

Appendix 11. Extensive summary of findings

STRUCTURAL VALIDITY			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – <i>Daily activities</i> ⁴²	Two subscales: Daily life (3 items) and Dependence (4 items)	Indeterminate	No level of evidence: rating is indeterminate
DFS-SF – <i>Dependence/daily life</i> ^{34,38,45,60,61}	Unidimensional scale	Sufficient	High: one very good study (results of inadequate study are ignored)
PRO-DM-Thai – <i>Physical function</i> ³⁵	Unidimensional scale	Sufficient	High: one very good study
IWADL/ APPADL – (<i>Physical</i>) <i>activities of daily living</i> ^{36,46}	Unidimensional scale	Sufficient	Low: one doubtful study
QOLID – <i>Physical endurance</i> ³⁷	Unidimensional scale	Sufficient	Very low: one inadequate study
DQLCTQ – <i>Physical function</i> ⁴⁴			
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³	Unidimensional scale	Sufficient	Moderate: one adequate study
Diabetes-39 – <i>Energy and mobility (15 items)</i> ^{39-41,43,48,51,59}	Unidimensional scale	Sufficient	High: two adequate studies
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹	Structural validity unconfirmed	Insufficient	Moderate: one adequate study
Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰	Structural validity unconfirmed	Indeterminate	No level of evidence: rating is indeterminate
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸	Unidimensional scale	Sufficient	High: one very good study
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷	Unidimensional scale	Sufficient	Moderate: one adequate study
INTERNAL CONSISTENCY			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – <i>Daily activities</i> ⁴²	Cronbach's alpha: 0.85; n=48	Indeterminate	No level of evidence: rating is indeterminate because structural validity is

			indeterminate
DFS-SF – <i>Dependence/daily life</i> ^{34,38,45,60,61}	Cronbach's alpha: 0.85-0.91; consistent results; n=1050	Sufficient	High: six very good studies
PRO-DM-Thai – <i>Physical function</i> ³⁵	Cronbach's alpha: 0.82; n=500	Sufficient	High: one very good study
IWADL/ APPADL – <i>(Physical) activities of daily living</i> ^{36,46}	Cronbach's alpha: ≥ 0.89 ; consistent results; n=455;	Sufficient	Low: two very good studies, but structural validity is low
QOLID – <i>Physical endurance</i> ³⁷	Cronbach's alpha: 0.85; n=150	Indeterminate	No level of evidence: rating is indeterminate because structural validity is very low
DQLCTQ – <i>Physical function</i> ⁴⁴	Cronbach's alpha: 0.85; n=909	Indeterminate	No level of evidence: rating is indeterminate because structural validity is not assessed
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³	Cronbach's alpha: 0.81-0.92; n=516	Sufficient	Moderate: one very good study, but structural validity is moderate
Diabetes-39 – <i>Energy and mobility (15 items)</i> ^{39-41,43,48,51,59}	Cronbach's alpha: 0.79-0.93; consistent results; n=1622	Sufficient	High: six very good studies
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹	Cronbach's alpha: 0.94; n=397	Indeterminate	No level of evidence: rating is indeterminate because structural validity is insufficient
Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰	Cronbach's alpha: 0.84; n=144	Indeterminate	No level of evidence: rating is indeterminate because structural validity is indeterminate
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸			
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷	Cronbach's alpha: 0.73-0.92; n=151	Sufficient	Moderate: one very good study, but structural validity is moderate

CROSS-CULTURAL VALIDITY\MEASUREMENT INVARIANCE			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence

DFS – Daily activities ⁴²			
DFS-SF – Dependence/daily life ^{34,38,45,60,61}	DIF for gender in one item, while five items were tested for six variables; n=212	Sufficient	Very low: one inadequate study
PRO-DM-Thai – Physical function ³⁵			
IWADL/ APPADL – (Physical) activities of daily living ^{36,46}			
QOLID – Physical endurance ³⁷			
DQLCTQ – Physical function ⁴⁴			
Diabetes-39 – Energy and mobility (pilot version - 14 items) ⁴³			
Diabetes-39 – Energy and mobility (15 items) ^{39-41,43,48,51,59}			
Diabetes-39 Thai – Energy and mobility (10 items) ⁴⁹			
Diabetes-39 German – Physical impairment (7 items) ⁵⁰			
Diabetes-39 SF – Energy and mobility (5 items) ⁴⁸			
C-CWIS – Physical symptoms and everyday living ⁴⁷			

RELIABILITY			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – Daily activities ⁴²	Daily life: r=0.68; n=? Dependence: r=0.84; n=?	Daily life: insufficient Dependence: sufficient	Very low: one inadequate study
DFS-SF – Dependence/daily life ^{34,38,45,60,61}	ICC: 0.74-0.77; consistent results; n>141	Sufficient	Low: one doubtful study
PRO-DM-Thai – Physical function ³⁵			
IWADL/ APPADL – (Physical) activities of daily living ^{36,46}	ICC: 0.91; n=106	Sufficient	Moderate: one adequate study

QOLID – <i>Physical endurance</i> ³⁷	ICC: 0.83; n=58	Sufficient	Low: one adequate study, sample size 58
DQLCTQ – <i>Physical function</i> ⁴⁴			
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³			
Diabetes-39 – <i>Energy and mobility (15 items)</i> ^{39-41,43,48,51,59}	ICC: 0.91, spearman r: 0.84; consistent results; n=535	Sufficient	Moderate: two doubtful studies
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹			
Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰	0.88; n=72	Indeterminate	No level of evidence: rating is indeterminate
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸			
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷			

MEASUREMENT ERROR			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – <i>Daily activities</i> ⁴²			
DFS-SF – <i>Dependence/daily life</i> ^{34,38,45,60,61}			
PRO-DM-Thai – <i>Physical function</i> ³⁵			
IWADL/ APPADL – <i>(Physical) activities of daily living</i> ^{36,46}	SEM: 6.3, SDC: 17.5, MIC: 9.8-13.6; n=106	Insufficient	Low: one doubtful study
QOLID – <i>Physical endurance</i> ³⁷			
DQLCTQ – <i>Physical function</i> ⁴⁴			
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³			
Diabetes-39 – <i>Energy and mobility (15 items)</i> ^{39-41,43,48,51,59}			
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹			

Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰			
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸			
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷			

HYPOTHESES TESTING FOR CONSTRUCT VALIDITY			
a=comparison with other instruments			
b=comparison between subgroups			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – <i>Daily activities</i> ⁴²	a. 4 out of 5 hypotheses confirmed; n=173 b. No data provided	a. Sufficient b. Indeterminate	a. Moderate: one adequate study b. No level of evidence: rating is indeterminate
DFS-SF – <i>Dependence/daily life</i> ^{34,38,45,60,61}	a. 21 out of 36 hypotheses confirmed; n=1050 b. 15 out of 17 hypotheses confirmed; n=170	a. Inconsistent b. Sufficient	a. High: three very good studies b. High: two very good studies (results of inadequate study and study with no data provided are ignored)
PRO-DM-Thai – <i>Physical function</i> ³⁵	b. 0 out of 1 hypothesis confirmed; n=200	b. Insufficient	b. Very low: one inadequate study (results of study with no data provided are ignored)
IWADL/ APPADL – <i>(Physical) activities of daily living</i> ^{36,46}	b. 12 out of 34 hypotheses confirmed; n=349	b. Inconsistent	b. High: one very good study
QOLID – <i>Physical endurance</i> ³⁷	a. 3 out of 6 hypotheses confirmed; n=30 b. 0 out of 3 hypotheses confirmed; n=210	a. Inconsistent b. Insufficient	a. Very low: one adequate study, sample size 30 b. High: one very good study
DQLCTQ – <i>Physical function</i> ⁴⁴	b. 1 out of 2 hypotheses confirmed; n=942	b. Inconsistent	b. High: one very good study
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³	b. No data provided	b. Indeterminate	b. No level of evidence: rating is indeterminate

Diabetes-39 – <i>Energy and mobility (15 items)</i> ^{39-41,43,48,51,59}	a. 8 out of 15 hypotheses confirmed; n=795 b. 11 out of 22 hypotheses confirmed; n=566	a. Inconsistent b. Inconsistent	a. High: two adequate studies (results of study with no data provided are ignored) b. High: two very good studies (results of study with no data provided are ignored)
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹	a. 2 out of 5 hypotheses confirmed; n=397 b. 4 out of 6 hypotheses confirmed; n=397	a. Inconsistent b. Inconsistent	a. Moderate: one adequate study b. High: one very good study
Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰	a. No data provided b. 4 out of 4 hypotheses confirmed; n=144	a. Indeterminate b. Sufficient	a. No level of evidence: rating is indeterminate b. High: one very good study
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸			
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷	a. No data provided b. 1 out of 1 hypotheses confirmed; n=131	a. Indeterminate b. Sufficient	a. No level of evidence: rating is indeterminate b. Very low: one inadequate study

RESPONSIVENESS			
a=comparison to gold standard			
b=comparison with other instruments			
c=comparison between subgroups			
d=before and after intervention			
PROM – subscale	Summary or pooled result	Overall rating	Quality of evidence
DFS – <i>Daily activities</i> ⁴²	c. 0 out of 2 hypotheses confirmed; n=264	c. Insufficient	c. Low: one doubtful study
DFS-SF – <i>Dependence/daily life</i> ^{34,38,45,60,61}	c. 2 out of 3 hypotheses confirmed; n=573	c. Inconsistent	c. High: three very good studies
PRO-DM-Thai – <i>Physical function</i> ³⁵			
IWADL/ APPADL – <i>(Physical) activities of daily living</i> ^{36,46}	d. 2 out of 3 hypotheses confirmed; n=40	d. Inconsistent	d. Low: one very good study, sample size 40

QOLID – <i>Physical endurance</i> ³⁷			
DQLCTQ – <i>Physical function</i> ⁴⁴	c. 0 out of 2 hypotheses confirmed; n=328	c. Insufficient	c. High: one very good study
Diabetes-39 – <i>Energy and mobility (pilot version - 14 items)</i> ⁴³			
Diabetes-39 – <i>Energy and mobility (15 items)</i> ³⁹ 41,43,48,51,59			
Diabetes-39 Thai – <i>Energy and mobility (10 items)</i> ⁴⁹			
Diabetes-39 German – <i>Physical impairment (7 items)</i> ⁵⁰	d. No data provided	d. Indeterminate	d. No level of evidence: rating is indeterminate
Diabetes-39 SF – <i>Energy and mobility (5 items)</i> ⁴⁸			
C-CWIS – <i>Physical symptoms and everyday living</i> ⁴⁷			