APATHY INVENTORY
IA

The principle of the Apathy Inventory (*IA*) is to obtain information on the presence of apathy in patients with brain disorders. The Apathy Inventory is composed of 3 versions:
Caregiver version
Patient version
Clinician version
Each version assess the 3 same clinical dimensions:
- Emotional blunting
- Lack of initiative
- Lack of interest

General principle

At the time of the first assessment questions deal with behavior changes having appeared since the beginning of the disease. Behavior traits found throughout the life of the patient and not having changed since the evolution of the disease are not taken into account, even if they were abnormal.
It is also possible to use the IA **to measure changes occurred in a specific time lapse** (eg. Found during the last four weeks or since the beginning of treatment given by a physician).

Results analysis

In clinical research there is different possible cut off score
In clinical practice the most relevant scores are:
In the caregiver version:
- According to the interview rule, the presence compared to the absence of one of the IA dimension
- According to the quantitative rule a score > 2 in one of the IA dimension
Anosognosia: the caregiver – patients discrepancy IA total score
In the clinical version:
- A score equal or upper to 4 is pathological.

References:

- Robert PH, Clairet S, Benoit M, Koutaich J, Bertogliati C, Tible O, Caci H, Borg M, Brocker P, Bedoucha P. The Apathy Inventory: assessment of apathy and awareness in Alzheimer's disease Parkinson's disease and Mild cognitive impairment. International Journal of Geriatric Psychiatry, 17: 1099 – 1105, 2002
- Benoit M, Clairet S, Koulibaly P.M., Darcourt J, Robert P.H. Brain perfusion correlates of the Apathy Inventory dimensions of Alzheimer's disease. *International Journal of Geriatric Psychiatry*; 19: 864-869, 2004
- Robert,P.H., Berr,C., Volteau,M., Bertogliati,M., Benoit,M., Mahieux,F., Legrain,S.,Dubois,B. Neuropsychological performance in mild cognitive impairment with and without apathy. *Dementia and Geriatric cognitive dis.* 21 : 192-197, 2006

Email: massa.i@chu-nice.fr or robert.ph@chu-nice.fr

IA CAREGIVER INSTRUCTION

IA caregiver version is based on responses gathered from an accompanying person, preferably intimately familiar with the patient's behavior.
The interview is best conducted with the caregiver in the absence of the patient to facilitate an open discussion of behaviors. At the beginning of the interview, tell the accompanying person that « *these questions should evaluate the behavior of your relative…You should usually be able to respond by 'yes' or 'no', and please try to answer briefly*. »
Questions should be asked exactly as written. If the accompanying person doesn't understand, the question should be clarified.
First of all the IA caregiver version is a structured interview if the response to the questions are negative, the rater proceeds to the next dimension. If the caregiver responds positively and confirms the presence of at least one dimension of the IA, the patient is recorded as presenting a symptom of apathy.
In a second step and if the response is positive the quantitative evaluation (the frequency and gravity) must be explored
To determine the degree of frequency, tell the person that you are interviewing that *« I would now like to know what frequency these problems arise ».*
To determine the degree of severity**,** tell the person that you are interviewing *"I would now like to know what the **degree of severity** of these behavior problems is. By degree of gravity I mean, to what degree are they disturbing or a handicap to the patient?"*
It is possible to obtain 4 scores:

- for each of three items, a score of Frequency x Severity (F x S) over 12
- A global score of 36 corresponding to the sum of three previous F x S scores

IA PATIENT INSTRUCTION

It is also possible to obtain the point of view from the subject himself on the same items. The interview is best conducted with the patient in the absence of the caregiver. The same questions result in scores directly obtained by using a visual analogical scale or a numeric evaluation between 1 – 12. If the patient does not understand the visual scale functioning, try to obtain the score by a verbal rating (severity from 1 mild to 12 extremely severe according to the patient point of view.

IA CLINICIAN INSTRUCTION

IA clinician version is based on clinician (medical doctor, psychologist, member of the care staff) point of view following an observation (during a consultation and / or a testing session and / or a day hospitalization and / or the day for patient living in institution) and global evaluation
The assessment *(0 to 4 score)* has to take into account several factors:
- Useful observation points (cf page 6)
- Patient history and her / his usual social environment
- Patient personality
- Information coming from the caregiver (when available)
- Patient's responses to the clinical domains questions
- Patient level of autonomy in activity of daily living

APATHY INVENTORY - *IA CAREGIVER*

Name: **date :**

Type of evaluation*:*

First Evaluation

Follow up evaluation: time since the previous evaluation

1 - Emotional blunting F x S = / 12

Is he /she is as affectionate and express emotion as usual?

Yes = 0 **No** = *rate frequency and severity*

FREQUENCY

Occasionally: less than once a week	**1**
Often: about once a week	**2**
Frequently: several times a week but less than everyday	**3**
Very frequently: essentially continuously present	**4**

SEVERITY

Mild	**1**
Moderate	**2**
Marked	**3**

2 – Lack of initiative: F x S = / 12

Is he /she initiates a conversation and or make decisions?

In daily life, does he/she refer to you when he takes a decision or when he is asked a question ?

Yes = 0 **No** = *rate frequency and severity*

FREQUENCY

Occasionally: less than once a week	**1**
Often: about once a week	**2**
Frequently: several times a week but less than everyday	**3**
Very frequently: essentially continuously present	**4**

SEVERITY

Mild	**1**
Moderate	**2**
Marked	**3**

3 – Lack of interest: F x S = / 12

Does he / she:

• Seem interested in the activities and plans of others?

• Interested in friends and family members?

• Enthusiastic about his / her usual leisure or professional interests?

Yes = 0 **No** = *rate frequency and severity*

FREQUENCY

Occasionally: less than once a week	**1**
Often: about once a week	**2**
Frequently: several times a week but less than everyday	**3**
Very frequently: essentially continuously present	**4**

SEVERITY

Mild	**1**
Moderate	**2**
Marked	**3**

TOTAL SCORE: (1+2+3) **/ 36**

APATHY INVENTORY - *IA PATIENT*

It is also possible to obtain the point of view from the subject himself on the same items. The interview is best conducted with the patient in the absence of the caregiver. The same questions result in scores directly obtained by using a visual analogical scale or a numeric evaluation between 1 – 12. If the patient does not understand the visual scale functioning, try to obtain the score by a verbal rating (severity from 1 mild to 12 extremely severe according to the patient point of view.

1 - Emotional blunting

Do you have the impression of being as affectionate as usual? Do you express your emotions?

YES = 0

NO **=** *Could you evaluate the amount of this emotional blunting from, "*mild*" at the extreme left to "*Severe*" at the extreme right*

Mild _____ **Severe**

2 – Lack of initiative:

Do you spontaneously begin a conversation? Do you make decisions and initiatives?

YES = 0

NO= *Could you evaluate the amount of this lack of initiative from, "*mild*" at the extreme left to "*Severe*" at the extreme right*

Mild _____ **Severe**

3 – Lack of interest:

Do you have points of interest?

- Are you still interested by other people's activities or projects?
- Are you interested in your friends and family members?
- Are you still enthusiastic about your points of interest? (Hobbies?)

YES = 0

NO= *Could you evaluate the amount of this lack of interest from, "*mild*" at the extreme left to "*Severe*" at the extreme right*

Mild _____ **Severe**

TOTAL SCORE: (1+2+3) ***/ 36***

APATHY INVENTORY - *IA CLINICIAN*

Name: **date:**
Type of evaluation:
First Evaluation
Follow up evaluation: time since the previous evaluation:

On this page (below) are the same questions from the caregiver and patient version as well as the scoring guide.
On the following page (reverse side) are the instructions for scoring according to whether the patient is an outpatient or in an institution.

IA dimension	***Score/4***
Emotional blunting: Does the patient show affection? Does s/he show emotions? ***Evaluation / 4*** *0 No problem* *1* *2 Moderate problem* *3* *4. Major problem*	
Loss of initiative: Does the patient initiate a conversation and or make decisions? ***Evaluation / 4*** *0 No problem* *1* *2 Moderate problem* *3* *4. Major problem*	
Loss of interest: Does the patient have interests? Is s/he interested in the activities or projects of others? Does s/he show interest in friends and family members? ***Evaluation / 4*** *0 No problem* *1* *2 Moderate problem* *3* *4. Major problem*	
TOTAL SCORE (of 12)	

Useful Points for rating the Clinician score

For an ambulatory patient (outpatient, Day Hospital ambulatory care, medical visit)

Emotional Blunting: Take into account:

- Facial expression and gestures appropriate to conversation

-The capacity of a patient to express an emotional reaction during the course of a humorous conversation, or, on the other hand, during the course of a sad conversation.

- Reaction to presentation of a new medical diagnosis or medical test results

-The capacity of the patient to express an emotional reaction when proposed a reward (for example when such a test is taken during the course of a neuropsychological assessment, a medical visit or in a day hospital)

Loss of initiative: Take into account:

- Spontaneous capacity to speak and to integrate oneself into a conversation, to ask for details.
- The relationship with the caregiver (when a question is posed directly to the patient, does the patient turn their head towards the caregiver, asking for s/he to respond).
- The capacities of initiative of the patient at the moment of entering the doctor's office or at the time of leaving, their response at requests to do things (the fact of doing something only after being stimulated or asked to do so indicating a lack of spontaneity of initiative and should be taken into account in the evaluation).
- Performance on cognitive tests evaluating the capacity for initiative.

Loss of interest: Take into account:

- The level of interest of the subject in the interview: mimicking posture and response, attention and eye contact.
- The quality and quantity of details provided by the patient when asked about their personal interests.
- The number of interests evoked by a test objectively exploring the patient interests. [eg TILT test]

For institutionalized patients (Hospital, Rehabilitation Medicine, Assisted Living or Nursing Home)

Emotional Blunting: Take into account:

- Facial expression and gestures appropriate to conversation

-The capacity of a patient to express and emotional reaction during the course of a humorous conversation, or, on the other hand, during the course of a sad conversation.

- Reaction to presentation of a new medical diagnosis or medical test results

-The capacity of the patient to express an emotional reaction when proposed a reward (for example when such a test is taken during the course of a neuropsychological assessment, a medical visit or in a stimulation program)

Loss of initiative: Take into account:

- Spontaneous capacity to speak and to integrate oneself into a conversation, to ask for details.
- The relationship with the caregiver (when a question is posed directly to the patient, does the patient turn their head towards the caregiver, asking for s/he to respond).
- The capacities of initiative of the patient at the moment of entering the doctor's office or at the time of leaving, their response at requests to do things (the fact of doing something only after being stimulated or asked to do so indicating a lack of spontaneity of initiative and should be taken into account in the evaluation).
- Performance on cognitive tests evaluating the capacity for initiative when they are available.

Please Note: Do not count as initiatives repetitive behaviors (pacing or stereotypic questions).

Loss of interest: Take into account:

- The level of interest of the subject in the interview: mimicking interviewer's posture and response, attention and eye contact.

-The level of interest of the subject in staff. Does she or he attempt to understand the function of different professional staff or their first names?

-The level of interest of the subject in other patients or residents.

- The questions she or he asks about their health, the results of tests, length of stay and return home (if the stay is temporary).
- The quality and quantity of details provided by the patient when asked about their personal interests.
- Questions about their everyday environment and their family.
- The desire to participate in workshops or activities, and their level of active participation.
- The number of interests evoked by a test objectively exploring the patient interests. [eg TILT test]