal with the problem."

### 2 The basic competency is observed:

The key message is explicitly made an issue during the consultation by the clinician's pointing out that he cannot make a decision in the patient's place even if he has at his disposal strong evidence that in any way supports one of the possible options.

#### Example

- *Clinician*: "There are several ways of dealing with the problem. Based on scientific evidence it is not possible to say whether or which immunotherapy is right for you." Or "There is no true or false here."
- *Patient*: analogous

### 3 The behaviour is observed (good standard):

In addition to mentioning the key message its implication for an active patient role is expressed. It is emphasized that the patient's individual preferences pertaining to the specific decision are essential for appraisal of scientific evidence.

#### Example

- *Clinician*: "It's ultimately a question of what the medical evidence means to you personally." or "It's your body, you will have to live with the decision and so consider carefully which treatment fits best for you." Or "No doctor can tell you how your disease will continue. You have to weigh up whether you want to start with a treatment or not."
- *Patient*: analogous

### 4 The behaviour is observed (excellent standard):

Compared to point 3, the SDM key message or the role distribution is made an issue several times in an easily understandable way, e.g. by providing reasons for the patient's participation. Or particular attention is paid to encouraging the patient to take the role.

#### Example

- *Clinician*: see example on previous page
- *Patient*: "I have to judge for myself whether the chance to have one or two relapses less is incentive enough to start a therapy. You have given me an idea of how big that chance is."

### Indicator 3a: Discussing the options (structure)

The <b>clinician</b> structures the discussion of the options in a way that is easy to understand and easy to remember.
The <b>patient</b> structures the discussion of the options in a way that is easy to understand and easy to remember.
<b>Clinician and patient</b> structure the discussion of the options in a way that is easy to understand and easy to remember.

- The systematic structure of the information given can substantially contribute towards comprehension during the consultation. This helps the patient follow the discussion and remember the information. An explicit structure also allows both parties to refer to what has been exchanged earlier in the conversation. It is of pronounced relevance that the options are listed before being explained in detail. Further explanations should then preferably follow this initial structure. If an attempt is made to provide a list, but the list remains incomplete, e.g. because the doctor interrupts the listing process in order to give further explanations about drugs mentioned in the list, the competency is rated as a minimal attempt.

It is not enough to merely mention the different options during the course of the consultation. On the contrary, it is crucial that the options are presented in some sort of organized structure at the beginning of the consultation so that they can be picked up again and explained in more depth later on in the process.

- In this indicator the quality of the structure is supposed to be rated based on the comprehensiveness with regard to the given consultation. Is an option given later, the initial list will be mixed up. The issue of comprehensiveness in general is addressed by indicator "3b".
- Using attributes to help focus the patient's mind on the individual option is rated a particularly outstanding performance, e.g. if when listing the options the doctor lines up objects on the table (one for each option). The doctor can then always hold the appropriate object in his hand when providing detail on one of the options. This competency can also be indicated if the doctor slows down an overhasty consultation course by taking a step back and listing the available options systematically.
- The more extensive the information the greater the need for a structured approach to the explanations. If options or information regarding benefits or harm resulting from an option are not stated until later on this limits the score accordingly.

### 0 The behaviour is not observed:

The structuring of risk communication (listing options & pros and cons) does not facilitate the patient's understanding of the content, or risk communication is omitted.

### 1 The behaviour is observed (minimal attempt):

Attempts to structure the discussion of pros and cons are visible, e.g. the doctor initiates a list of options, but the list remains incomplete because the listing is already mixed up with more detailed explanations. Or the list is complete but is not used later on. For this indicator, appraisal of the list's completeness should be conducted formally only with reference to the entire content of the consultation.

#### Example

- *Clinician*: "The available options are drug A, drug B which can have some rather unpleasant side-effects, and... Incidentally, a recently published study revealed that .... "
- *Patient*: "Let's list the possibilities. I know I can take drug M and – but I don't think I would ever want to take that, because .... ."

### 2 The basic competency is observed:

The structured information on pros and cons is introduced by a corresponding list of the options (*e. g. by using: either/or syntax*). The following explanation is structured according to the list.

#### Example

- *Clinician*: "You can choose between drug B, drug A, or drug C." than: "drug B would mean .... a.s.o."
- *Patient*: analogous

### 3 The behaviour is observed (good standard):

The structure of the information is clarified by additional means. For example, the list is enriched by verbal or metaphoric attributes perhaps using personal reference aspects for the different options. Frequent or skilful reference is made to the initial list or summaries are given in between to facilitate the patient's comprehension.

#### Example

- *Clinician*: "There are three drugs: A, B, and C. A and B are injected daily, C weekly. And then D – a tablet – would also be feasible in your case, as would E, a monthly infusion. And of course there's the possibility to wait and see how things continue without therapy."
- *Patient*: analogous

### 4 The behaviour is observed (excellent standard):

The list can be rated "4" if in addition to a clear structure the patient is actively involved in building the structure, e.g. the order of information provision, or the patient is particularly motivated to process the information.

#### Example

- *Clinician*: "Which option shall we start with?" or "Now I'll give you numbers and frequencies about what risk reduction can be expected for each single option. I do this to enable you to make up your own mind about the best choice. I will come back to this question later on."
- *Patient*: analogous

### Indicator 3b: Discussing the options (content)

The **clinician** explains to the patient the pros and cons of the different options (*if applicable, also the pros and cons of 'doing nothing'*).

The **patient** discusses the pros and cons of the different options (*if applicable also the pros and cons of 'doing nothing'*).

**Clinician and patient** weigh up the pros and cons of the different options (*if applicable, also the pros and cons of 'doing nothing'*).

This indicator is at the core of risk communication in that it deals with the likelihoods of benefits or harm resulting from a particular measure. The information has to be complete, comprehensible and – equally important – it must be presented in an objective, well-balanced manner. Appraisal of the quality of the information in terms of the criteria of evidence based patient information [Bunge 2010] is not the issue of this indicator. These aspects are addressed by the following indicator “3c”.

- Poorly balanced information about the pros and cons cannot be given more than a maximum “2” even if it is detailed. “Well-balanced” refers to benefits and side-effects and also to the relation between the presented options.
- If all the options appear in juxtaposition on an equal footing a higher score can be given. It is not enough just to list advantages and disadvantages (e.g. risks and side-effects) of the options. It is crucial that they are thoroughly explained. If the doctor succeeds in putting these explanations into the context of the patient’s individual disease course this reflects a high competency.
- An excellent performance of the indicator has during the negotiation of pros and cons to consider the uncertainty, e.g. even clear evidence for a benefit associated with a medical measure does not necessarily mean a benefit to the patient.
- Questions from the patient’s side can be given up to 2 points if they contribute to completion of the risk communication.

***For this indicator it is important to be aware of the fact that the competency can never be rated higher than “2” if the pros and cons of “doing nothing” are not included in the explanations. To get a high score it is necessary to connect explanations of pros and cons directly with the options. Well-balanced information also implies that the doctor withholds any recommendations until the point at which the risk information is given in full.***

### 0 The behaviour is not observed:

Advantages and disadvantages of the options are not a subject of the consultation.

### 1 The behaviour is observed (minimal attempt):

Advantages and disadvantages of the different options are mentioned incompletely.

#### Example

- *Clinician*: The doctor only talks about the benefits or only about the risks, and/or fails to include the option to do nothing.
- *Patient*: "I read that most of the drugs that come into question for me have strong side-effects – hair loss and the like ..."

### 2 The basic competency is observed:

Advantages and disadvantages of the different options are discussed, i.e. they are assigned to the corresponding option. An idea is given of the probability of benefits or harm resulting from the individual options.

#### Example

- *Clinician*: "Drug C can lead to a reduction in the number of relapses. It works about as well as drugs A and B... The advantage of drug B is that it only has to be taken twice a week, whilst C has to be injected daily. The main side-effect is skin changes at the injection site. But that's very rare ..."
- *Patient*: analogous

### 3 The behaviour is observed (good standard):

In addition to point 2, (including the possibility of doing nothing) more detailed explanations are provided and support is given for appraising the pros and cons: e.g. the doctor explains the mechanism by which a drug acts in the disease process or the reasons for side-effects. Reference is made to the patient's individual disease course.

#### Example

- *Clinician*: "Although it's generally true that drug B is most likely to slow down disease progression you experienced a worsening of symptoms under that treatment. So, despite the fact that it's not possible to say certainly that drug B has no effect at all on your disease it does rather seem to point in the direction of trying a different therapy."
- *Patient*: analogous

### 4 The behaviour is observed (excellent standard):

The performance is excellent if communication of the pros and cons goes beyond the presentation of a balanced picture and includes the message of uncertainty. saying: It is uncertain whether an individual patient will experience a benefit or harm that is evident from research.

#### Example

- *Clinician*: "... In your case, nobody can give you a certain prognosis about whether this drug will help you."
- *Patient*: analogous

### Indicator 3c: Discussing the options (information quality)

The **clinician** complies with the criteria of evidence based patient information (*presentation, sources, level of evidence*).

The **patient** contributes to achieving compliance with the criteria of evidence based patient information (*presentation, sources, level of evidence*).

**Clinician and patient** consider the criteria of evidence based patient information (*presentation, sources, level of evidence*).

This indicator is used to appraise the extent to which the criteria of evidence based patient information are considered. These criteria have been proven essential in enabling patients to make informed decisions. While completeness of the content is rated here the quality of the presentation of benefit and harm, the indication of sources and support in estimating the level of a given evidence is supposed to be rated.

- Likelihoods of benefit or harm should be provided as absolute numbers (throughout the information and consistently). Moreover, the complementary data (no benefit and no harm) should be provided accordingly. This also applies to the option to do nothing. If the measure in question is a diagnostic test, test reliability (e.g. frequencies of correct and false positive test results), possible harm caused by the test procedure or the test result, detection rate without testing and benefit of the diagnostic test have to be presented. If the information is given based on an evidence based patient information tool or a decision aid the criteria can be deemed to be met.
- Performance when providing information stands and falls on the accuracy with which the background to any statements is explained; this means a superficial hint such as for example "Our head doesn't like it" does not suffice. It is not enough just to refer to the source of any information. Reference should also be made to the content of a source. A higher competence would mean discussing the contents or recommendations of different sources against each other and justifying a conclusion in this way.
- Associated with the source is the issue of evidence level. Information and recommendations should be critically appraised and weighted. A recommendation should be given less weight than a Cochrane review. Moreover, particular strengths and weaknesses of studies could be explained with regard to their applicability to the individual case.
- Questions from the patient's side can be given up to 3 points if they impact strongly on the quality of the information in terms of EBPI.

### 0 The behaviour is not observed:

No reference is made to the origin of a recommendation or information provided in the consultation.

#### Example

- *Clinician*: "We strongly recommend you to take drug M."
- *Patient*: The patient makes no effort to question the origin of the recommendation.

### 1 The behaviour is observed (minimal attempt):

The source of a recommendation/ information is named (e.g. reference to either scientific evidence, expert statements or own experience) and the source's content given. Or: Some of the frequencies are presented in consideration of the EBPI criteria.

#### Example

- *Clinician*: "Based on our institute's experience I would recommend treatment A. This recommendation is due to the fact that this kind of complication didn't appear once over hundreds of surgeries in our unit."  
Or: "Following clinical studies this antibiotic drug is superior to a pain drug. Although the patients' symptoms didn't disappear earlier patients using the antibiotics had less relapses." Or "This recommendation is taken from a so called S<sub>3</sub> guideline. This means that the conclusion is well justified by studies."
- *Patient*: "Is that based on your experience?"

### 2 The basic competency is observed:

The basic competence can be deemed as met if in addition to the indication of sources the criteria for EBPI are considered at least for a relevant example as part of the whole information.

#### Example

- *Clinician*: Please check criteria on previous page.
- *Patient*: Can you give me an estimate of what risk reduction I can expect in relation to the absolute risk we have been talking about. You said my risk of having a stroke next year is 5 out of 100. How many less can I expect with the drug?

### 3 The behaviour is observed (good standard):

The performance is good if EBPI criteria are considered in all parts of the discussion of the options.

#### Example

- *Clinician*: "In a big placebo controlled clinical trial 7 out of 100 patients had no further relapse in the following 2 years due to treatment with this drug."
- *Patient*: analogous

### 4 The behaviour is observed (excellent standard):

The performance is excellent if in addition to what was mentioned above the communication of pros and cons reports on the quality of the evidence or of recommendations. This also includes the doctor's disclosure of possible conflicts of interest.

#### Example

- *Clinician*: "The study seems more meaningful to your case than another one which revealed no benefit for drug C. The patients that took part were much more comparable with you." Or: "I have to admit that with regard to my own research I would very much appreciate you entering the study. However, I don't want to put pressure on you, because as far as we can seriously tell no benefit has as yet been proven for you."
- *Patient*: analogous

### Indicator 4: Expectations & worries

The **clinician** explores the patient's expectations (*ideas*) and concerns (*fears*) about how to manage the concrete problem.

The **patient** describes his expectations (*ideas*) and concerns (*fears*) about how to manage the concrete problem.

**Clinician and patient** discuss the patient's expectations (*ideas*) and concerns (*fears*) about how to manage the concrete problem.

This indicator refers to the communication of the patient's expectations (ideas) and worries (anxieties) with regard to the management of the problem. What presuppositions does the patient have about what should be done? What are the patient's preferences regarding for example the mode of application? What worries the patient and might mean a barrier for making a decision? What underpins the patient's point of view? Communication of these patient-related aspects is crucial in SDM.

- Of relevance to the rating of a minimal attempt or the basic competency is the question of to what extent the patient's perspective becomes explicitly subject of the communication, e.g. for a basic competence (rating "2") *immunotherapy of MS*: "Would you spontaneously prefer any of the options I explained to you? ... Do my explanations meet your own ideas? ... Now we have talked in detail about the procedures, chances of benefit, risks, side-effects and so on regarding a possible treatment with drug A. What do you think about it now?"
- Better performance on the doctor's part is shown by expanding the exploration of the patient's preferences (basic competency) to a more comprehensive exploration (including probing and comments on the patient's attitude). On the part of the patient, carefully considered, well-founded statements regarding his own point of view are rated higher than mere expression of preferences and worries, e.g. *immunotherapy of MS*: "... In addition to the concrete pros and cons of the treatment options, are there any significant aspects that will be of importance to you personally when you make your decision? How do you see yourself when it comes to managing a serious disease?"
- An excellent indicator 4 would be coded if the discussion of the patients' preferences were to have the character of a coaching including for example constructive questions regarding differences which are relevant for the patient or questions about the patient's decision strategies in general.

***Utterances of clear/ strong preferences in the sense of a decision or pre-decision can also be coded, if applicable through double coding with Indicator 5. If the doctor obviously ignores the patient's preferences this negligence can be reflected by removing points given at an earlier stage in the consultation (for the same Indicator 4).***

### 0 The behaviour is not observed:

No exploration of the patient's expectations and worries can be observed.

#### Example

- *Clinician:* (following the patient's statement that "These flu-like side-effects worry me quite a bit when I imagine having them several times a week..."): "I think you should start the therapy quite soon ..."
- *Patient:* The patient does not indicate any personal preferences or concerns.

### 1 The behaviour is observed (minimal attempt):

The patient's expectations and worries are explored superficially, e.g. by using an open question to ask the patient for an atmospheric picture, or (patient) by indicating a feeling of uncertainty but failing to clarify exactly what it is.

#### Example

- *Clinician:* "So, how about it?" Or: "What do you think?"
- *Patient:* "I don't really know how I feel about Drug B."

### 2 The basic competency is observed:

The patient's expectations and/or worries are an explicit part of the consultation either through questions from the doctor's side or on the patient's initiative.

#### Example

- *Clinician:* "Do you have the feeling that any one of the treatment options I've just explained fits you particularly well? ... Do the explanations I just gave you more or less meet your expectations? ... We've talked in detail about the procedure, risks and side-effects of treatment with drug A. What do you think now about therapy with that drug?"
- *Patient:* "... Now that you've told me that there can be a lot of side-effects during therapy with drug B I have to say I'm rather frightened. How can I manage all that with two children?"

### 3 The behaviour is observed (good standard):

In addition to point 2, the patient's worries and expectations are explored by more far-reaching questions. Or: Statements by the patient on worries or ideas are discussed.

#### Example

- *Clinician:* "... I can understand your concern about the treatment's side-effects but I can reassure you: studies have shown that these serious side-effects only occur in 5 out of 100 patients."
- *Patient:* "... I can't afford to be ill in bed all the time. I've weighed up the possible advantages against the drawbacks of therapy and to be honest the bottom line is that I'll do without therapy."

### 4 The behaviour is observed (excellent standard):

In addition to point 3 the doctor supports the patient's decision making process like a decision coach.

#### Example

- *Clinician:* "In addition to the concrete pros and cons of the treatment options, are there any significant aspects that will be of importance to you personally when you make your decision? How do you see yourself when it comes to managing a serious disease?"
- *Patient:* "... I see my MS as a task I have to handle. I'm not basically against taking a drug but as I see it, the discussion of this treatment – particularly since its effects are very uncertain – leads me away from what it's really all about for me."

### Indicator 5: Indicate decision

The **clinician** opens the decision stage leading to the selection of an option (*If applicable, deferment is a possible decision*).

The **patient** opens the decision stage leading to the selection of an option (*If applicable, deferment is a possible decision*).

**Clinician and patient** open the decision stage leading to the selection of an option (*If applicable, deferment is a possible decision*).

This behavioural skill indicates the transition from the stage of information exchange and negotiation to the decision stage. The competency demanded from the parties is to make this transition explicit. This is particularly important if the decision is to be deferred, for example due to a lack of clear information.

- A reliable cue for the score "0" is if the observer is not sure until the end of the consultation which decision has been made. It is not sufficient to open the decision stage by a brief imprecise indication. The idea is to emphasize the moment of transition in the process as clearly as possible.
- Depending on whether there have at that point of the consultation already been signs of the direction in which the decision will go and has perhaps implicitly already been taken, or whether the decision is still completely open, Indicator 14 can rate different behaviours. In the first case the idea is to explicitly agree on what has already been implicitly communicated.
- In the second case it might be necessary to summarize the relevant content of the previous information and negotiation process and thereby initiate the decision. Example: "... OK, in your individual case we are talking about a remaining set of three options: drug B, which you already know, drug A, the one you could take as a tablet, or waiting to see if your condition worsens and then perhaps starting with treatment later on. Are you already able to say what you would prefer? We can also defer this decision for a week or two if you need more time."
- Often an explicit attempt to move into the decision stage leads to renewed entry into the information process, where remaining aspects are clarified that had not been fully understood. This implies that the introduction to the decision stage has to be repeated. High competency is indicated when the transition is combined with a clear summary of the remaining options or – if there was an implicit choice already – this choice is now stated in a clearly explicit way.

***If summarizing the remaining options is appropriate with regard to the course of the consultation, to get a higher score than "2" the list should always include the option to defer the decision.***

### 0 The behaviour is not observed:

The parties enter the stage of volition (concrete plan of action) without any transition at all.

#### Example

- *Clinician*: "Right, so you now need an appointment for the first infusion."
- *Patient*: "I'll ask for an appointment next Monday for the first infusion."

### 1 The behaviour is observed (minimal attempt):

The decision stage is initiated by an implicit statement.

#### Example

- *Clinician*: "So, what now?"
- *Patient*: "OK, fine, I've got the picture now."

### 2 The basic competency is observed:

The decision stage is initiated by an explicit statement.

#### Example

- *Clinician*: "So can you already decide on any of the options?"
- *Patient*: "All right, I'd like to try the study drug then."

### 3 The behaviour is observed (good standard):

In addition to point 2, the doctor indicates efforts to approach the decision stage, e.g. by given a summary. Or: Within the decision statement a clear rationale is included, either from the patient's or the doctor's side.

#### Example

- *Clinician*: "... Well, there are three options to choose from in your case: Drug B, with its spectrum of side-effects that you already know from your own experience, drug A that is an oral drug, or to wait and see whether your condition gets worse and you might then start a therapy later on. Can you already say which option you prefer? Another option is to defer the decision for a week or two to give you more time to think it over."
- *Patient*: "... If I've understood everything correctly all that remains for me is to accept the infusion or to do nothing. I think I'll ..."

### 4 The behaviour is observed (excellent standard):

In addition to point 3, more attention is paid and more emphasis placed on the transition from the information to the decision stage and the transition is conducted cooperatively.

#### Example

- *Clinician*: "Can you tell me anything else that you still need for making a decision?"
- *Patient*: "I find it very difficult to make a decision where I can be sure that I will not regret it later on."

### Indicator 6: Follow up arrangements

The **clinician** makes arrangements with the patient concerning how to proceed (*e. g. steps for implementing the decision, review of decision or of deferment*).

The **patient** contributes towards the arrangements for how to proceed (*e. g. steps for implementing the decision, review of decision or of deferment*).

**Clinician and patient** discuss plans for how to proceed (*e. g. steps for implementing the decision, review of decision or of deferment*).

This indicator refers to aspects that have to be discussed and agreed on after a decision has been made. Again, it has to be considered that deferring a decision is also one of the possible choices. Firstly, agreements have to be made on how to implement the choice: Where should any letters/ information be sent (doctor's report). When should the treatment begin? What diagnostic tests still have to be carried out prior to starting treatment? Secondly, the parties should agree on how the decision will be evaluated: dates, conditions, extent and goals of check ups as well as criteria that would indicate the necessity to re-evaluate the decision.

- A superficial reference to a future consultation is not sufficient. Instead, at least a concrete agreement has to be made.
- A high level of this competency is indicated when the evaluation steps are thoroughly explained. Also, consideration of the individual patient's daily life conditions in the further planning should be awarded higher scores, e.g.: "Bearing your work in mind, I would suggest evaluating the treatment in terms of mobility. If this worsens, however, we should think about changing the treatment."

*It is important that these aspects are communicated after the decision or the agreement to defer the decision. This means that if any discussion of this kind (realization or evaluation of the decision) has been carried out before the decision these aspects have to be assigned to the information process and rated accordingly by coding for Indicator 3b, for example.*

### **0 The behaviour is not observed:**

There is no discussion of future procedure.

#### Example

- *Clinician*: "OK, then I wish you all the best with your choice of therapy."
- *Patient*: "Good, thank you for your advice."

### **1 The behaviour is observed (minimal attempt):**

There is only implicit communication of future procedure (e.g.) by mentioning the need for further steps.

#### Example

- *Clinician*: "I'll write to your GP and then you can start."
- *Patient*: "Where can I get the MRT images?"

### **2 The basic competency is observed:**

Future procedure is explicitly made a subject by agreeing on a follow up check up.

#### Example

- *Clinician*: "I'll inform your GP about our consultation and your decision. And then you can arrange with him when to start treatment. And I will see you again in six month."
- *Patient*: "And how do we proceed from here? Do I have to see my GP first and when do we meet again?"

### **3 The behaviour is observed (good standard):**

In addition to point 2, the need for an evaluation of the decision is indicated, e.g. by making an appointment or by suggesting reasons for the need to evaluate the decision.

#### Example

- *Clinician*: "I would like you to have another MRT done so that it will be possible to track your disease course."
- *Patient*: "And how do I know whether I should see you again before the year's up?"

### **4 The behaviour is observed (excellent standard):**

In addition to point 3, communication on follow-up arrangements is given more attention and individual considerations are included in the plans for further procedure.

#### Example

- *Clinician*: "Bearing your work in mind, I would suggest evaluating the treatment in terms of mobility. If this worsens, however, we should think about changing the treatment."
- *Patient*: "I'd like to have an MRT done so that after one year, in addition to how I feel, and how my symptoms have developed, it's possible to discuss my disease course on the basis of how the lesions in my brain have developed."

### Indicator 7: Preferred communication approach

The **clinician** ascertains the patient's preferred approach to exchanging information (*e.g. in which setting, with which media, which time frame*).

The **patient** participates in deciding on the preferred approach to exchanging information (*e.g. in which setting, with which media, which time frame*).

**Clinician and patient** choose an approach to exchanging information (*e.g. in which setting, with which media, which time frame*).

The approach to information exchange is the specific way in which the parties provide each other with information. This 7th indicator refers to communication on "how" to proceed in this exchange. It includes decisions on the setting, location and participants. A patient who is involved in decisions about "how" to inform each other is much more likely to participate in the negotiation of "what" is to be discussed, i.e. which medical issue. Information exchange can be approached in different ways. In addition to print media, e. g. leaflets, diagrams or graphs, digital media can also be used. Merely mentioning other possibilities is not enough. It is crucial that doctor and patient clarify which approach best suits the situation and is preferred by the patient. An attempt to vary the communication approach (e.g. in response to a patient showing difficulties in understanding an issue) to achieve better understanding is seen as a minimal attempt.

- The competency is evident if the communication itself is made a subject of the consultation, e.g. by asking, "Would you prefer me to use a picture to explain this?" (basic competency).
- More comprehensive or thorough discussion of the setting can be awarded higher scores. Example: "OK, how shall we proceed? Shall we discuss the decision today? Shall I give you information to take home with you and then we make a new appointment? You would then have some time to think it over. Your wife could come with you next time, too, to say what she thinks. What do you say?"

*It is important that the time of indicating this competence in a consultation is appropriate in relation to the specific issue. If it refers to the setting of the consultation it should be early, if it is about suggesting another communication approach it might be later in the consultation.*

### 0 The behaviour is not observed:

The way information will be exchanged is not made a subject of communication.

#### Example

- *Clinician*: "I'll tell you a bit about it."
- *Patient*: The patient neither questions the way in which information is exchanged, nor does he make any other suggestions.

### 1 The behaviour is observed (minimal attempt):

Attention is paid implicitly to the issue of the approach to information exchange, e.g. by changing the medium in response to comprehension difficulties.

#### Example

- *Clinician*: (*Patient shows signs of comprehension difficulties*) "I can draw you a diagram. That might make it clearer."
- *Patient*: "Can you draw a diagram of that?" Or: "Can you repeat that slowly so that I can write it down?"

### 2 The basic competency is observed:

Attention is paid explicitly to the issue of the approach to information exchange, e.g. by asking questions or making suggestions.

#### Example

- *Clinician*: "Do you want me to go through the brochure with you or should I first give you an outline of what it says ...?"
- *Patient*: "Do you have a video that explains how the different therapies work?"

### 3 The behaviour is observed (good standard):

In addition to point 2, alternative approaches and the patient's preferences are discussed.

#### Example

- *Clinician*: "... What's the best way for you to understand such explanations? Are you a visual person? Do you need written information to take home with you?"
- *Patient*: "... I'd say I understand things better if they are visual. But what I mainly need is time... so that I can digest the information myself."

### 4 The behaviour is observed (excellent standard):

In addition to point 3, alternative approaches are weighed up under consideration of the patient's attitude and preferences.

#### Example

- *Clinician*: The doctor corrects his approach after conferring with the patient. "So how shall we proceed? Shall I give you information to take home with you and then we make a new appointment? You would then have some time to think it over. Your wife could come with you next time, too, to say what she thinks. What do you say?"
- *Patient*: The patient determines the approach to information exchange by making a suggestion: "For me it would be good if you would first tell me a bit about it and then I could have time to read over it all again before meeting up for another appointment where my wife could be present when the decision is taken."

### Indicator 8: Evaluation of patient's understanding

The <b>clinician</b> checks that the patient has understood the information.
The <b>patient</b> clarifies how he understood the information given by the clinician.
<b>Clinician and patient</b> clarify whether the patient understood the information given by the clinician correctly.

This indicator concerns the competency to check the patient's understanding of the information provided by the doctor. Like the other SDM indicators, this skill can be initiated either by the patient or by the doctor. In addition to reassurance of comprehension it is important to probe for any lack of knowledge or uncertainties on the patient's side.

- Neither a question by the doctor as to whether the patient has understood, nor brief confirmation by the patient, can be considered sufficient.
- On the contrary, how the patient understood the information should be made a subject of the consultation. This can be done by asking questions on both sides.
- A high level of competency is indicated if the patient's understanding is checked by direct questioning or using questions that build up on each other, e.g. the doctor narrows down the patient's question to be sure he understands it before responding to that point. Or: if the patient communicates his understanding by providing a well-structured representation of what he was told. This understanding should additionally be put into the context of the information provided by the doctor, e.g. "... How would you sum that up for yourself? Could you tell me what you have understood so far?"
- An excellent performance yields reassurance of the patient's comprehension at each important stage of the consultation without, however, treating the patient in a schoolmasterly manner. A repeated evaluation after additional information has been given can be an indicator for excellent performance. It is assumed that excellent performance of this indicator can only be achieved cooperatively.

### 0 The behaviour is not observed:

The patient asks no questions and isn't explicitly invited to do so. There is no serious evaluation of the patient's understanding.

#### Example

- *Clinician*: "Could you understand me?"
- *Patient*: "I understood so far."

### 1 The behaviour is observed (minimal attempt):

The doctor invites the patient to ask questions or responds appropriately to questions from the patient's side. By doing so minimal exchange about the understanding can be deemed to be met. The patient's questions are interest-based, however they do not indicate the extent of the patient's comprehension.

#### Example

- *Clinician*: "Do you have any questions?"
- *Patient*: "Are there side effects I would have to expect?" "How often do I need to inject the drug?"

### 2 The basic competency is observed:

The patient is invited to ask questions about specific issues or other attempts are made to reassure the doctor about or to compensate obvious misconceptions or lack of understanding (e.g. by responding more comprehensively to the patient's questions). Patients ask questions indicating their level of understanding of the doctor's explanation.

#### Example

- *Clinician*: "Do you know what placebo means? Do you have questions about the way the new drug is supposed to affect the disease?"
- *Patient*: Following a corresponding explanation by the doctor the patient asks further questions: "I have to ask again..."  
"If I were to participate in the placebo group, wouldn't that mean that I would swallow those pills but wouldn't get the active ingredients?"

### 3 The behaviour is observed (good standard):

In addition to point 2, particular emphasis is paid to specific aspects (by further questioning and/or by detailed reconstruction). Explanations in response to the patient's questions are comprehensive and far reaching (going beyond the core idea of the question). The patient could summarize the information to show what he has understood.

#### Example

- *Clinician*: "... How would you sum that up in your own words?" "In answer to that question I have to give you a longer explanation of how the drug works.... Then you get a better idea."  
"What an interesting question, please tell me how that came to mind?"
- *Patient*: "... And so compared to drug C it's less dangerous. But the two don't differ with regard to dosage. Is that right?"

### 4 The behaviour is observed (excellent standard):

The performance is excellent if it succeeds in making sure of the patient's understanding at each important stage of the consultation without treating the patient in a schoolmasterly manner. For example, a skilful exploration of what the patient really understood and where the barriers are takes place. Then the comprehension is checked anew. It is assumed that excellent performance of this indicator can only be achieved cooperatively.

### Indicator 9: Evaluation of doctor's understanding

The <b>clinician</b> makes sure that he has understood the patient's viewpoint correctly.
The <b>patient</b> makes sure that the clinician understands his viewpoint.
<b>Clinician and patient</b> clarify whether the clinician has understood the patient's viewpoint correctly.

Accordingly (cf. Indicator 8) this indicator concerns the competency to check the doctor's understanding of the patient's contributions. Like the other SDM indicators, this skill can be initiated either by the patient or by the doctor. In addition to reassurance of comprehension it is important to probe for any lack of knowledge or uncertainties on the doctor's side.

- Neither a question by the patient as to whether the doctor has understood, nor brief confirmation by the doctor, can be considered sufficient.
- On the contrary, how the doctor understood the information should be made a subject of the consultation. This can be done by asking questions on both sides.
- Higher levels of performance in analogy to indicator 8.

### **0 The behaviour is not observed:**

The doctor asks no questions and isn't explicitly invited to do so. There is no serious evaluation of the doctor's understanding.

#### Example

- *Clinician*: "I understand."
- *Patient*: "Could you follow me?"

### **1 The behaviour is observed (minimal attempt):**

The patient invites the doctor to ask questions or responds appropriately to the doctor's questions. By doing so minimal exchange about the understanding can be deemed to be met. The doctor's questions are interest-based, however they do not indicate the extent of the doctor's comprehension.

#### Example

- *Clinician*: "Oh, that's it, is it?"
- *Patient*: "Do you understand where my exact problem is – Do you know what I mean?"

### **2 The basic competency is observed:**

Explicit statements and/or questions signify that the doctor's understanding of the patient's point of view is an issue.

#### Example

- *Clinician*: "Have I understood you correctly that you are of the opinion that you should have opted for immunotherapy much earlier on?"
- *Patient*: "Just to make sure you understand me correctly: What I said was that I am not basically against drug therapy ..."

### **3 The behaviour is observed (good standard):**

In addition to point 2, particular attention is paid to specific aspects (by further questioning and/or by detailed reconstruction).

#### Example

- *Clinician*: "You've led me to understand that you want to change something because...."
- *Patient*: "What do you make of my explanations? I get the feeling you haven't quite grasped what I mean!"

### **4 The behaviour is observed (excellent standard):**

The performance is excellent if it succeeds in making sure of the doctor's understanding at each important stage of the consultation. For example, a skilful evaluation of what the doctor really understood and where the barriers are takes place. Then the comprehension is checked anew. It is assumed that excellent performance of this indicator can only be achieved cooperatively.

#### Example

- *Clinician*: "From listening to you just now I understand two different aspects: Firstly, that you're not basically against immunotherapy and that you recognise the possible benefit. On the other hand I get the impression you don't want to make a decision today. There's still something that's bothering you. Is that what you're saying?"
- *Patient*: "In part, yes, but I have to correct you on one point. I'll explain it differently."

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### Attachments

- MAPPIN'SDM observation sheet
- Results for reliability
- Comparison of OPTION and MAPPIN 'SDM

## MAPPIN'SDM observation sheet

<b>1</b>	The <b>clinician</b> draws attention to an identified problem as one that requires a decision-making process.	0	1	2	3	4
	The <b>patient</b> draws attention to his concrete problem as one that requires a decision-making process.	0	1	2	3	4
	<b>Clinician and patient</b> agree on a concrete problem as one that requires a decision-making process.	0	1	2	3	4
<b>2</b>	The <b>clinician</b> states that there is more than one way to deal with the identified problem ( <i>SDM key message</i> ).	0	1	2	3	4
	The <b>patient</b> indicates that there is more than one way to deal with the concrete problem ( <i>SDM key message</i> ).	0	1	2	3	4
	<b>Clinician and patient</b> discuss that there is more than one way to deal with the concrete problem ( <i>SDM key message</i> ).	0	1	2	3	4
<b>3 a</b>	The <b>clinician</b> structures the discussion of the options in a way that is easy to understand and easy to remember.	0	1	2	3	4
	The <b>patient</b> structures the discussion of the options in a way that is easy to understand and easy to remember.	0	1	2	3	4
	<b>Clinician and patient</b> structure the discussion of the options in a way that is easy to understand and easy to remember.	0	1	2	3	4
<b>3 b</b>	The <b>clinician</b> explains to the patient the pros and cons of the different options (if applicable, also the pros and cons of 'doing nothing').	0	1	2	3	4
	The <b>patient</b> discusses the pros and cons of the different options (if applicable also the pros and cons of 'doing nothing').	0	1	2	3	4
	<b>Clinician and patient</b> weigh up the pros and cons of the different options (if applicable, also the pros and cons of 'doing nothing').	0	1	2	3	4
<b>3 c</b>	The <b>clinician</b> complies with the criteria of evidence based patient information ( <i>presentation, sources, level of evidence</i> ).	0	1	2	3	4
	The <b>patient</b> contributes to achieving compliance with the criteria of evidence based patient information ( <i>presentation, sources, level of evidence</i> ).	0	1	2	3	4
	<b>Clinician and patient</b> consider the criteria of evidence based patient information ( <i>presentation, sources, level of evidence</i> ).	0	1	2	3	4
<b>4</b>	The <b>clinician</b> explores the patient's expectations ( <i>ideas</i> ) and concerns ( <i>fears</i> ) about how to manage the concrete problem.	0	1	2	3	4
	The <b>patient</b> describes his expectations ( <i>ideas</i> ) and concerns ( <i>fears</i> ) about how to manage the concrete problem.	0	1	2	3	4
	<b>Clinician and patient</b> discuss the patient's expectations ( <i>ideas</i> ) and concerns ( <i>fears</i> ) about how to manage the concrete problem.	0	1	2	3	4

### MAPPIN'SDM observation sheet

5	The <b>clinician</b> opens the decision stage leading to the selection of an option ( <i>If applicable, deferment is a possible decision</i> ).	0	1	2	3	4
	The <b>patient</b> opens the decision stage leading to the selection of an option ( <i>If applicable, deferment is a possible decision</i> ).	0	1	2	3	4
	<b>Clinician and patient</b> open the decision stage leading to the selection of an option ( <i>If applicable, deferment is a possible decision</i> ).	0	1	2	3	4
6	The <b>clinician</b> makes arrangements with the patient concerning how to proceed ( <i>e.g. steps for implementing the decision, review of decision or of deferment</i> ).	0	1	2	3	4
	The <b>patient</b> contributes towards the arrangements for how to proceed ( <i>e.g. steps for implementing the decision, review of decision or of deferment</i> ).	0	1	2	3	4
	<b>Clinician and patient</b> discuss plans for how to proceed ( <i>e.g. steps for implementing the decision, review of decision or of deferment</i> ).	0	1	2	3	4
7	The <b>clinician</b> ascertains the patient's preferred approach to exchanging information (e.g. in which setting, with which media, which time frame).	0	1	2	3	4
	The <b>patient</b> participates in deciding on the preferred approach to exchanging information (e.g. in which setting, with which media, which time frame).	0	1	2	3	4
	<b>Clinician and patient</b> choose an approach to exchanging information (e.g. in which setting, with which media, which time frame).	0	1	2	3	4
8	The <b>clinician</b> checks that the patient has understood the information.	0	1	2	3	4
	The <b>patient</b> clarifies how he understood the information given by the clinician.	0	1	2	3	4
	<b>Clinician and patient</b> clarify whether the patient understood the information given by the clinician correctly.	0	1	2	3	4
9	The <b>clinician</b> makes sure that he has understood the patient's viewpoint correctly.	0	1	2	3	4
	The <b>patient</b> makes sure that the clinician understands his viewpoint.	0	1	2	3	4
	<b>Clinician and patient</b> clarify whether the clinician has understood the patient's viewpoint correctly.	0	1	2	3	4

Results for reliability

	Obs <sub>doctor</sub>				Obs <sub>patient</sub>				Obs <sub>dyad</sub>			
	Mean	SD <sup>A</sup>	Agree. <sup>B</sup>	Reliability <sup>C</sup>	Mean	SD <sup>A</sup>	Agree. <sup>B</sup>	Reliability <sup>C</sup>	Mean	SD <sup>A</sup>	Agree. <sup>B</sup>	Reliability <sup>C</sup>
1	1,04	0,98	93.6	.90	0,19	0,5	89.4	.62	1,13	1,0	80.9	.90
2	0,11	0,38	95.7	.86	0,11	0,4	93.6	.55	0,19	0,5	87.5	.71
3	.043	.29	97.9	1	.04	.29	97.9	1	.04	.29	100	1
4	.85	.59	83	.71	.64	.79	80.9	.85	.98	.71	91.5	.91
5	.68	.88	83	.89	.08	.28	95.8	.69	.69	.88	81.3	.88
6	1.21	.74	70.8	.68	.54	.65	68.3	.55	1.33	.81	72.9	.68
7	1.77	.63	48.9	.32	2.53	.91	51.1	.61	2.60	.88	48.9	.51
8	.87	.88	70.2	.80	.11	.43	95.7	.86	.87	.90	68.1	.78
9	.00	.00	97.9	-	.09	.41	97.9	1	.09	.41	97.9	.94
10	,60	,93	78.7	.65	,04	,29	97.9	-	,62	,97	76.6	.66
11	1,21	,59	87.2	.74	1,43	1,3	76.6	.80	1,92	,86	76.6	.71
12	,23	,63	89.4	.57	,00	,00	100	-	,23	,63	89.4	.57
13	,23	,60	74.5	.38	,15	,47	87.2	.43	,34	,67	66	.34
14	1,53	,93	59.6	.69	1,04	1	63.8	.52	2,04	,86	51.1	.30
15	1,96	1,0	65.2	.79	1,37	1,1	50	.59	2,00	1,0	65.2	.81
Item-level Mean(15)	0.82	0.67	79.7	.77	0.56	0.59	83.1	.70	1.01	0.8	76.9	.71
Item-level Mean(12)			80.1	.76				.				
Mean level (15)				.90				.85				.91

The table shows the inter-rater reliability (pair wise average) of the relevant rater pairs out of a group of four raters applying MAPPIN'SDM to a sample of 50 video-taped consultations. All raters had previously taken part in training with 27 videos. Pairs rotated systematically.

A= calculated based on consensus ratings for the same sample. Range: 0- 4.

B= percentage agreement

C= Pearson correlation coefficient (Values calculated with Spearman's rho are quite similar)

Comparison of OPTION and MAPPIN'SDM

SDM aspect	OPTION' Scale	MAPPIN'SDM	
		Version 1.0	Version 2.0
defining problem	1	1	1
SDM key message	2	2	} 2
role attribution	10	4	
discussing options (structure)	4	5	} 3a
discussing options (content)	5	6	
discussing options (quality of information)	lacking	6 & 8	} 3c
indicating source of recommendations/evidence	lacking	8	
expectations	6	} 7	} 4
worries	7		
supporting strategies of decision-making	lacking	13	
indicate decision	11	14	5
follow up arrangements	12	15	6
preferred communication approach	3	3	7
physician's evaluation of patient's understanding	8	9	} 8
opportunity for questions (from patient)	9	11	
patient's evaluation of physician's understanding	lacking	10	} 9
opportunity for questions (from physician)	lacking	12	

