

Ritter S, Stirnemann J, Breckwoldt J, Stocker H, Fischler M, Mauler S, Fuhrer-Soulier V, Meier CA, Nendaz M. Shared decision-making training in internal medicine: a multisite intervention study. *J Grad Med Educ.* 2019;11(4 suppl):146–151.

Supplemental Material A:
SDM Packet Card

1. Prepare for SDM encounter

Review patient's records (medical history).

Ascertain surrogate decision-maker
(*gesetzlicher Stellvertreter / représentant thérapeutique*).

Consult patient's living will (*Patientenverfügung / directives anticipées*).

Review your knowledge of the clinical issue to be discussed.

Evaluate the research evidence in relation to the individual patient
(clinically reasonable options).

Support from colleagues and team members
(agree on treatment options).

Identify and have people present at patient's request
(support network).

Distribute printed information
(e.g. educational material, decision aids, copies of x-rays, test results).

Location and setting (quiet, comfortable, private;
convenient time, no interruptions, sufficient time).

2. Develop a partnership with the patient

Emphasize equality of partners ("meeting between experts").

Encourage active patient participation.

Represent the health care team.

3. Identify and address any barriers to communication

Establish patient's educational level;
hearing impairment, visual impairment, language barrier
(other people may help a person communicate);
altered mental status (sedative agents, disease process),
barriers to verbal communication (endotracheal tube, disease process).

4. Discuss the nature of the decision

Disclose that a decision needs to be made.

Establish the patient's preferences for information (amount, format).

Define and explain the problem.

Employ educational tools and decision aids, use of printed information.

5. Establish the patient's preferences for role in decision making

Discuss role of the physician (collaborative or more directive role).

Define additional roles (spouse, family members, nurses, GP).

6. Assess the patient's decision making capacity

7. Present options

Present options that could be chosen in this situation
(clinically reasonable choices).

Discuss feasibility of the options.

Disclose availability of the expertise locally.

8. Discuss potential benefits, risks and side effects of each option

Discuss likelihood of benefits and risks of each option to occur.

Present best evidence (e.g. baseline risk, ARR, RRR) and
acknowledge scientific uncertainties.

Disclose health care team's experience associated with the options.

Disclose associated costs.

9. Respond to any kind of questions or requests for other information

Ascertain and respond to patient's ideas, concerns, and expectations.

Help patient to reflect on and assess the impact of alternative
decisions with regard to his or her values and lifestyle.

10. Ascertain patient's understanding

Assess the patient's ability to understand the clinical issue and
the options.

Ascertain the patient's ability to appreciate the potential consequences
of a decision.

Discuss patient ability and self-efficacy to adhere to the decision.

Assess the need for input from others.

Offer third party consultation
(*Zweitmeinung einholen / prendre un deuxième avis*).

Consider specialized ethics consultation or palliative care consultation.

11. Explore patient's preferences

Explore patient's medical preferences and values.

Deliberate (including physician's recommendations).

Option of refusing proposed treatment (including withholding or withdrawing proposed treatment).

Achieve consensus about the treatment course most consistent with the patient's values and preferences (mutual agreement).

12. Make a decision in partnership with the patient (or explicitly defer a decision)

Incorporate individual preferences, needs, and values.

13. Agree an action plan

Summarize the discussion.

Determine shared goals.

Complete arrangements for follow up.

Ascertain availability.

14. Document

Summarize the discussion in written form.

15. Teach SDM to students, residents, and faculty

References

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Meeting Between Experts Shared Decision Making (SDM) in Practice

1. Prepare for SDM encounter
2. Develop a partnership with the patient
3. Identify and address any barriers to communication
4. Discuss the nature of the decision
5. Establish the patient's preferences for role in decision making
6. Assess the patient's decision making capacity
7. Present options
8. Discuss potential benefits, risks and side effects of each option
9. Respond to any kind of questions or requests for other information
10. Ascertain patient's understanding
11. Explore patient's preferences
12. Make a decision in partnership with the patient
13. Agree an action plan
14. Document
15. Teach SDM

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Supplemental Material B: SDM completeness scale (adapted from OPTION)

Rating scale to assess completeness of SDM by direct assessment of video-tapes of encounters with standardized patients. A total of 20 elements of SDM were required for completeness. The sequence of elements was not tested.

Assigned number (ID): _____

Scenario:

- #1 Anticoagulation for atrial fibrillation**

- #2 Palliative chemotherapy for advanced pancreatic cancer**

Rater: _____

Date: _____



<p>Rating (for each element): The Doctor.....</p>	<p>Not fulfilled: 0 point Partially fulfilled: 1 point Fulfilled: 2 points</p> <p>Possibility to give half points</p>
<p>1. Decision to be made Discloses to the patient that a decision needs to be made</p> <p>#1 Anticoagulation for atrial fibrillation #2 Chemotherapy for advanced pancreatic cancer</p>	
<p>2. Partnership 2.1. Formulates the equality of partners</p> <p><i>Explains the importance of the patient’s role in the decision-making process; “Meeting between (two) experts”</i></p>	
<p>2.2. Encourages active patient participation in the decision-making process</p> <p><i>Such as asking questions at any time</i></p>	

<p>3. Patient role</p> <p>3.1. Discusses the patient’s preferred role in decision making</p> <p><i>Such as risk taking and degree of involvement of self and others; defines roles (desire for involvement); paternalism (“doctor decides”) vs. informed choice/patient autonomy (patient decision after receiving information)</i></p>	
<p>3.2. Discusses the patient’s self-efficacy or ability to adhere to the decision</p>	
<p>4. Nature of decision</p> <p>Explains and discusses the clinical issue or nature of the decision</p> <p>#1 Risk of thrombus formation in the heart, embolus to the brain leading to ischemic stroke. Risk factors for stroke in atrial fibrillation include arterial hypertension among others (1 risk factor present). The risk can be reduced with oral anticoagulation therapy.</p> <p>#2 Palliative chemotherapy in advanced pancreatic cancer is an option in patients with a grade 0 to 2 ECOG performance status (at least capable of all selfcare)</p>	



<p>5. Alternatives</p> <p>Describes and discusses treatment options to the patient (unbiased information, presentation of evidence)</p> <p><i>Identifies and presents choices and evaluates the research evidence in relation to the individual patient; What are the clinically reasonable choices? Options are clearly delineated.</i></p> <p>#1 OAC (well-known drug, well studied, widely used); NOAC (newer drug); or no anticoagulation</p> <p>#2 palliative chemotherapy (half an hour infusion therapy every week for 7 weeks at first); or supportive therapy only (symptomatic therapy in case of pain, nausea, fatigue, pruritus, obstipation etc.)</p>	
<p>6. Pros and cons</p> <p>6.1. Discusses possible benefits or increased quality of life associated with the options</p> <p>#1 reduced risk of stroke with both OAC and NOAC (RRR of ~65%); antidote available in case of bleeding for OAC; no regular blood tests needed for NOAC; no risk of bleeding, no medication, and no costs for drugs with the option of no anticoagulation.</p> <p>#2 surviving and quality of life may be improved with chemotherapy, gemzar® with relatively low toxicity; no regular visits with symptom-directed therapy</p>	



<p>6.2. Discusses possible risks, side-effects, or decreased quality of life associated with the options</p> <p>#1 increased risk of major bleeding on anticoagulation (OAC, NOAC); no antidote available for NOAC in case of bleeding; accumulation in case of renal failure (NOAC); regular blood tests needed for OAC; baseline risk for stroke unchanged (no anticoagulation), i.e. stroke risk of ~1.3% per year without anticoagulation (CHADSVASC-Score: 1 point).</p> <p>#2 toxicity with gemzar® (such as fever, nausea, vomitus, hair loss), regular visits; tumor progression and reduced survival without chemotherapy</p>	
<p>6.3. Discloses experience of the health care team associated with the options</p> <p><i>Taking into account competencies</i></p> <p>#1 Lesser clinical experience with NOAC compared to OAC</p> <p>#2 therapy with gemzar® is widely used</p>	



<p>7. Uncertainties</p> <p>Discusses uncertainties associated with the decision</p> <p><i>What is the likelihood of success of treatment? Such as ARR, RRR vs. baseline risk</i></p> <p>#1 baseline stroke risk around 1.3% with 1 risk factor, risk of 0.4% with anticoagulation (RRR around 65%, ARR around 0.9%, NNT 111); increased bleeding risk in uncontrolled arterial hypertension</p> <p>#2 gemzar® recommended only in patients with a good performance status, 1-year survival rate can be increased, but is still only 18-20%, median survival with gemzar® around 6.7 months, possible benefit with decreased usage of painkillers and decreased weight loss</p>	
<p>8. Patient understanding</p> <p>8.1. Checks and clarifies the patient's understanding of the decision</p> <p><i>Is the patient now an informed participant with a working understanding of the decision? Does the patient demonstrate an understanding of the options? Can the patient now appreciate associated outcomes, and relevant consequences of the presented options?</i></p>	
<p>8.2. Makes reference to patient outcome expectations or concerns</p> <p><i>How will the decision affect the patient's daily life?</i></p>	



<p>8.3. Assesses the need for additional information or input from others</p> <p><i>Is there anyone else the patient would like to consult before making a decision? (partner, family member or other support person, consultations with other providers, GP)</i></p> <p>#2 discussion with an oncologist? Support from palliative care team?</p>	
<p>9. Patient preferences</p> <p>9.1. Explores the patient’s medical preferences and values</p> <p><i>Helps patient to reflect on the impact of alternative decisions with regard to his/her values and lifestyle; Encourages the patient to talk about what matters most to him/her;</i></p>	
<p>9.2. Listens actively to the patient and asks open-ended questions</p>	
<p>9.3. Asks the patient what option he/she prefers</p> <p><i>Deliberates if needed (including physician’s recommendations)</i></p>	
<p>9.4. Achieves consensus about the treatment course most consistent with the patient’s values and preferences (mutual agreement)</p>	

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<p>10. Shared decision</p> <p>Makes or explicitly defers decision</p> <p><i>Makes a decision in partnership with the patient and resolves conflict; Agreement on the decision</i></p>	
<p>11. Action plan and follow-up</p> <p>Agrees an action plan and arranges follow-up regarding the discussed treatment option</p> <p><i>Plans to review the decision in the future</i></p>	
<p>Total amount of points (out of 40): _____</p>	



Supplemental Material C:






Questionnaire for the pre- and post-intervention survey

C.1 Participant's self-assessment

Self-perception of SDM competencies, application of SDM concepts and tools in clinical practice, and motivation for learning and teaching SDM, using a 5-point scale.






How do you agree on the following statements?

I am very comfortable with the way I am practicing SDM.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>






I don't practice

I am rating my SDM competences as “very good”.






 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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




I am rating my communication skills as “very good”.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>






I am very comfortable with my knowledge about SDM.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am very comfortable with my SDM skills.






 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am very interested to learn more about the concepts and tools of SDM.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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I am very interested to teach SDM concepts and tools to others (e.g., students, residents).

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How often are you applying SDM concepts and using SDM tools during your work as a doctor?

SDM concepts

Never	Less than 1x in a month	≥1x every month	≥1x every week	Daily
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Decision aids

Never	Less than 1x in a month	≥1x every month	≥1x every week	Daily
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Visual methods of risk communication (e.g. with “smileys”)

Never	Less than 1x in a month	≥1x every month	≥1x every week	Daily
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Option grids



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Never	Less than 1x in a month	≥1x every month	≥1x every week	Daily
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>








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C.2 Standardized patient's assessment of the participant






Standardized patient's rating of the physician at the end of the encounter, using a 5-point scale. Questions were being presented to the SPs immediately after each encounter

How do you agree on the following statements?

The overall competence of the doctor discussing the decision to be made with you has been excellent.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You have been very comfortable with the way the doctor was discussing the issue with you.

 Strongly Disagree	 Disagree	 Undecided (neutral)	 Agree	 Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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TABLE 1
Participant Characteristics

No. of participants	27
Age	37.3 (5.7), 30–49
Female	17 (63%)
Professional experience, y	
Since graduation	10.5 (5.8), 4–24
Working in Internal Medicine	9.0 (5.3), 4–23
Working as a senior resident ^a	4.2 (4.6), 0.5–16
Baseline training	
Heard the term SDM before	15 (56%)
Previous training in SDM	0 (0%)
Previous training in communication skills	20 (74%)
Previous training in EBM	23 (85%)

Note: Results are given as numbers (%) or mean (SD) and range.

Abbreviations: SDM, shared decision-making; EBM, evidence-based medicine. SD, standard deviation.

^a Senior resident in internal medicine.