

## SUPPLEMENTARY MATERIAL

To the article titled

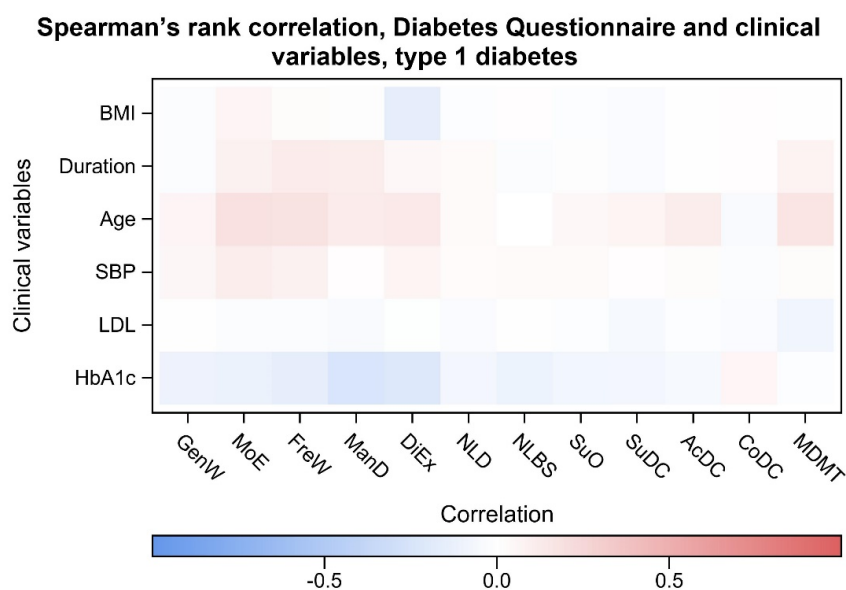
New diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – Nationwide cross-sectional study of construct validity assessing associations with generic health-related quality of life and clinical variables

By

Maria Svedbo Engström; Janeth Leksell; Unn-Britt Johansson; Sixten Borg, Bo Palaszewski; Stefan Franzén; Soffia Gudbjörnsdottir; Katarina Eeg-Olofsson

Submitted to *BMJ Open*

### Supplementary figures

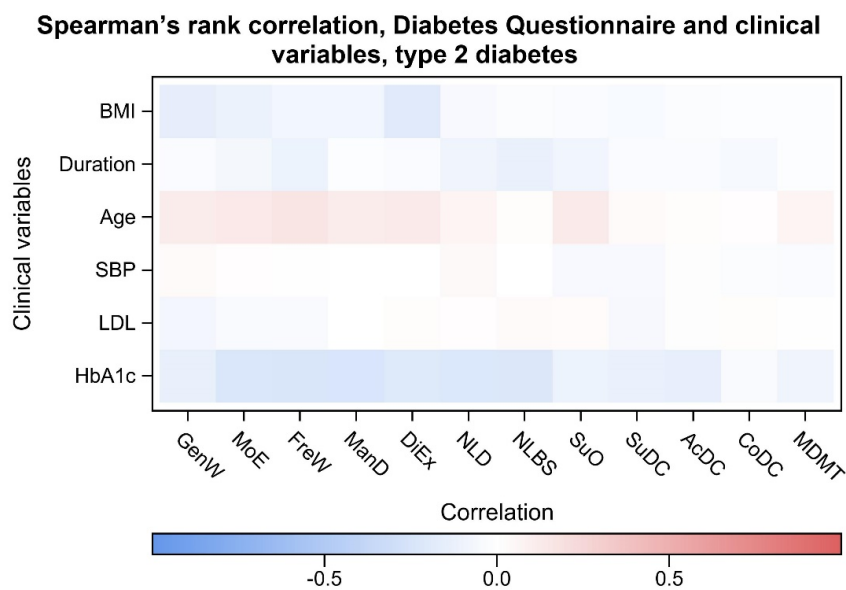


**Fig. S1.** Spearman's rank correlation between the Diabetes Questionnaire scales and clinical variables in type 1 diabetes

Diabetes Questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.

Clinical variables: BMI: body mass index, SBP: systolic blood pressure, LDL: LDL cholesterol, HbA<sub>1c</sub>: glycated haemoglobin level.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

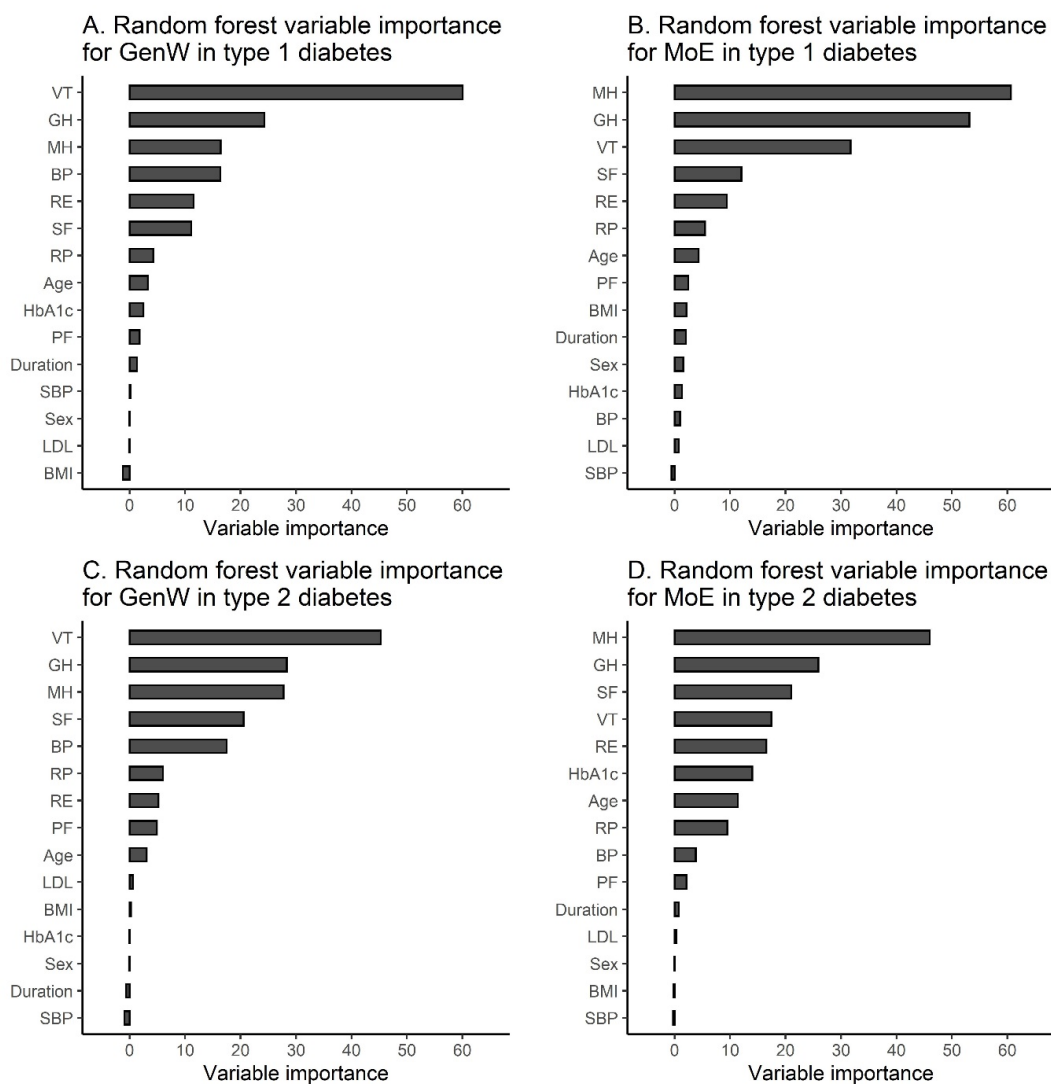


**Fig. S2.** Spearman's rank correlation between the Diabetes Questionnaire scales and clinical variables in type 2 diabetes

Diabetes Questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.

Clinical variables: BMI: body mass index, SBP: systolic blood pressure, LDL: LDL cholesterol, HbA<sub>1c</sub>: glycated haemoglobin level.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables



**Fig. S3.** Variable importance of clinical variables and the SF-36v2 domains as predictors of the Diabetes Questionnaire scales GenW (General Wellbeing) and MoE (Mood and Energy) in type 1 (A and B) and type 2 diabetes (C and D)

Clinical variables: BMI: body mass index, SBP: systolic blood pressure, LDL: LDL cholesterol, HbA<sub>1c</sub>: glycated haemoglobin level.

SF-36v2 domains: PF: physical functioning; RP: role-physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role-emotional; MH: mental health.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

## Supplementary tables

**Table S1.** Crude means and standard deviations for the Diabetes Questionnaire scales and the SF-36v2 domains for participants with type 1 diabetes and those with type 2 diabetes

Diabetes Questionnaire scale	Type 1 diabetes	Type 2 diabetes	p-value	Standardized mean difference, SMD
GenW	59.69 (23.81)	63.76 (24.71)	<0.001	0.168
MoE	64.07 (23.60)	75.19 (22.25)	<0.001	0.485
FreW	54.89 (21.91)	69.03 (22.29)	<0.001	0.640
ManD	63.20 (20.16)	70.48 (19.89)	<0.001	0.364
DiEx	56.66 (24.36)	58.88 (24.08)	0.018	0.092
NLD	75.33 (23.47)	84.14 (21.70)	<0.001	0.390
NLBS	69.97 (26.94)	80.94 (26.84)	<0.001	0.408
SuO	62.32 (23.46)	66.26 (23.71)	<0.001	0.167
SuDC	78.35 (20.29)	77.89 (22.61)	0.574	0.022
AcDC	67.80 (20.73)	71.31 (22.61)	<0.001	0.162
CoDC	80.04 (23.29)	71.42 (27.39)	<0.001	0.339
MDMT	75.40 (21.78)	80.47 (18.39)	<0.001	0.252

Diabetes questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S2.** Clinical and demographic characteristics for non-responders separated for type 1 and type 2 diabetes

<b>Variable</b>	<b>Type 1 diabetes (n=1106)</b>	<b>Type 2 diabetes (n=1116)</b>
Men, %	60.7	58.1
Age, years (SD)	41.2 (15.5)	62.8 (10.9)
Diabetes duration, years (SD)	21.7 (14.0)	8.7 (7.0)
HbA <sub>1c</sub> , mmol/mol (SD)	65.2 (15.1)	54.7 (14.3)
BMI, kg/m <sup>2</sup> (SD)	26.1 (4.6)	30.9 (5.9)
Systolic blood pressure, mmHg (SD)	126.1 (14.0)	134.7 (15.8)
Antihypertensive medication, %	34.6	77.5
LDL-cholesterol, mmol/L (SD)	2.53 (0.79)	2.64 (0.93)
Lipid-lowering medication, %	37.1	60.5
Micro-albuminuria, %	11.4	18.4
Macro-albuminuria, %	5.6	5.0
Retinopathy, %	66.2	30.5
Smoker, %	15.7	18.4
Physical activity, daily, %	20.3	27.1
<b>Diabetes treatment</b>		
Diet alone, %	-	20.1
Oral hypoglycaemic agent alone, %	-	52.5
Insulin alone, %	97.2	8.1
Insulin and oral agent, %	2.3	16.7
Insulin pump users, %	19.9	-

The descriptive statistics are presented as the means and standard deviations (SD) for continuous variables or number and percentages for categorical variables.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S3.** Spearman's rank correlations with p-values between the Diabetes Questionnaire scale scores and clinical variables in type 1 diabetes

Clinical variable	GenW	MoE	FreW	ManD	DiEx	NLD	NLBS	SuO	SuDC	AcDC	CoDC	MDMT
Age	0.06 (0.0184)	0.19 ( $<.0001$ )	0.18 ( $<.0001$ )	0.13 ( $<.0001$ )	0.14 ( $<.0001$ )	0.03 (0.2050)	0.01 (0.8445)	0.05 (0.0875)	0.07 (0.0093)	0.11 ( $<.0001$ )	-0.04 (0.1635)	0.17 ( $<.0001$ )
Diabetes duration	-0.02 (0.4673)	0.09 (0.0006)	0.13 ( $<.0001$ )	0.11 ( $<.0001$ )	0.05 (0.0456)	0.04 (0.1981)	-0.02 (0.4678)	-0.01 (0.6936)	-0.03 (0.2024)	-0.00 (0.9883)	0.01 (0.6045)	0.08 (0.0027)
HbA <sub>1c</sub>	-0.12 ( $<.0001$ )	-0.12 ( $<.0001$ )	-0.16 ( $<.0001$ )	-0.25 ( $<.0001$ )	-0.21 ( $<.0001$ )	-0.07 (0.0073)	-0.12 ( $<.0001$ )	-0.08 (0.0101)	-0.07 (0.0070)	-0.05 (0.0542)	0.06 (0.0356)	-0.02 (0.5485)
BMI	-0.02 (0.4601)	0.07 (0.0151)	0.03 (0.2763)	-0.01 (0.6738)	-0.15 ( $<.0001$ )	-0.01 (0.6239)	0.02 (0.5767)	-0.01 (0.6620)	-0.03 (0.2568)	-0.00 (0.9175)	0.02 (0.5998)	0.01 (0.7292)
SBP	0.06 (0.0231)	0.12 ( $<.0001$ )	0.09 (0.0005)	0.02 (0.5036)	0.07 (0.0072)	0.03 (0.3393)	0.03 (0.2152)	0.03 (0.3092)	0.01 (0.6002)	0.03 (0.2773)	-0.03 (0.3239)	0.03 (0.2610)
LDL	-0.00 (0.9452)	-0.02 (0.4805)	-0.02 (0.4380)	-0.04 (0.1549)	-0.01 (0.8077)	-0.03 (0.2406)	-0.00 (0.9780)	-0.02 (0.5905)	-0.06 (0.0474)	-0.02 (0.5275)	-0.03 (0.2873)	-0.09 (0.0023)

Diabetes questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.  
Clinical variables: BMI: body mass index; SBP: systolic blood pressure; LDL: LDL cholesterol; HbA<sub>1c</sub>: glycated haemoglobin level.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S4.** Spearman's rank correlations with p-values between the Diabetes Questionnaire scale scores and clinical variables in type 2 diabetes

Clinical variable	GenW	MoE	FreW	ManD	DiEx	NLD	NLBS	SuO	SuDC	AcDC	CoDC	MDMT
Age	0.12 ( $<.0001$ )	0.14 ( $<.0001$ )	0.16 ( $<.0001$ )	0.12 ( $<.0001$ )	0.14 ( $<.0001$ )	0.07 (0.0061)	0.02 (0.3646)	0.13 (0.0002)	0.04 (0.1926)	0.02 (0.3657)	0.01 (0.6265)	0.07 (0.0089)
Diabetes duration	-0.03 (0.2226)	-0.07 (0.0202)	-0.11 ( $<.0001$ )	-0.02 (0.5662)	-0.04 (0.1868)	-0.10 (0.0007)	-0.13 ( $<.0001$ )	-0.09 (0.0184)	-0.04 (0.2043)	-0.03 (0.2353)	-0.06 (0.0570)	-0.01 (0.6150)
HbA <sub>1c</sub>	-0.14 ( $<.0001$ )	-0.24 ( $<.0001$ )	-0.24 ( $<.0001$ )	-0.24 ( $<.0001$ )	-0.21 ( $<.0001$ )	-0.23 ( $<.0001$ )	-0.22 ( $<.0001$ )	-0.11 (0.0015)	-0.13 ( $<.0001$ )	-0.15 ( $<.0001$ )	-0.04 (0.1270)	-0.09 (0.0012)
BMI	-0.15 ( $<.0001$ )	-0.12 ( $<.0001$ )	-0.08 (0.0046)	-0.08 (0.0037)	-0.20 ( $<.0001$ )	-0.05 (0.0752)	-0.03 (0.3242)	-0.03 (0.4203)	-0.05 (0.0854)	-0.03 (0.3238)	-0.01 (0.6580)	-0.02 (0.5507)
SBP	0.03 (0.2195)	0.02 (0.5649)	0.01 (0.7496)	0.00 (0.9131)	0.00 (0.8954)	0.04 (0.1082)	0.01 (0.8433)	-0.05 (0.1746)	-0.05 (0.0781)	-0.01 (0.6444)	-0.02 (0.4327)	-0.03 (0.2736)
LDL	-0.07 (0.0151)	-0.04 (0.1773)	-0.04 (0.1310)	0.00 (0.9813)	0.02 (0.4793)	0.02 (0.5751)	0.04 (0.2250)	0.03 (0.4554)	-0.06 (0.0504)	-0.01 (0.7171)	0.02 (0.5061)	0.01 (0.8070)

Diabetes questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.  
Clinical variables: BMI: body mass index; SBP: systolic blood pressure; LDL: LDL cholesterol; HbA<sub>1c</sub>: glycated haemoglobin level.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S5.** Spearman's rank correlations with p-values between the Diabetes Questionnaire scales and the SF-36v2 domains in type 1 diabetes

Diabetes Questionnaire scale	SF-36v2 domain							
	PF	RP	BP	GH	VT	RF	SF	MH
GenW	0.33 (<.0001)	0.43 (<.0001)	0.43 (<.0001)	0.56 (<.0001)	0.60 (<.0001)	0.43 (<.0001)	0.48 (<.0001)	0.53 (<.0001)
MoE	0.23 (<.0001)	0.40 (<.0001)	0.30 (<.0001)	0.55 (<.0001)	0.57 (<.0001)	0.46 (<.0001)	0.52 (<.0001)	0.60 (<.0001)
FreW	0.17 (<.0001)	0.29 (<.0001)	0.21 (<.0001)	0.46 (<.0001)	0.40 (<.0001)	0.31 (<.0001)	0.38 (<.0001)	0.41 (<.0001)
ManD	0.18 (<.0001)	0.28 (<.0001)	0.20 (<.0001)	0.47 (<.0001)	0.44 (<.0001)	0.29 (<.0001)	0.37 (<.0001)	0.41 (<.0001)
DiEx	0.26 (<.0001)	0.28 (<.0001)	0.23 (<.0001)	0.45 (<.0001)	0.51 (<.0001)	0.32 (<.0001)	0.35 (<.0001)	0.39 (<.0001)
NLD	0.29 (<.0001)	0.37 (<.0001)	0.24 (<.0001)	0.44 (<.0001)	0.34 (<.0001)	0.37 (<.0001)	0.42 (<.0001)	0.38 (<.0001)
NLBS	0.31 (<.0001)	0.39 (<.0001)	0.27 (<.0001)	0.43 (<.0001)	0.37 (<.0001)	0.35 (<.0001)	0.41 (<.0001)	0.36 (<.0001)
SuO	0.10 (0.0017)	0.15 (<.0001)	0.14 (<.0001)	0.29 (<.0001)	0.30 (<.0001)	0.23 (<.0001)	0.29 (<.0001)	0.32 (<.0001)
SuDC	0.15 (<.0001)	0.22 (<.0001)	0.16 (<.0001)	0.31 (<.0001)	0.29 (<.0001)	0.23 (<.0001)	0.27 (<.0001)	0.29 (<.0001)
AcDC	0.13 (<.0001)	0.20 (<.0001)	0.15 (<.0001)	0.30 (<.0001)	0.28 (<.0001)	0.23 (<.0001)	0.26 (<.0001)	0.31 (<.0001)
CoDC	0.01 (0.8176)	0.03 (0.3182)	0.03 (0.3309)	0.08 (0.0027)	0.02 (0.3822)	0.06 (0.0375)	0.06 (0.0297)	0.06 (0.0335)
MDMT	0.06 (0.0240)	0.14 (<.0001)	0.09 (0.0006)	0.30 (<.0001)	0.27 (<.0001)	0.19 (<.0001)	0.26 (<.0001)	0.30 (<.0001)

Diabetes Questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.

SF-36v2 domains: PF: physical functioning; RP: role-physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role-emotional; MH: mental health.



Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S6.** Spearman's rank correlations with p-values between the Diabetes Questionnaire scales and the SF-36v2 domains in type 2 diabetes

Diabetes Questionnaire scale	SF-36v2 domain							
	PF	RP	BP	GH	VT	RF	SF	MH
GenW	0.39 (<.0001)	0.44 (<.0001)	0.48 (<.0001)	0.56 (<.0001)	0.60 (<.0001)	0.44 (<.0001)	0.51 (<.0001)	0.53 (<.0001)
MoE	0.41 (<.0001)	0.45 (<.0001)	0.42 (<.0001)	0.57 (<.0001)	0.58 (<.0001)	0.51 (<.0001)	0.54 (<.0001)	0.60 (<.0001)
FreW	0.28 (<.0001)	0.35 (<.0001)	0.34 (<.0001)	0.47 (<.0001)	0.42 (<.0001)	0.38 (<.0001)	0.40 (<.0001)	0.43 (<.0001)
ManD	0.26 (<.0001)	0.32 (<.0001)	0.28 (<.0001)	0.44 (<.0001)	0.45 (<.0001)	0.34 (<.0001)	0.37 (<.0001)	0.42 (<.0001)
DiEx	0.32 (<.0001)	0.33 (<.0001)	0.36 (<.0001)	0.48 (<.0001)	0.51 (<.0001)	0.30 (<.0001)	0.36 (<.0001)	0.38 (<.0001)
NLD	0.38 (<.0001)	0.44 (<.0001)	0.34 (<.0001)	0.46 (<.0001)	0.43 (<.0001)	0.45 (<.0001)	0.47 (<.0001)	0.43 (<.0001)
NLBS	0.34 (<.0001)	0.40 (<.0001)	0.31 (<.0001)	0.40 (<.0001)	0.38 (<.0001)	0.44 (<.0001)	0.46 (<.0001)	0.42 (<.0001)
SuO	0.14 (0.0001)	0.19 (<.0001)	0.25 (<.0001)	0.31 (<.0001)	0.32 (<.0001)	0.20 (<.0001)	0.26 (<.0001)	0.32 (<.0001)
SuDC	0.14 (<.0001)	0.21 (<.0001)	0.21 (<.0001)	0.26 (<.0001)	0.25 (<.0001)	0.21 (<.0001)	0.26 (<.0001)	0.28 (<.0001)
AcDC	0.22 (<.0001)	0.26 (<.0001)	0.28 (<.0001)	0.32 (<.0001)	0.31 (<.0001)	0.26 (<.0001)	0.29 (<.0001)	0.32 (<.0001)
CoDC	0.07 (0.0130)	0.10 (0.0006)	0.11 (0.0001)	0.16 (<.0001)	0.13 (<.0001)	0.11 (0.0002)	0.13 (<.0001)	0.14 (<.0001)
MDMT	0.13 (<.0001)	0.20 (<.0001)	0.18 (<.0001)	0.24 (<.0001)	0.24 (<.0001)	0.22 (<.0001)	0.26 (<.0001)	0.28 (<.0001)

Diabetes Questionnaire scales: GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment.

SF-36v2 domains: PF: physical functioning; RP: role-physical; BP: bodily pain; GH: general health; VT: vitality; SF: social functioning; RE: role-emotional; MH: mental health.

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

**Table S7.** Least square mean estimates and 95% confidence intervals for the Diabetes Questionnaire scales in three glycated haemoglobin (HbA<sub>1c</sub>) groups for type 1 and type 2 diabetes

Diabetes Questionnaire scale	Type 1 diabetes						Type 2 diabetes					
	Unadjusted analysis			Adjusted analysis			Unadjusted analysis			Adjusted analysis		
	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol
GenW	64.33 (63.46-65.20)	59.27 (58.74-59.79)	56.34 (55.49-57.19)	51.11 (49.14-53.07)	47.23 (45.44-49.01)	45.66 (43.80-47.53)	65.97 (65.41-66.54)	62.92 (62.24-63.60)	54.26 (52.90-55.62)	63.63 (62.10-65.15)	62.81 (61.29-64.32)	56.81 (54.85-58.78)
MoE	67.15 (66.29-68.01)	65.14 (64.62-65.66)	58.32 (57.48-59.16)	57.77 (55.87-59.66)	56.14 (54.41-57.86)	49.75 (47.96-51.54)	79.24 (78.74-79.74)	72.75 (72.15-73.35)	61.02 (59.80-62.25)	77.12 (75.78-78.46)	72.23 (70.91-73.56)	60.73 (58.99-62.46)
FreW	58.21 (57.41-59.01)	56.09 (55.61-56.58)	48.72 (47.96-49.49)	55.28 (53.51-57.05)	52.22 (50.61-53.82)	46.09 (44.42-47.75)	73.07 (72.57-73.57)	66.72 (66.12-67.32)	54.82 (53.62-56.03)	70.39 (69.03-71.75)	65.51 (64.16-66.86)	54.66 (52.90-56.42)
ManD	70.05 (69.33-70.78)	63.88 (63.45-64.32)	55.09 (54.40-55.79)	64.84 (63.20-66.47)	59.71 (58.23-61.19)	51.49 (49.95-53.03)	74.12 (73.67-74.56)	67.74 (67.20-68.28)	60.35 (59.26-61.43)	71.53 (70.33-72.74)	66.65 (65.46-67.85)	60.07 (58.51-61.63)
DiEx	63.95 (63.07-64.84)	56.52 (55.98-57.06)	50.18 (49.32-51.04)	54.44 (52.50-56.37)	50.59 (48.83-52.35)	45.40 (43.57-47.23)	62.48 (61.92-63.03)	55.86 (55.20-56.52)	50.13 (48.80-51.47)	57.97 (56.54-59.40)	55.31 (53.91-56.72)	52.85 (51.02-54.68)
NLD	76.79 (75.93-77.66)	76.59 (76.07-77.11)	70.75 (69.92-71.58)	68.78 (66.84-70.71)	70.09 (68.33-71.85)	64.26 (62.44-66.09)	87.94 (87.46-88.43)	81.82 (81.23-82.40)	71.54 (70.37-72.71)	83.17 (81.79-84.55)	78.57 (77.21-79.94)	69.61 (67.83-71.38)
NLBS	74.54 (73.54-75.54)	70.33 (69.73-70.93)	64.60 (63.63-65.58)	64.39 (62.08-66.69)	61.14 (59.05-63.23)	57.16 (54.98-59.33)	85.59 (84.98-86.20)	77.91 (77.18-78.64)	65.85 (64.37-67.33)	81.69 (79.96-83.43)	75.53 (73.81-77.25)	65.42 (63.19-67.65)
SuO	66.33 (65.31-67.35)	61.93 (61.32-62.54)	59.61 (58.63-60.59)	63.01 (60.74-65.28)	59.84 (57.79-61.88)	58.00 (55.86-60.14)	68.56 (67.83-69.29)	65.70 (64.89-66.51)	57.12 (55.49-58.74)	68.47 (66.77-70.16)	66.84 (65.20-68.48)	57.40 (55.25-59.56)
SuDC	79.87 (79.13-80.61)	79.34 (78.89-79.79)	74.41 (73.70-75.13)	77.71 (76.01-79.41)	77.27 (75.73-78.81)	73.04 (71.44-74.64)	80.06 (79.54-80.58)	76.49 (75.87-77.11)	70.89 (69.64-72.14)	77.76 (76.38-79.14)	75.23 (73.86-76.59)	72.46 (70.69-74.24)
AcDC	69.08 (68.32-69.84)	68.52 (68.06-68.98)	64.78 (64.05-65.51)	64.69 (62.96-66.42)	64.90 (63.33-66.47)	62.54 (60.91-64.17)	73.64 (73.12-74.16)	69.68 (69.06-70.30)	64.39 (63.14-65.64)	70.33 (68.92-71.75)	68.12 (66.72-69.52)	65.20 (63.37-67.02)

Svedbo Engström et al. A new diabetes questionnaire to add patients' perspectives to diabetes care for adults with type 1 and type 2 diabetes – A nationwide cross-sectional study of associations with generic health-related quality of life and clinical variables

Diabetes Questionnaire scale	Type 1 diabetes						Type 2 diabetes					
	Unadjusted analysis			Adjusted analysis			Unadjusted analysis			Adjusted analysis		
	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol	HbA <sub>1c</sub> <52 mmol/mol	HbA <sub>1c</sub> 52-69 mmol/mol	HbA <sub>1c</sub> ≥70 mmol/mol
CoDC	78.03 (77.13-78.92)	80.76 (80.22-81.29)	80.05 (79.20-80.90)	74.89 (72.88-76.90)	77.58 (75.75-79.41)	76.08 (74.18-77.97)	72.45 (71.77-73.12)	70.90 (70.11-71.70)	67.72 (66.11-69.33)	72.22 (70.34-74.09)	70.45 (68.59-72.31)	68.43 (66.01-70.84)
MDMT	77.14 (76.34-77.94)	75.78 (75.30-76.26)	72.81 (72.04-73.58)	72.21 (70.41-74.01)	71.74 (70.11-73.38)	70.14 (68.45-71.84)	82.46 (82.02-82.90)	78.80 (78.29-79.31)	76.45 (75.41-77.48)	81.42 (80.23-82.62)	78.79 (77.62-79.96)	76.64 (75.11-78.17)

**Table S7 continued.** GenW: General Wellbeing; MoE: Mood and Energy; FreW: Free of Worries about blood sugar; ManD: Capabilities to Manage your Diabetes; DiEx: Diet and Exercise; NLD: Not Limited by Diabetes; NLBS: Not Limited by Blood Sugar; SuO: Support from Others; SuDC: Support from Diabetes Care; AcDC: Access to Diabetes Care; CoDC: Continuity in Diabetes Care; MDMT: Medical Devices and Medical Treatment