Supplementary material

Supplement 1. Coding scheme and manual

General notes:

- Only code utterances made when both patient and clinician were present in the room
- Code utterances of patient's significant other as the patient's, unless the patient explicitly disagrees/contradicts. Desires stated by next of kind will be coded as desire of the patient itself
- Sometimes there is a logical healthcare choice, for example if things are going well and no
 adjustment is needed. This is coded as an obvious next step. If there is an obvious next step
 during the consultation, SDM steps and/or forms of SDM may still be coded, since clinicians
 and patients may not be on the same line of thought.
- Every type of desire, even when stated in one sentence, will be coded as a separate desire.
- Increasing dose of medication should be coded as 'to start medication'.

Definitions:

Desire: Any vocalized desire or utterance with a valuative element for a certain treatment option or strategy towards the patients' diabetes care. Code as 'yes' if you experience even the smallest 'maybe' during the consultation.

Providing information: Information provided by the care provider concerning various treatment options and strategies and potential harms and benefits.

| General | | | | |
|-----------|---|---------------------|---|--|
| Study ID: | | | Coder: | |
| Da | te: | | _ (mm/dd/yyyy) | |
| 1. | Was the pa | tient accompanied | d by a caregiver? | |
| | | No ₀ | (do not see, hear, or positively ID someone else in the room) | |
| | | Yes ₁ | (partner, relative, friend or significant other) | |
| 2. | 2. Was there an obvious next step concerning future treatment? □ Non | | | |
| | | | | |
| | | Yes ₁ | (no decision making on treatment, because of logical next step) | |
| 3. | What was t | he total time of th | e consultation (patient and clinician together in consultation | |

| | Desires | | | |
|----------------------|---|---|--|--|
| 4. | 4. Number of desire: | | | |
| 5. | | | | |
| 6. | | patient/clinician | | |
| | | | | |
| 7. | Who initiat | ted the comment on desires? | | |
| | | Patient ₁ | | |
| | | | | |
| | | Clinician ₂ | | |
| Exp | olain: | (write in text) | | |
| | | | | |
| 8. | What was | the desire about? (more than one may apply) | | |
| | | An option ₁ | | |
| | | (medication or lifestyle) | | |
| | _ | A | | |
| | | A personal want/disposition ₂ (e.g. I don't like needles, I'm not giving up my glass of wine) | | |
| | (e.g. r don't like needles, r in not giving up my glass of wine) | | | |
| | □ A situation₃ | | | |
| | (e.g. we've got to do something about all the hypos you've been having) | | | |
| | | | | |
| □ Integrity of self₄ | | | | |
| | | (e.g. I wish I wasn't like this, It's good—I'm figuring this out) | | |
| | | Other ₅ (write in text) | | |

Utterance (entire quote): ___

| ς | ח | N |
|---|---|---|
| | | |

9. State which steps of SDM you encountered during the consultation video in chronological order. Choose from: choice awareness (1), providing information (2), deciding on final treatment (3)

| Step of SDM | Starting time | Citation |
|-------------|---------------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

10. Which forms of SDM did you see? (see table 1 and 2 listed below) Multiple forms of SDM are possible during one consultation. Please enter forms in chronological order during the conversation. Choose from no form of SDM to be defined (0), weighing treatment alternatives (1), negotiating conflicting desires (2), solving problematic situations (3) and developing existential insight (4).

| Form of SDM | Starting time | Citation |
|-------------|---------------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Supplementary table 1. Patient characteristics per study arm.

| Patient demographics | Intervention (n=69) | Control (n=31) | p-value |
|-------------------------|---------------------|----------------|---------|
| Age, years (mean, SD) | 59 (9) | 63 (10) | 0.03 |
| Gender, female (n, %) | 25 (36) | 16 (52) | 0.15 |
| BMI (mean, SD) | 36.3 (9.6) | 37.5 (8.3) | 0.30 |
| Race (n, %) | | | 0.83 |
| White | 58 (84) | 27 (87) | |
| Black | 7 (10) | 2 (6.5) | |
| Other | 4 (6) | 2 (6.5) | |
| Education (n, %) | | | 0.87 |
| High School or less | 20 (36) | 9 (31) | |
| Vocational/4 year | 29 (53) | 17 (59) | |
| college degree | | | |
| Graduate degree | 6 (11) | 3 (10) | |
| HbA1c, % (mean, SD) | 8.9 (1.3) | 9.0 (1.2) | 0.53 |
| Years with diabetes (n, | | | 0.30 |
| %) | | | |
| <5 | 20 (33) | 7 (24) | |
| 5 to <10 | 23 (38) | 9 (31) | |
| >10 | 17 (28) | 13 (45) | |
| Literacy (n, %) | | | 0.17 |
| Inadequate | 8 (13) | 1 (4) | |
| Adequate | 54 (87) | 27 (96) | |

BMI: body mass index; HbA1c: glycated hemoglobin; SD: standard deviation. The intervention consisted of the use of a within-encounter conversation aid. P-value < 0.05 is considered statistically significant.

Supplementary table 2. Number of desires voiced per study arm.

| Number of desires voiced | Study | | |
|--------------------------|--------------|-----------|-------|
| | Intervention | Control | Total |
| 0 | 11 (15.94) | 6 (19.35) | 17 |
| 1 | 14 (20.29) | 9 (29.03) | 23 |
| 2 | 12 (17.39) | 2 (6.45) | 14 |
| 3 | 11 (15.94) | 8 (25.81) | 19 |
| 4 | 11 (15.94) | 1 (3.23) | 12 |
| 5 | 3 (4.35) | 2 (6.45) | 5 |
| 6 | 2 (2.90) | 3 (9.68) | 5 |
| 7 | 4 (5.80) | 0 (0.00) | 4 |
| 8 | 1 (1.45) | 0 (0.00) | 1 |
| Total | 69 | 31 | 100 |

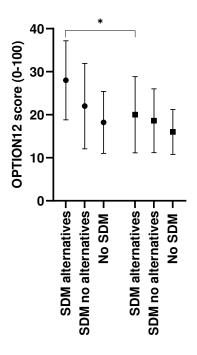
The intervention consisted of the use of a within-encounter conversation aid.

Supplementary table 3. Type of desire stated by patient or clinician per study arm.

| | Study | | |
|-----------------------|--------------|----------|---------|
| Desire | Intervention | Control | p-value |
| Overall | | | 0.07 |
| Patient | 107 (60%) | 50 (72%) | |
| Clinician | 71(40%) | 19 (28%) | |
| Medication/Lifestyle | | | 0.03 |
| Patient | 18 (29%) | 10 (56%) | |
| Clinician | 45 (71%) | 8 (44%) | |
| Personal want | | | 0.89 |
| Patient | 65 (74%) | 33 (75%) | |
| Clinician | 23 (26%) | 11 (25%) | |
| Problematic situation | | | >0.99 |
| Patient | 20 (87%) | 4 (100%) | |
| Clinician | 3 (13%) | 0 (0%) | |
| Integrity of self | | | ~ |
| Patient | 4 (100%) | 3 (100%) | |
| Clinician | 0 (0%) | 0 (0%) | |

The intervention consisted of the use of a within-encounter conversation aid. P-value <0.05 is considered statistically significant.

Supplementary figure 1. Association OPTION12 score and weighing of alternatives per study arm.



- Conversation aid used
- No conversation aid used

CA: conversation aid; SDM: shared decision making. Figures represent means, bars represent standard deviations. Dots: consultations in which a within-conversation aid was used. Squares: consultations in which no within-conversation aid was used. SDM alternatives; consultations in which SDM was present and focused on weighing alternatives solely or as part of multiple forms of SDM used (CA: n=42, no CA: n=10). SDM no alternatives; consultations in which SDM was present but not focused on weighing alternatives (CA: n=18, no CA: n=15). No SDM; consultations in which no form of SDM was observed (CA: n=8, no CA: n=6). OPTION12 score: score measuring the clinician's efforts to involve a patient within a consultation. Scores range from 0 to 100, with higher scores indicating more aspects of SDM present.*p-value<0.05.

Supplementary figure 2. Overview of forms of SDM used and desires voiced by patients and clinicians per consultation.

X-axis represents the percentage of time of the encounter. Consultations are ordered by the amount of SDM instances observed during the encounter, with no instance of SDM at the top to six instances of SDM at the bottom. Colors represent the different forms of SDM. Only the start of an SDM instance was coded, since a clear end could often not be distinguished. Desires voiced during the encounter are indicated by a P for desires voiced by the patient or C for a desire voiced by the clinician and further characterized as focused towards 1) an option, 2) a personal want/disposition, 3) a situation or 4) integrity of self.