

Patient-reported Outcomes in Cognitive Impairment (PROCOG)

Frank, L., Flynn, J. A., Kleinman, L., Margolis, M. K., Matza, L. S., Beck, C., and Bowman, L. (2006)

"Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment."

Instrument de mesure	Patient-reported outcomes in cognitive impairment
Abréviation	PROCOG
Auteur	Frank L.
Thème	Évaluation des troubles cognitifs
Objectifs	Évaluation des symptômes du déficit cognitif léger et de la démence du type Alzheimer et leur impact sur la qualité fonctionnelle, comportementale, relative à la santé et aux activités quotidiennes.
Population	Les patients atteints de troubles cognitifs légers à modérés
Utilisateurs	Questionnaire auto-administré
Nombre d'items	55
Participation du patient	Oui ; Test auto-administré
Localisation de l'instrument de mesure	Frank, L., Flynn, J. A., Kleinman, L., Margolis, M. K., Matza, L. S., Beck, C., and Bowman, L. 2006. "Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment." <i>Int Psychogeriatr.</i> 18(1):135-49

Objectifs

Le PROCOG a été conçu pour évaluer les symptômes du déficit cognitif léger, de la démence du type Alzheimer et leur impact sur la qualité fonctionnelle, comportementale, relative à la santé et aux activités quotidiennes.

Population cible.

Le PROCOG s'adresse particulièrement aux patients présentant des troubles cognitifs.

Description

Le PROCOG est un questionnaire auto-administré de 55 items, il mesure les symptômes de base comme l'estimation par le patient de l'impact des symptômes liés au trouble cognitif dans sa vie quotidienne. Les questions sont évaluées sur une échelle de Likert de cinq points (de 0 (pas du tout) à 4 (toujours)).

Le score total est obtenu par l'addition des points de tous les items (les résultats s'étendent de 0 à 220).

Le test est composé de six sous-échelles classant les items par catégorie :

- affectif
- perte de compétence
- mémoire sémantique
- mémoire des événements récents
- fonction cognitive
- impact social

Des scores pour chaque sous-échelle sont calculés par la valeur moyenne de tous les items de la sous échelle. Si moins de la moitié des items de la sous - échelle sont complétés, les points de celle-ci ne sont pas comptabilisés dans le score total.

Des valeurs élevées indiquent une plus grande sévérité des symptômes et de leur impact sur la vie quotidienne du patient.

Le questionnaire doit être complété par le patient. Si le patient ne peut le faire, le questionnaire peut être réalisé par un informateur familial.

Fiabilité

La fiabilité du PROCOG a été montrée par une corrélation entre les différents items constituant l'échelle (*Internal Consistency*). Cette consistance interne du test a été évaluée pour le PROCOG en utilisant la formule pour le coefficient alpha de Cronbach qui se situe pour toutes les sous-échelles aux alentours de 0.82 (Frank et al.2006).

La stabilité du test (*Stability*) , mesurée par une réadministration du test (*test-retest*), a été évaluée par le coefficient de corrélations interclasses (ICC). Les résultats se situent entre 0.49 et 0.90 selon les sous échelles du test. On peut dire que les points sont restés stables entre les deux éditions du test.

Validité

Les experts cliniques ont passé en revue l'instrument pour la validité apparente de l'outil (*Face validity*).

La validité psychométrique du PROCOG est bonne pour tous les groupes diagnostiques (MCI & DTA).

Pour tous les sujets, il a été montré une corrélation entre les résultats obtenus au PROCOG et ceux de deux autres échelles (*Concurrent Validity*). Les coefficients de corrélations avec le QOL-AD étaient $r = -0.53$ et de $r = 0.60$ avec le CES-D.

Les points obtenus dans le groupe des patients atteints de troubles légers (MCI) diffèrent significativement de ceux du groupe des déments Alzheimer (DAT) à l'exception de la sous-échelle « impact social » (*Discriminant Validity*) . Les résultats de la sous-échelle évaluant la mémoire à long terme ne sont pas significativement différents entre les trois groupes. En général, les sujets témoins étaient distincts des patients de MCI ou de DAT.

Autre étude

Aucune autre étude de validation du PROCOG n'est disponible dans la littérature.

Convivialité

Le temps utile à l'administration du PROCOG est de moins de 12 minutes.

Référence

Frank, L., Flynn, J. A., Kleinman, L., Margolis, M. K., Matza, L. S., Beck, C., and Bowman, L. 2006. "Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment." *Int Psychogeriatr.* 18(1):135-49.

Localisation de l'instrument de mesure

Frank, L., Flynn, J. A., Kleinman, L., Margolis, M. K., Matza, L. S., Beck, C., and Bowman, L. 2006. "Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment." *Int Psychogeriatr.* 18(1):135-49.

PATIENT-REPORTED OUTCOMES IN COGNITIVE IMPAIRMENT (PROCOG)

Frank L. (2006)

U.S.A. (English)

Author (year)	Setting	Sample (n)	Design	Reliability	Validity
"Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment." Frank, L., & al. (2006)	Five clinical sites across the USA	186 Subjects > 64 years (78 with mild cognitive impairment; 75 with mild dementia Alzheimer type and 33 cognitive intact)	Validation study	IC S	FV CrV

Result reliability	Result validity	Commentary
<p>(IC) Internal Consistency Chronbach's : above 0.82</p> <p>(S) Test retest ICC: ranges from 0.49 to 0.90</p>	<p>(FV) Face Validity Clinical experts reviewed the instrument for face validity and minor revisions was submitted.</p> <p>(CrV) Concurrent Validity: QOL-AD : $r = -0.53$ CES-D $r = 0.6$</p> <p>(CrV) Discriminant Validity MCI and DAT scores differed significantly ($p < 0.05$).</p>	

Reliability: Stability (S), Internal consistency (IC), Equivalence (E)

Validity: Face validity (FV), Content validity (CtV), Criterion validity (CrV), Construct validity (CsV)

Sensitivity (Sen), Specificity (Sp), Positive Predictive Value (PPV), Negative Predictive Value (NPV), Receiver Operating Curve (ROC), Likelihood Ratio (LR), Odds Ratio (OR)

Quality of life-Alzheimer's Disease (QOL-AD), Centers for Epidemiologic studies-Depression Scale (CES-D), (MCI) Mild cognitive impairment, (DAT) dementia Alzheimer

Patient–reported Outcomes in Cognitive Impairment (PROCOG)

Frank L.

Frank, L., Flynn, J. A., Kleinman, L., Margolis, M. K., Matza, L. S., Beck, C., and Bowman, L. 2006. "Validation of a New Symptom Impact Questionnaire for Mild to Moderate Cognitive Impairment."

Appendix A.: PROCOG – Patient Version

Date Completed: _____

Initials: _____

PROCOG – Patient Version

Below are some questions about ways your memory affects your life. For each question, think about the **last two weeks**. Please check the response that best describes you, where **0** is **None of the time**, and **4** is **All of the time**. If you are unsure about how to answer a question, please give the best answer you can.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
	0	1	2	3	4
1. How much do you rely on reminder notes, lists, or calendars?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2. Do you walk into a room and forget why you went there?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. Do you have difficulty finding words to say what you want to say?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
4. Does it take you longer than you would like to figure things out?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5. Do you get lost finding your way to places that you've been many times before?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6. Do you have trouble finding things around the house?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7. Do you forget where things are kept in the house (for example, where the sugar bowl belongs)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8. Do you have difficulty following the meaning of things you read?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9. Do you have trouble concentrating on conversations?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10. Do you have trouble concentrating on what you read?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11. Do you misplace things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12. How often do family members or friends say you forget things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

		None of the time	A little of the time	Some of the time	Most of the time	All of the time
		0	1	2	3	4
13.	Do family members or friends say you repeat the same questions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
14.	Do family members or friends say you repeat the same stories or jokes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15.	Because of your memory or thinking problems, how often have you cut back on social activities outside the home?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16.	Because of your memory or thinking problems, how often have family members or friends avoided you?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17.	How often do you feel embarrassed or ashamed about your memory?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
18.	Because of your memory or thinking problems, how often do you get frustrated?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19.	Because of your memory or thinking problems, how often do you get angry?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20.	Because of your memory or thinking problems, how often do you feel anxious or tense?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
21.	How often do your memory or thinking problems make you feel sad?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
22.	Because of your memory or thinking problems, how often do you feel concerned about the future?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways your memory affects your life. For each question, think about the **last two weeks**. Please check the response that best describes you, where **0** is **Not at all difficult**, and **4** is **Extremely difficult**. If you are unsure about how to answer a question, please give the best answer you can.

	Not at all difficult	A little bit difficult	Somewhat difficult	Very difficult	Extremely difficult
	0	1	2	3	4
23. How difficult is remembering names of people you know well, like family or friends?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
24. ...remembering names of people you don't see often?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
25. ...remembering names of new people you meet?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
26. ...remembering names of common objects or things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
27. ...remembering what you just read?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
28. ...remembering what you just heard?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
29. How difficult is remembering your plans for each day?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
30. ...remembering things that happened in the last week?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
31. ...remembering things you did yesterday?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
32. ...remembering things you did earlier in the day?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
33. ...remembering what you were doing if you get interrupted?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
34. ...remembering events from years ago?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
35. How difficult is it to follow written instructions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
36. How difficult is it to follow spoken instructions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways your memory affects your life. For each question, think about the ***last two weeks***. Please check the response that best describes you, where **0** is ***NO, not at all***, and **4** is ***YES, completely***. If you are unsure about how to answer a question, please give the best answer you can.

		NO, not at all	A little bit	Somewhat	Very much	YES, completely
		0	1	2	3	4
37.	Do you get annoyed at yourself because of your memory or thinking problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.	Do you feel embarrassed because of forgetting things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.	Because of your memory or thinking problems, do you feel less confident in yourself?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.	Because of your memory or thinking problems, do you feel you are less effective or successful in your life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.	Because of your memory or thinking problems, have you cut back on your usual hobbies or activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.	Is your thinking fuzzy or not sharp?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.	Do you try to hide your memory or thinking problems from others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44.	Because of your memory or thinking problems, have you stopped doing things you used to enjoy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45.	Because of your memory or thinking problems, are there hobbies or activities you don't do as well as you once could?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46.	Because of your memory or thinking problems, do you find you don't perform household chores as well as you once did (for example, preparing dinner, fixing things around the house)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	NO, not at all	A little bit	Somewhat	Very much	YES, completely
	0	1	2	3	4
47. Because of your memory or thinking problems, do you find you don't perform activities as well as you once did (for example, playing cards, working at the computer)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
48. Because of your memory or thinking problems, is it more difficult to write or do activities with your hands now?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
49. Do you think friends call you less than they used to because of your memory or thinking problems?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
50. Because of your memory or thinking problems, have family routines changed, like who does most of the driving or cooking or who usually handles finances?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways your memory affects your life. For each question, think about the **last two weeks**. Please check the response that best describes you, where **0** is **Not at all**, and **4** is **A great deal**. If you are unsure about how to answer a question, please give the best answer you can.

	Not at all	A little bit	Somewhat	Very much	A great deal
	0	1	2	3	4
51. Do friends or family members say you are more irritable now than before?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
52. Do your memory or thinking problems add to your stress level?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
53. Because of your memory or thinking problems, do you find it more difficult to decide what to wear than it used to be?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
54. Because of your memory or thinking problems, how often have you cut back on seeing friends?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
55. Because of your memory or thinking problems, do you make more mistakes with money now (for example, when balancing the checkbook or making change)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Thank you for completing this questionnaire.

June 2005 PROCOG – Informant Version

The PROCOG is a 55-item self-administered questionnaire designed to measure a range of patient reported outcomes unique to individuals with cognitive impairment of mild to moderate severity. It was designed to be suitable for individuals with mild cognitive impairment as well as Dementia of the Alzheimer's Type. There is a patient version and an informant version. The informant version is for completion by an informant familiar with the individual with cognitive impairment. This instrument was designed to be completed independently by the respondent. It is recommended that the informant be familiar with the individual on an ongoing basis, with a minimum of in-person interaction of once per week. We recommend collection of information about the informant's relationship to patient (e.g., spouse, adult child, friend).

Scoring: Questions are rated on a 4-point Likert scale, with a total of 4 different response scales (e.g., *none of the time* to *all of the time*; *not at all* to *a great deal*). Higher values indicate greater severity of symptoms and their impact. A total score is computed as the sum of all items (score range: 0-220). Subscale scores are calculated as the mean value of all items within the subscale for multi-item subscales, and as the item value for the single-item Long Term Memory subscale (score range 0-4).

Subscales: There are 7 subscales:

- Affect (items 17, 18, 19, 20, 21, 22, 37, 38, 39, 40, 52),
- Skill Loss (items 35, 36, 41, 43, 45, 46, 47, 48, 50, 53, 55),
- Semantic Memory (items 2, 23, 24, 25, 26),
- Memory for Recent Events (items 2, 27, 28, 29, 30, 31, 32, 33),
- Cognitive Functioning (items 1, 4, 5, 6, 7, 8, 9, 10, 11, 42),
- Social Impact (items 12, 13, 14, 15, 16, 44, 49, 51, 54), and
- Long Term Memory (item 34).

An individual subscale score is set to missing if >50% of items within that subscale are missing. A total score is calculated only if >50% of items have non-missing data.

Contact Information: For further information please contact:

Lori Frank, PhD Center for Health Outcomes Research, United BioSource Corporation
7101 Wisconsin Avenue, Suite 600

Bethesda, MD 20814

Voice: 301 986 6762 FAX: 301 654 9864 E-mail: Lori.Frank@unitedbiosource.com Date

Completed: _____ Initials: _____

PROCOG – Informant Version

Below are some questions about ways the memory of the study participant affects his/her life. For each question, think about the **last two weeks**. Please check the response that best describes the person, where **0** is ***None of the time***, and **4** is ***All of the time***. If you are unsure about how to answer a question, please give the best answer you can.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
	0	1	2	3	4
1. How much does the person rely on reminder notes, lists, or calendars?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2. Does the person walk into a room and forget why he/she went there?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. Does the person have difficulty finding words to say what he/she wanted to say?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
4. Does it take the person longer than he/she would like to figure things out?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5. Does the person get lost finding his/her way to places that he/she has been many times before?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6. Does the person have trouble finding things around the house?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7. Does the person forget where things are kept in the house (for example, where the sugar bowl belongs)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8. Does the person have difficulty following the meaning of things he/she reads?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9. Does the person have trouble concentrating on conversations?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10. Does the person have trouble concentrating on what he/she reads?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11. Does the person misplace things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12. How often do family members or friends say the person forgets things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
13. Do family members or friends say the person repeats the same questions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
	0	1	2	3	4
14. Do family members or friends say the person repeats the same stories or jokes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15. Because of the person's memory or thinking problems, how often has the person cut back on social activities outside the home?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16. Because of the person's memory or thinking problems, how often have family members or friends avoided the person?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17. How often does the person feel embarrassed or ashamed about his/her memory?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
18. Because of the person's memory or thinking problems, how often does he/she get frustrated?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19. Because of the person's memory or thinking problems, how often does he/she get angry?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20. Because of the person's memory or thinking problems, how often does he/she feel anxious or tense?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
21. How often do the person's memory or thinking problems make him/her feel sad?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
22. Because of the person's memory or thinking problems, how often does he/she feel concerned about the future?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways the study participant's memory affects his/her life. For each question, think about the ***last two weeks***. Please check the response that best describes the person, where **0** is ***Not at all difficult***, and **4** is ***Extremely difficult***. If you are unsure about how to answer a question, please give the best answer you can.

	Not at all difficult	A little bit difficult	Somewhat difficult	Very difficult	Extremely difficult
	0	1	2	3	4
23. How difficult does the person find remembering names of people he/she knows well, like family or friends?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
24. ...remembering names of people he/she doesn't see often?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
25. ...remembering names of new people he/she meets?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
26. ...remembering names of common objects or things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
27. ...remembering what he/she just read?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
28. ...remembering what he/she just heard?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
29. How difficult does the person find remembering his/her plans for each day?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
30. ...remembering things that happened in the last week?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
31. ...remembering things he/she did yesterday?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
32. ...remembering things he/she did earlier in the day?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
33. ...remembering what he/she was doing if he/she got interrupted?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
34. ...remembering events from years ago?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
35. How difficult does the person find following written instructions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
36. How difficult does the person find following spoken instructions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways the study participant's memory affects his/her life. For each question, think about the last two weeks. Please check the response that best describes the person, where 0 is **NO, not at all**, and 4 is **YES, completely**. If you are unsure about how to answer a question, please give the best answer you can.

	NO, not at all	A little bit	Somewhat	Very much	YES, completely
	0	1	2	3	4
37. Does the person get annoyed at him- or herself because of his/her memory or thinking problems?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
38. Does the person feel embarrassed because of forgetting things?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
39. Because of the person's memory or thinking problems, does he/she feel less confident in him- or herself?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
40. Because of the person's memory or thinking problems, does he/she feel that he/she is less effective or successful in his/her life?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
41. Because of the person's memory or thinking problems, has he/she cut back on his/her usual hobbies or activities?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
42. Is the person's thinking fuzzy or not sharp?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
43. Does the person try to hide his/her memory or thinking problems from others?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
44. Because of the person's memory or thinking problems, has he/she stopped doing things he/she used to enjoy?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

	NO, not at all	A little bit	Somewhat	Very much	YES, completely
	0	1	2	3	4
45. Because of the person's memory or thinking problems, are there hobbies or activities he/she doesn't do as well as he/she once could?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
46. Because of the person's memory or thinking problems, does he/she find that he/she doesn't perform household chores as well as he/she once did (for example, preparing dinner, fixing things around the house)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
47. Because of the person's memory or thinking problems, does he/she find that he/she doesn't perform activities as well as he/she once did (for example, playing cards, working at the computer)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
48. Because of the person's memory or thinking problems, does he/she find it more difficult to write or do activities with his/her hands now?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
49. Does the person think friends call him/her less than they used to because of his/her memory or thinking problems?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
50. Because of the person's memory or thinking problems, have family routines changed, like who does most of the driving or cooking or who usually handles finances?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Below are some more questions about ways the study participant's memory affects his/her life. For each question, think about the ***last two weeks***. Please check the response that best describes the person, where **0** is ***Not at all***, and **4** is ***A great deal***. If you are unsure about how to answer a question, please give the best answer you can.

	Not at all	A little bit	Somewhat	Very much	A great deal
	0	1	2	3	4
51. Do friends or family members say the person is more irritable now than before?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
52. Do the person's memory or thinking problems add to his/her stress level?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
53. Because of the person's memory or thinking problems, does he/she find it more difficult to decide what to wear than it used to be?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
54. Because of the person's memory or thinking problems, how often has he/she cut back on seeing friends?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
55. Because of the person's memory or thinking problems, does he/she make more mistakes with money now (for example, when balancing the checkbook or making change)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Qu'est-ce que BEST ?

BEST pour Belgian Screening Tools est le nom d'une étude réalisée par l'Université de Gand, service des Sciences Infirmières, à la demande du Service Public Fédéral de la Santé Publique, Sécurité Alimentaire et Environnement.

Objectif de BEST ?

Le but de ce projet est de construire une base de données contenant des instruments de mesures validés scientifiquement. Dans le but d'objectiver les diagnostics et résultats des interventions infirmières, des instruments de mesures fiables et valides doivent être disponibles pour démontrer l'efficacité des soins infirmiers.

Notre attention se porte sur les instruments de mesure utilisables pour scorer les interventions infirmières du nouveau Résumé Infirmier Minimum ou DI-RHM.

Que pouvez-vous trouver dans ce rapport ?

Le rapport décrit les différents instruments de mesure. En plus, si nous en avons reçu l'autorisation des auteurs, l'instrument est mis à votre disposition. Les instruments de mesure présentant une fiabilité et une validité élevées ont également fait l'objet d'une traduction vers le néerlandais et le français.

Les chefs de projet UGent

Prof. dr. T. Defloor
Prof. dr. M. Grypdonck

Les collaborateurs du projet UGent

M. Daem
Dr. K. Vanderwee

Le chef de projet UCL

Dr. M. Gobert

Le collaborateur du projet UCL

C. Piron

Le chef de projet FOD

B. Folens

Le collaborateur du projet FOD

M. Lardennois

Daem, M., Piron, C., Lardennois, M., Gobert, M., Folens, B., Spittaels, H., Vanderwee, K., Grypdonck, M., & Defloor T. (2007). Mettre à disposition une base de données d'instruments de mesure validés: le projet BEST. Bruxelles: Service Public Fédéral Santé Publique, Sécurité de la Chaîne alimentaire et Environnement.