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The Ambient Assisted Living Joint Programme

understAID: a platform that helps informal caregivers to understand and aid their demented relatives



Call: Ambient Assisted Living Joint Programme Call 5

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PARTICIPANTS

1. Demographic data (Table 1)

This report presents the combined data from the research conducted in Poland, Spain and Denmark in relation to Task 2.2 of the understAID project. National results are presented in separate reports and not included in this presentation of data.

The final sample was composed of 121 participants from the 3 countries. The data was collected in cooperation with the following institutions from the participating countries.

SPAIN:

The national sample was collected at three different day care centres:

1. The Gerontological Complex "La Milagrosa", from A Coruña
2. The Association of Relatives of Alzheimer Patients (AFAL), from Ferrol
3. The day care centre SARAIVA, from Pontevedra

POLAND:

The national sample was collected at three different day care centres from Greater Poland:

1. Winiary Health Clinic from Poznań
2. Poznań Alzheimer Association
3. Health Centre from Koźiegłowy

Denmark:

1. The national sample was collected in the municipality Skanderborg by their dementia contact and support team.

The mean age of the relatives were 62,2 years (range 25-88). The most relevant data that can be drawn from Table 1 are as follows; There is a high number of feminine caregivers when compared to male ones (70,2% females versus 29,8% males). Most of the participants are married, with no children under 14 years of age. The largest group of educational years is 9-12 years and the occupation categories mostly selected were "Physical labour" and "Intellectual labour" but the close to half of the relatives where retired.

Table 1. Caregivers: socio demographic data

Gender	N	%
Male	36	29,8
Female	85	70,2
Marital status		
Single	15	12,4
Married	100	82,6
Separated/divorced	4	3,3
Widow/er	1	0,8
Cohabiting	1	0,8
Number of children younger than 14 years of age		
1	3	3,2
2	8	8,4
No children	83	87,4
Disabled children	1	1,1
Educational years		
0-4 years	2	1,7
5-8 years	21	17,5
9-12 years	56	46,7
College or higher degree	41	34,2
Occupation		
Physical labour	26	22,6
Intellectual labour	28	24,3
Unemployed	10	8,7
Retired	51	44,3
	Mean	Standard deviation
Household income	€ 21.245	30.224

2. Caregiving situation (Table 2)

With regard to the caregiving situation, the mean of caregiving time is around 5,5 years, and the main caregiver is an adult child or a spouse, and the amount of caregiving time per week is more than 20 hours. 19,2% of caregivers left work in order to take care of a relative and a 16% changed their working shifts.

Regarding the caregiving support, half of them rely on the day care centre to help them with their relatives. More than 40% consult's with the family doctor and relatives/friends (66,1%) to help them with the caregiving tasks. About 30% relied on home support services - public or private. Self-help groups was a source of support for 14,9% of the relatives. Around 25% of caregivers take care of other relatives in addition to the demented relative, and 49% of the participants never thought about institutionalizing their demented relative.

Table 2. Caregiving situation description

	Mean	Standard deviation
Caregiving time (months)	65,7	48,9
	N	%
Family relationship		
Spouse	55	45,5
Adult child	49	40,5
Father/mother in law	3	2,5
Sibling	2	1,7
Others	12	9,9
Hours per week of caregiving		
1-5	4	3,3
6-10	6	5,0
11-15	10	8,3
16-20	5	4,1
More than 20	96	79,3
Lost work	23	19,2
Changed of working shift	19	16,0
Support		
Family doctors (GP)	50	41,3
Dementia supervisor from	42	34,7

the municipality		
Relatives/friends	80	66,1
Home support services from the municipality or private firm	36	29,8
Tele-care	1	0,8
Day centre	64	52,9
Respite care in an adult centre	9	7,4
Self-help groups	18	14,9
Local parish	4	3,3
No support	1	0,8
Other	18	18,9
Caring of other relative	29	24,4
Feelings of institutionalization		
Never	59	49,2
Sometimes	50	41,7
Frequently	11	9,2

3. Use of ICT (Table 3)

Table 3 shows the use of ICT done by the caregivers. Around 40% uses Internet to look for information about their relatives' disease and the vast majority only used it once a week. The same percentage applies to the use of social networks with different frequency of use: Facebook, Twitter, YouTube etc.

Table 3. Use of ICT

	N	%
Use Internet to search for information	48	39,7
Several times a week	6	14,0
Approximately once a week	37	86,0
Use of social networks	29	24,0
Several times a day	6	20,7
Approximately once a day	6	20,7
Several times a week	8	27,6
Approximately once a week	8	27,6

4. Patient profile (Table 4)

When analysing the patients' profile, the data show that 53% of them suffer from Alzheimer disease. Vascular and frontal-temporal dementias are less frequent. 29% of the patients suffer from a mixture of several pathologies such as ictus, Alzheimer disease, Parkinson, and Pick dementia, among others. Most of the participants were classified as GDS 6 - while GDS 4 and 7 were also strongly represented. FAST stage 6 and 7 - including sub stages - showed to be larger than FAST 4 and 5 stages, but not of a greater magnitude . The data indicates that the demented persons in this study are relatively well represented from mild to severe dementia.

Table 4. Patients profile

Diagnosis	N	%
Alzheimer's disease	42	53,2
Lewy bodies	2	2,5
Fronto-temporal	4	5,1
Vascular	8	10,1
Others	23	29,1
GDS stage		
GDS 4	28	23,5
GDS 5	18	15,1
GDS 6	39	32,8
GDS 7	25	21,0
FAST stage		
FAST 4	16	13,8
FAST 5	13	11,2
FAST 6a	5	4,3
FAST 6b	8	6,9
FAST 6c	18	15,5
FAST 6d	7	6,0
FAST 6e	8	6,9
FAST 7a	11	9,5
FAST 7b	4	3,4
FAST 7c	1	0,9
FAST 7d	7	6,0
FAST 7e	7	6,0
FAST 7f	10	8,6

5. Psychological and physical status of the caregiver

All the participants have high levels of burden (mean 42,2) following the cut-off of Schreiner et al. (Schreiner A. S., Morimoto, T., Arai, Y. & Zarit, S. (2006). Assessing family caregiver's mental health using a statistically derived cut-off score for the Zarit Burden Interview (Aging and Mental Health, March 2006, 10 (2), 107-111). The mean of people whom the caregivers can count on is 2,1, with a mean value of 4,6 for satisfaction with this social support. Regarding depression symptomatology, the mean of the CES-D was of 16,9 (SD 10,5) and with a cut-off value of 16 for depressive symptoms, this indicating the presence of depressive symptoms in the group to some degree. Most of the participants feel that they are competent when taking care of their relatives (CSS mean of 13,6, maximum 16). As regards the satisfaction in caregiving, the mean in the RCSS was of 21, being 30 the maximum possible score. Consequently, our sample of caregivers feels high levels of satisfaction with the caregiving. Among the sample 45% estimated their own health as Good or Very good and around 21 % of the relatives are under psychoactive drugs prescription.

Table 5. Physical and psychological status of the caregiver

	Mean	Standard deviation
Zarit Scale	42,2	14,0
Social support		
Social support received	2,1	1,2
Satisfaction with social support received	4,6	1,4
CES-D	16,9	10,5
CCS	13,6	1,9
RCSS	21,0	6,0
Self-estimation of health status	N	%
Very good	17	14,0
Good	38	31,4
Fair	47	38,8
Poor	16	13,2
Very poor	3	2,5
Psychoactive drugs intake	25	20,7

INITIAL ASSESSMENT-QUESTIONNAIRE 1

The following section shows a series of tables analysing the daily situations that the caregivers described during the Initial Assessment. These are common situations that usually arise during the care of the relative. Each table records the frequency for the behaviour (how often the problem affects the caregiver daily live), the severity for the behaviour (how does the problem affect the caregiver's daily life and also the patient's daily life) and the discomfort this problem causes to the caregiver.

1. Selection of tags

These tables contain the results collected during the Initial Assessment of the caregiver, and correspond to the Questionnaire 1 document. The tables are separated by the Main Categories used to classify the deficits of the patient: Table 6: Daily tasks, Table 7: Behaviour, Table 8: Social activities and Table 9: Cognitive activities. These tables contain the number of caregivers that chose an answer ("n") and also the percentage ("%"). In order to select those tasks or questions that will be included in the "UnderstAID Platform" Menu, it was taken into account the level of **discomfort** that every situation caused on the caregiver. Those questions were discarded in which the number of caregivers that chose the "Nothing" option, was higher than the total number of caregivers that chose any of the three other options (Some, Quite a lot and A lot).

2. Classification of tags

Once selected the question, the answer was classified as "Highly relevant" tag, "Relevant" tag or "Not particular relevant" tag. To do that, it was reviewed the number of caregivers that selected every answer ("n"; Some, Quite a lot and A lot) and the more frequent answer was chosen. If the more frequent was "A lot", it was considered as "Highly relevant" tag to be included in the platform. If the more frequent answer was "Quite a lot" it was considered as "Relevant"

tag to be included in the platform. And finally, if the more frequent answer was “Some” it was considered as “Not particular relevant” tag to be included in the platform. In the cases of several options with the same “n”, it was calculated the mean to choose the category.

3. Results: selection of tags

Table 6, Daily Tasks, records these sub-categories: Personal hygiene, Personal appearance, Household chores, Sleep behaviour or disorders and Appetite and eating changes. Following the instructions as explained, only one item was passed on for further evaluation and it was “The patient does not take as much care of his/her personal hygiene and appearance as usually” from the sub-categories “personal hygiene”.

Table 7, Behaviour, records these sub-categories: Suspiciousness and false beliefs, General mood, Anxiety level, Indifference/Apathy/Motivation to act, Apprehension/Uneasiness and Agitation/Lack of inhibition/Aggressiveness. After applying the selection criteria, 6 items passed on for further evaluation. All the items from “Indifference/Apathy/Motivation to act” was selected and to from “General mood” and one from the sub-category “Apprehension/Uneasiness”.

Table 8, Social activities, records these sub-categories: Participation in conversation, Activities with family and friends, Engagement in hobbies and recreation and Socially acceptable conduct. All the items were passed on for further evaluation apart from one being “the patient is rude or childish”. In all 7 items was chosen.

Table 9, Cognitive activities, contains these sub-categories: Name and event recollection, Finding appropriate words, Orientation, Awareness of the environment and Make decisions. All items were selected (13 in total) and only 2 were discarded. The items not chosen for the platform was; “The patient has trouble finding the appropriate word when trying to communicate” and “The

patient makes language or pronunciation errors” both from the “Finding appropriate words” sub-categories.

In total 27 items was passed on for classification.

4. Results: classification of tags

Tables 10 and 11 content the selected items for “High relevant” tags and the “Not particular relevant” tags. No items were classified as “Relevant”.

Twenty one items were classification as “High relevant” but only one was from the “Daily tasks” main category. Five were selected from the behaviour category and notably all from the sub-category “Indifference/Apathy /Motivation to act”. Five was selected from social activities and her again all from the sub-category “engagement in hobbies and recreation”. Ten items was selected from the main category “cognitive activities” – 3 from “name and event recollection”, 2 from “orientation”, 5 from “awareness of the environment” and 2 from “make decisions”.

Six items was classified as “not particular relevant tags”, no one from the “Daily tasks” main category, and only 1 from behaviour main category and 2 from the social activities main category. The remaining 3 was from cognitive activities under “awareness of the environment” and “name and event recollection”.

Table 6. Q1. Daily tasks (n, %)

	Frequency					Severity				Discomfort				
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA	Nothing	Some	Quite a lot	A lot	NA
Personal hygiene														
The patient does not take as much care of his/her personal hygiene and appearance as usually	23 (19,2)	4 (3,3)	7 (5,8)	84 (70,0)	2 (1,7)	46 (38,0)	27 (22,3)	45 (37,2)	2 (1,7)	46 (38,7)	29 (24,4)	11 (9,2)	32 (26,9)	1 (0,8)
The patient gets upset with those trying to care for him/her or resist activities such as bathing or changing clothes	59 (49,2)	19 (15,8)	18 (15,0)	22 (18,3)	2 (1,7)	65 (55,1)	28 (23,7)	23 (19,5)	2 (1,7)	59 (49,6)	26 (21,8)	8 (6,7)	24 (20,2)	2 (1,7)
Personal appearance														
You have to tell the patient that he/she should brush his/her teeth or comb his/her hair	42 (34,7)	4 (3,3)	9 (7,4)	61 (50,4)	5 (4,1)	65 (53,7)	27 (22,3)	23 (19,0)	5 (4,1)	63 (52,5)	26 (21,7)	7 (5,8)	20 (16,7)	4 (3,3)
You have to assist the patient in brushing his teeth	47 (39,5)	3 (2,5)	9 (7,6)	58 (48,7)	2 (1,7)	64 (55,2)	26 (22,4)	24 (20,7)	2 (1,7)	62 (53,4)	25 (21,6)	9 (7,8)	17 (14,7)	3 (2,6)
You have to assist the patient in combing his hair	44 (36,7)	5 (4,2)	8 (6,7)	62 (51,7)	1 (0,8)	70 (59,8)	25 (21,4)	21 (17,9)	1 (,9)	71 (60,2)	23 (19,5)	6 (5,1)	16 (13,6)	2 (1,7)
You have to assist the patient to get ready	33 (27,5)	4 (3,3)	5 (4,2)	78 (65,0)	0 (0,0)	59 (50,9)	32 (27,6)	25 (21,6)	0 (0,0)	61 (52,6)	27 (23,3)	12 (10,3)	15 (12,9)	1 (0,9)
Household chores														
You have to assist the patient in shopping	10 (8,3)	3 (2,5)	6 (5,0)	102 (84,3)	0 (0,0)	57 (48,3)	25 (21,2)	36 (30,5)	0 (0,0)	64 (54,7)	19 (16,2)	10 (8,5)	24 (20,5)	0 (0,0)
You have to assist the patient in cooking	9 (7,4)	2 (1,7)	5 (4,1)	105 (86,8)	0 (0,0)	56 (47,9)	26 (22,2)	35 (29,9)	0 (0,0)	62 (53,4)	25 (21,6)	9 (7,8)	20 (17,2)	0 (0,0)
You have to assist the patient to use the electrical appliances	15 (12,6)	7 (5,9)	9 (7,6)	88 (73,9)	0 (0,0)	62 (54,9)	22 (19,5)	29 (25,7)	0 (0,0)	68 (59,6)	18 (15,8)	8 (7,0)	20 (17,5)	0 (0,0)
Sleep behaviour or disorders														

The patient has difficulty sleeping	73 (61,3)	16 (13,4)	11 (9,2)	18 (15,1)	0 (0,0)	75 (63,0)	21 (17,6)	20 (16,8)	0 (0,0)	62 (53,4)	21 (18,1)	11 (9,5)	22 (19,0)	0 (0,0)
The patient wanders at night or get dressed	95 (80,5)	8 (6,8)	7 (5,9)	5 (4,2)	2 (1,7)	90 (81,1)	9 (8,1)	10 (9,0)	2 (1,8)	83 (74,1)	8 (7,1)	5 (4,5)	14 (12,5)	2 (1,8)
The patient awakes you or any member of your family during the night	72 (60,5)	15 (12,6)	10 (8,4)	21 (17,6)	0 (0,0)	79 (69,3)	17 (14,9)	18 (15,8)	0 (0,0)	69 (59,5)	11 (9,5)	15 (12,9)	21 (18,1)	0 (0,0)
Appetite and eating changes														
The patient has some change in appetite, weight, or eating habits	53 (44,2)	11 (9,2)	14 (11,7)	41 (34,2)	0 (0,0)	69 (57,5)	26 (21,7)	22 (18,3)	0 (0,0)	68 (58,1)	23 (19,7)	12 (10,3)	14 (12,0)	0 (0,0)
The patient has a change in the kind of food he/she likes	75 (62,5)	10 (8,3)	9 (7,5)	25 (20,8)	0 (0,0)	90 (76,3)	19 (16,1)	9 (7,6)	0 (0,0)	85 (72,6)	19 (16,2)	7 (6,0)	6 (5,1)	0 (0,0)
The patient has an increase in appetite	72 (61,5)	6 (5,1)	7 (6,0)	21 (17,9)	10 (8,5)	79 (70,5)	13 (11,6)	10 (8,9)	10 (8,9)	76 (67,3)	14 (12,4)	6 (5,3)	7 (6,2)	10 (8,8)
The patient has a decrease in appetite	12 (30,8)	2 (5,1)	1 (2,6)	8 (20,5)	16 (41,0)	17 (43,6)	1 (2,6)	5 (12,8)	16 (41,0)	13 (33,3)	7 (17,9)	2 (5,1)	1 (2,6)	16 (41,0)

Table 7. Q1. Behaviour (n, %)

	Frequency					Severity				Discomfort				
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA	Nothing	Some	Quite a lot	A lot	NA
Suspiciousness and false beliefs														
The patient believes in things that you know are unreal	63 (52,1)	20 (16,5)	9 (7,4)	23 (19,0)	6 (5,0)	68 (56,7)	24 (20,0)	21 (17,5)	6 (5,0)	68 (57,1)	20 (16,8)	7 (5,9)	18 (15,1)	6 (5,0)
The patient has hallucinations such as seeing false visions or hearing false voices	82 (70,7)	11 (9,5)	4 (3,4)	14 (12,1)	5 (4,3)	84 (73,0)	14 (12,2)	12 (10,4)	5 (4,3)	85 (73,9)	13 (11,3)	2 (1,7)	10 (8,7)	5 (4,3)
General mood														
The patient loses their emotional responsiveness	30 (25,6)	17 (14,5)	22 (18,8)	48 (41,0)	0 (0,0)	45 (38,1)	23 (19,5)	47 (39,8)	0 (0,0)	34 (29,6)	24 (20,9)	24 (20,9)	33 (28,7)	0 (0,0)
The patient appears sad or depressed	54 (45,8)	19 (16,1)	29 (24,6)	16 (13,6)	0 (0,0)	62 (53,0)	32 (27,4)	23 (19,7)	0 (0,0)	50 (43,1)	24 (20,7)	23 (19,8)	19 (16,4)	0 (0,0)
The patient cries sometimes	86 (72,3)	22 (18,5)	7 (5,9)	4 (3,4)	0 (0,0)	83 (70,3)	23 (19,5)	12 (10,2)	0 (0,0)	77 (65,8)	22 (18,8)	7 (6,0)	11 (9,4)	0 (0,0)
The patient expresses feelings of sadness or depression	71 (60,2)	19 (16,1)	11 (9,3)	7 (5,9)	10 (8,5)	66 (56,9)	27 (23,3)	13 (11,2)	10 (8,6)	65 (56,0)	22 (19,0)	8 (6,9)	11 (9,5)	10 (8,6)
The patient comments about death of self or others (e.g. "Life isn't worth living", "I'd be better off dead")	85 (72,0)	8 (6,8)	10 (8,5)	5 (4,2)	10 (8,5)	84 (71,8)	13 (11,1)	10 (8,5)	10 (8,5)	78 (67,2)	15 (12,9)	5 (4,3)	8 (6,9)	10 (8,6)
The patient comments about feeling worthless or being a burden to others	78 (66,7)	15 (12,8)	9 (7,7)	5 (4,3)	10 (8,5)	77 (66,4)	18 (15,5)	11 (9,5)	10 (8,6)	72 (62,1)	18 (15,5)	7 (6,0)	9 (7,8)	10 (8,6)
The patient comments about feeling like a failure or about not having any worthwhile accomplishments in life	98 (83,8)	1 (0,9)	3 (2,6)	5 (4,3)	10 (8,5)	95 (83,3)	5 (4,4)	4 (3,5)	10 (8,8)	89 (77,4)	10 (8,7)	1 (0,9)	5 (4,3)	10 (8,7)
The patient talks about feeling lonely	83 (70,3)	14 (11,9)	5 (4,2)	6 (5,1)	10 (8,5)	84 (71,8)	17 (14,5)	6 (5,1)	10 (8,5)	78 (66,7)	16 (13,7)	8 (6,8)	5 (4,3)	10 (8,5)

Anxiety level														
The patient appears to be anxious, worried or frightened for no apparent reason	72 (59,5)	22 (18,2)	19 (15,7)	8 (6,6)	0 (0,0)	72 (60,0)	31 (25,8)	16 (13,3)	0 (0,0)	66 (55,5)	21 (17,6)	17 (14,3)	15 (12,6)	0 (0,0)
The patient appears to be uneasy or nervous	67 (56,3)	23 (19,3)	17 (14,3)	12 (10,1)	0 (0,0)	68 (58,1)	30 (25,6)	19 (16,2)	0 (0,0)	68 (58,1)	12 (10,3)	18 (15,4)	19 (16,2)	0 (0,0)
Indifference/Apathy/Motivation to act														
The patient has lack of initiative	23 (19,2)	14 (11,7)	12 (10,0)	71 (59,2)	0 (0,0)	38 (32,2)	31 (26,3)	49 (41,5)	0 (0,0)	37 (31,6)	21 (17,9)	19 (16,2)	40 (34,2)	0 (0,0)
The patient seems less spontaneous or less active than usual	30 (25,2)	6 (5,0)	14 (11,8)	69 (58,0)	0 (0,0)	50 (43,1)	24 (20,7)	42 (36,2)	0 (0,0)	39 (33,1)	23 (19,5)	21 (17,8)	35 (29,7)	0 (0,0)
The patient seems less interested in the activities and plans of others	29 (24,4)	6 (5,0)	14 (11,8)	70 (58,8)	0 (0,0)	58 (50,4)	20 (17,4)	36 (31,3)	1 (0,9)	46 (39,3)	20 (17,1)	24 (20,5)	27 (23,1)	0 (0,0)
Apprehension, uneasiness														
The patient feels uneasy or hyperactive	51 (42,9)	16 (13,4)	16 (13,4)	36 (30,3)	0 (0,0)	52 (43,3)	28 (23,3)	39 (32,5)	0 (0,0)	43 (36,1)	18 (15,1)	21 (17,6)	37 (31,1)	0 (0,0)
The patient does things over and over such as pace, opening closets or drawers, or repeatedly pick at things, etc.	53 (44,5)	13 (10,9)	17 (14,3)	35 (29,4)	1 (0,8)	71 (59,7)	18 (15,1)	29 (24,4)	1 (0,8)	65 (54,2)	24 (20,0)	8 (6,7)	22 (18,3)	1 (0,8)
The patient is irritable, argue or complain	65 (54,6)	16 (13,4)	13 (10,9)	18 (15,1)	7 (5,9)	65 (56,0)	24 (20,7)	20 (17,2)	7 (6,0)	64 (54,2)	17 (14,4)	10 (8,5)	20 (16,9)	7 (5,9)

Agitation, lack of inhibition, aggressiveness														
The patient destroys the property	104 (86,7)	4 (3,3)	6 (5,0)	5 (4,2)	1 (0,8)	2 (1,7)	102 (84,3)	7 (5,8)	9 (7,4)	1 (0,8)	99 (83,2)	7 (5,9)	5 (4,2)	7 (5,9)
The patient does things that embarrass you	75 (63,0)	15 (12,6)	16 (13,4)	13 (10,9)	0 (0,0)	85 (72,6)	15 (12,8)	17 (14,5)	0 (0,0)	70 (59,3)	14 (11,9)	14 (11,9)	20 (16,9)	0 (0,0)
The patient talks loudly and rapidly	81 (68,6)	12 (10,2)	7 (5,9)	10 (8,5)	8 (6,8)	79 (68,7)	13 (11,3)	15 (13,0)	8 (7,0)	76 (65,0)	10 (8,5)	11 (9,4)	12 (10,3)	8 (6,8)
The patient engages in behaviour that is potentially dangerous to self or others	98 (82,4)	11 (9,2)	4 (3,4)	5 (4,2)	1 (0,8)	94 (80,3)	10 (8,5)	12 (10,3)	1 (0,9)	87 (73,7)	13 (11,0)	6 (5,1)	11 (9,3)	1 (0,8)
The patient threatened of hurting him/herself	107 (90,7)	4 (3,4)	1 (0,8)	1 (0,8)	5 (4,2)	104 (88,9)	3 (2,6)	5 (4,3)	5 (4,3)	98 (83,1)	8 (6,8)	3 (2,5)	4 (3,4)	5 (4,2)
The patient has been verbally aggressive to you or others	64 (53,8)	17 (14,3)	19 (16,0)	11 (9,2)	8 (6,7)	66 (55,5)	28 (23,5)	17 (14,3)	8 (6,7)	59 (49,6)	22 (18,5)	13 (10,9)	17 (14,3)	8 (6,7)

Table 8. Q1. Social activities (n, %)

	Frequency					Severity				Discomfort				
	Occasionally	Often	Frequently	Very Frequently	NA	Mild	Moderate	Intense	NA	Nothing	Some	Quite a lot	A lot	NA
Participating in conversation														
The patient has the amount of speech significantly decreased	27 (23,1)	10 (8,5)	16 (13,7)	59 (50,4)	5 (4,3)	36 (30,5)	26 (22,0)	48 (40,7)	6 (5,1)	36 (30,8)	27 (23,1)	19 (16,2)	30 (25,6)	5 (4,3)
The patient has lost the ability to converse	30 (25,0)	10 (8,3)	12 (10,0)	60 (50,0)	8 (6,7)	42 (35,6)	19 (16,1)	49 (41,5)	8 (6,8)	33 (28,0)	31 (26,3)	17 (14,4)	29 (24,6)	8 (6,8)
Activities with family and friends														
The patient lost interest in friends or daily activities	38 (31,7)	9 (7,5)	11 (9,2)	59 (49,2)	3 (2,5)	52 (44,4)	21 (17,9)	39 (33,3)	3 (2,6)	39 (33,1)	31 (26,3)	18 (15,3)	29 (24,6)	1 (0,8)
The patient lost interest in friends or family members	36 (30,0)	11 (9,2)	15 (12,5)	56 (46,7)	2 (1,7)	54 (46,2)	22 (18,8)	39 (33,3)	2 (1,7)	46 (38,7)	24 (20,2)	19 (16,0)	29 (24,4)	1 (0,8)
Engagement in hobbies and recreation														
The patient lost interest in doing things or lack motivation for starting new activities	21 (17,5)	6 (5,0)	13 (10,8)	77 (64,2)	3 (2,5)	50 (42,0)	22 (18,5)	42 (35,3)	3 (2,5)	41 (35,0)	26 (22,2)	18 (15,4)	30 (25,6)	2 (1,7)
The patient is less enthusiastic about his/her usual interests	28 (23,7)	5 (4,2)	20 (16,9)	62 (52,5)	3 (2,5)	51 (44,7)	19 (16,7)	41 (36,0)	3 (2,6)	42 (36,2)	25 (21,6)	17 (14,7)	30 (25,9)	2 (1,7)
Socially acceptable conduct														
The patient do things outside what are acceptable	49 (41,9)	15 (12,8)	14 (12,0)	38 (32,5)	1 (0,9)	59 (50,4)	17 (14,5)	38 (32,5)	1 (0,9)	52 (44,4)	14 (12,0)	12 (10,3)	38 (32,5)	1 (0,9)
The patient is rude, or childish	73 (62,9)	9 (7,8)	16 (13,8)	17 (14,7)	1 (0,9)	84 (73,0)	13 (11,3)	17 (14,8)	1 (0,9)	73 (62,4)	12 (10,3)	13 (11,1)	18 (15,4)	1 (0,9)

Table 9. Q1. Cognitive activities (n, %)

	Frequency					Severity				Discomfort				
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA	Nothing	Some	Quite a lot	A lot	NA
Name and event recollection														
The patient has trouble remembering the names of relatives or friends	24 (20,3)	11 (9,3)	15 (12,7)	60 (50,8)	8 (6,8)	45 (37,5)	23 (19,2)	40 (33,3)	8 (6,7)	44 (37,9)	24 (20,7)	15 (12,9)	26 (22,4)	7 (6,0)
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	12 (10,3)	4 (3,4)	11 (9,4)	83 (70,9)	7 (6,0)	39 (33,9)	22 (19,1)	47 (40,9)	7 (6,1)	42 (36,8)	23 (20,2)	16 (14,0)	28 (24,6)	5 (4,4)
The patient asks the same question many times	37 (31,1)	10 (8,4)	14 (11,8)	51 (42,9)	7 (5,9)	54 (46,2)	19 (16,2)	37 (31,6)	7 (6,0)	49 (41,9)	23 (19,7)	17 (14,5)	22 (18,8)	6 (5,1)
The patient has trouble remembering significant past events	42 (35,6)	12 (10,2)	12 (10,2)	46 (39,0)	6 (5,1)	65 (56,5)	19 (16,5)	25 (21,7)	6 (5,2)	54 (47,0)	21 (18,3)	15 (13,0)	20 (17,4)	5 (4,3)
The patient loses or misplace things	39 (33,9)	11 (9,6)	9 (7,8)	44 (38,3)	12 (10,4)	50 (44,6)	17 (15,2)	33 (29,5)	12 (10,7)	51 (45,1)	18 (15,9)	13 (11,5)	22 (19,5)	9 (8,0)
Finding appropriate words														
The patient has trouble finding the appropriate word when trying to communicate	36 (30,8)	9 (7,7)	15 (12,8)	48 (41,0)	9 (7,7)	51 (43,2)	25 (21,2)	30 (25,4)	9 (7,6)	56 (48,7)	19 (16,5)	11 (9,6)	22 (19,1)	7 (6,1)
The patient makes language or pronunciation errors	78 (66,7)	7 (6,0)	7 (6,0)	16 (13,7)	9 (7,7)	69 (60,0)	13 (11,3)	24 (20,9)	9 (7,8)	65 (57,0)	15 (13,2)	9 (7,9)	18 (15,8)	7 (6,1)
Orientation														
The patient loses his/her orientation in common places	21 (17,6)	5 (4,2)	15 (12,6)	75 (63,0)	3 (2,5)	38 (32,2)	25 (21,2)	50 (42,4)	3 (2,5)	42 (36,2)	18 (15,5)	19 (16,4)	35 (30,2)	2 (1,7)
The patient does not know the date (month, day and time)	15 (12,7)	6 (5,1)	11 (9,3)	85 (72,0)	1 (0,8)	35 (29,7)	21 (17,8)	61 (51,7)	1 (0,8)	42 (36,2)	22 (19,0)	17 (14,7)	34 (29,3)	1 (0,9)

Awareness of the environment														
The patient has difficulty concentrating on a task	22 (18,2)	18 (14,9)	20 (16,5)	60 (49,6)	1 (0,8)	42 (35,3)	28 (23,5)	46 (38,7)	1 (0,8)	43 (36,1)	27 (22,7)	15 (12,6)	34 (28,6)	0 (0,0)
The patient loses the interest in the world around him/her	25 (21,0)	8 (6,7)	16 (13,4)	70 (58,8)	0 (0,0)	49 (41,9)	26 (22,2)	42 (35,9)	0 (0,0)	45 (38,1)	27 (22,9)	14 (11,9)	32 (27,1)	0 (0,0)
The patient is unaware of problems/changes or deny them when discussed	27 (22,9)	10 (8,5)	15 (12,7)	66 (55,9)	0 (0,0)	41 (35,7)	30 (26,1)	44 (38,3)	0 (0,0)	41 (35,7)	31 (27,0)	16 (13,9)	27 (23,5)	0 (0,0)
The patient is not able to follow instructions	28 (23,3)	15 (12,5)	26 (21,7)	50 (41,7)	1 (0,8)	41 (35,3)	26 (22,4)	49 (42,2)	0 (0,0)	39 (33,6)	27 (23,3)	18 (15,5)	32 (27,6)	0 (0,0)
Make decision														
The patient is not able to make decisions about daily life (choosing clothes or food)	22 (18,6)	4 (3,4)	18 (15,3)	69 (58,5)	5 (4,2)	40 (33,9)	24 (20,3)	48 (40,7)	5 (4,2)	48 (41,7)	18 (15,7)	18 (15,7)	29 (25,2)	2 (1,7)
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	16 (13,9)	11 (9,6)	20 (17,4)	62 (53,9)	6 (5,2)	32 (27,8)	26 (22,6)	51 (44,3)	6 (5,2)	42 (37,2)	21 (18,6)	11 (9,7)	36 (31,9)	3 (2,7)

Table 10. Q1. Selected items: Highly relevant tags (%)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
The patient does not take as much care of his/her personal hygiene and appearance as usually	19,2	3,3	5,8	70,0	1,7	38,0	22,3	37,2	1,7
The patient loses their emotional responsiveness	25,6	14,5	18,8	41,0	0,0	38,1	19,5	39,8	0,0
The patient has lack of initiative	19,2	11,7	10,0	59,2	0,0	32,2	26,3	41,5	0,0
The patient seems less spontaneous or less active than usual	25,2	5,0	11,8	58,0	0,0	43,1	20,7	36,2	0,0
The patient seems less interested in the activities and plans of others	24,4	5,0	11,8	58,8	0,0	50,4	17,4	31,3	0,9
The patient feels uneasy or hyperactive	42,9	13,4	13,4	30,3	0,0	43,3	23,3	32,5	0,0
The patient has the amount of speech significantly decreased	23,1	8,5	13,7	50,4	4,3	30,5	22,0	40,7	5,1
The patient lost interest in friends or family members	30,0	9,2	12,5	46,7	1,7	46,2	18,8	33,3	1,7
The patient lost interest in doing things or lack motivation for starting new activities	17,5	5,0	10,8	64,2	2,5	42,0	18,5	35,3	2,5
The patient is less enthusiastic about his/her usual interests	23,7	4,2	16,9	52,5	2,5	44,7	16,7	36,0	2,6
The patient do things outside what are acceptable	41,9	12,8	12,0	32,5	0,9	50,4	14,5	32,5	0,9
The patient has trouble remembering the names of relatives or friends	20,3	9,3	12,7	50,8	6,8	37,5	19,2	33,3	6,7
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	10,3	3,4	9,4	70,9	6,0	33,9	19,1	40,9	6,1
The patient loses or misplace things	33,9	9,6	7,8	38,3	10,4	44,6	15,2	29,5	10,7

The patient loses his/her orientation in common places	17,6	4,2	12,6	63,0	2,5	32,2	21,2	42,4	2,5
The patient does not know the date (month, day and time)	12,7	5,1	9,3	72,0	0,8	29,7	17,8	51,7	0,8
The patient has difficulty concentrating on a task	18,2	14,9	16,5	49,6	0,8	35,3	23,5	38,7	0,8
The patient loses the interest in the world around him/her	21,0	6,7	13,4	58,8	0,0	41,9	22,2	35,9	0,0
The patient is not able to follow instructions	23,3	12,5	21,7	41,7	0,8	35,3	22,4	42,2	0,0
The patient is not able to make decisions about daily life (choosing clothes or food)	18,6	3,4	15,3	58,5	4,2	33,9	20,3	40,7	4,2
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	13,9	9,6	17,4	53,9	5,2	27,8	22,6	44,3	5,2

Table 11.Q1. Selected items: Not particular relevant tags (%)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
The patient appears sad or depressed	45,8	16,1	24,6	13,6	0,0	53,0	27,4	19,7	0,0
The patient has lost the ability to converse	25,0	8,3	10,0	50,0	6,7	35,6	16,1	41,5	6,8
The patient lost interest in friends or daily activities	31,7	7,5	9,2	49,2	2,5	44,4	17,9	33,3	2,6
The patient asks the same question many times	31,1	8,4	11,8	42,9	5,9	46,2	16,2	31,6	6,0
The patient has trouble remembering significant past events	35,6	10,2	10,2	39,0	5,1	56,5	16,5	21,7	5,2
The patient is unaware of problems/changes or deny them when discussed	22,9	8,5	12,7	55,9	0,0	35,7	26,1	38,3	0,0

CAREGIVERS DIARY-QUESTIONNAIRE 2

The following part of this result section shows a series of tables analysing the daily situations that arise during the care of the relative. The situations were collected on a daily basis for seven consecutive days. Each table records the frequency for the behaviour (how often the problem affects the caregiver's daily live), the severity for the behaviour (how does the problem affect the caregiver's daily life and also the patient's one) and the discomfort this problem causes to the caregiver.

1. Selection of tags

These tables contain the results collected from the Caregivers Diary, and correspond to the Questionnaire 2 document. The tables are separated by the Main Categories used to classify the behaviour of the patient: Table 12: Daily tasks, Table 13: Social activities, Table 14: Behaviour and Table 15: Cognitive activities. Firstly, for every question, the **mean** and standard deviation (SD) for the frequency, severity and discomfort was calculated. The tables therefore record the mean and the standard deviation for every answer. In order to select those questions to be included in the "UnderstAID Platform" Menu, it was taken into account the level of discomfort that every situation caused on the caregiver. For every question, the means of the seven days collection were calculated. If the number of "0" answers was higher than the rest, that question was discarded (Not to be included as a tag).

2. Classification of tags

Once selected the question, the answer was classified as "Highly relevant" tag, "Relevant" tag or "Not particular relevant" tag. To do that, the means for every answer were reviewed again. The "0" or "missing" answers were discarded and the rest were selected. The selected items were classified in three equal groups by using the "Percentile Values" option in SPSS. Consequently, the group in the upper range (higher values) was composed by the "High relevant"

answers, the one in the medium range (medium values) was composed by the “Relevant” answers and finally the group in the lower range was composed by the “Not particular relevant” answers. Afterwards, it was count up the number of cases “n” in each group (Highly relevant, Relevant Not particular relevant). The range with the higher n determines the category of that item.

The selected items were classified and presented in the Tables 16 and 17.

3. Results: selection of tags

Table 12, the Daily Tasks main category, has these sub-categories: Personal hygiene, Personal appearance, Household chores, Sleep behaviour or disorders and Appetite and eating changes. The only item that was selected was “The patient does not take as much care of his/her personal hygiene and appearance as usually” from the “Personal hygiene” sub-categories.

Table 13, Social activities, records these sub-categories: Participation in conversation, Activities with family and friends, Engagement in hobbies and recreation and Socially acceptable conduct. Six items were selected, belonging to the sub-category” Participation in conversation”, “Activities with family and friends” and “Engagement in hobbies and recreation”, so all items in the 3 sub-categories was passed on to classification.

Table 14, Behaviour, records these sub-categories: Suspiciousness and false beliefs, General mood, Anxiety level and Agitation/Lack of inhibition/Aggressiveness. Tre items were passed on for classification - 2 was from the “General mood” sub-category and 1 from the “Anxiety level” sub-category.

Table 15, Cognitive activities, contains these sub-categories: Name and event recollection, Finding appropriate words, Orientation, Awareness of the environment and Make decisions. Only 1 item was discarded from all the items in the main category and it was “the patient loses or misplaces things”.

In total 24 items was passed on for classification.

4. Results: classification of tags

Tables 16 and 17 contain the selected items for “High relevant” tags, “Relevant” tags. No item was classified as “Not particular relevant” tags.

The main category “Daily tasks” only consistent of 1 item and it was classified as relevant.

The main category “Social activities” has 6 items – 4 “high relevant” and 2 “relevant”. The “high relevant” contained of both items form “Activities with family and friends” and “Engagement in hobbies and recreation” and the “Relevant” contained of both items form “Participation in conversation”.

The main category “Behaviour” had 3 items – 1 with “High relevant” tags and 2 with “relevant” tags.

In the main category “Cognitive activities” the majority for items was selected, and apart from the sub-category “Orientation” that all was “high relevant”, the distribution was even in the sub-category’s among “high relevant” and “relevant” tags.

Table 12. Q2. Daily tasks

	Frequency		Severity		Discomfort	
	Mean	SD	Mean	SD	Mean	SD
Personal hygiene						
The patient does not take as much care of his/her personal hygiene and appearance as usually	4,48	3,23	1,57	1,21	1,11	1,17
The patient gets upset with those trying to care for him/her or resist activities such as bathing or changing clothes	3,13	3,29	1,11	1,35	0,88	1,07
Personal appearance						
You have to tell the patient that he/she should brush his/her teeth or comb his/her hair	3,50	3,38	1,27	1,24	0,85	1,10
You have to assist the patient in brushing his teeth	3,30	3,38	1,20	1,26	0,75	1,09
You have to assist the patient in combing his hair	3,32	3,39	1,23	1,27	0,68	1,06
You have to assist the patient to get ready	3,86	3,40	1,37	1,27	0,73	1,09
Household chores						
You have to assist the patient in shopping	4,73	3,15	1,70	1,29	0,79	1,13
You have to assist the patient in cooking	4,76	3,13	1,88	1,29	0,91	1,23
You have to assist the patient to use the electrical appliances	4,72	3,18	1,79	1,32	0,85	1,19
Sleep behaviour or disorders						
The patient has difficulty sleeping	2,23	3,11	0,75	1,00	0,64	0,97
The patient wanders at night or get dressed	1,29	2,55	0,45	0,85	0,38	0,80
The patient awakes you or any member of your family during the night	2,77	3,25	0,93	1,11	0,80	1,09
Appetite and eating changes						
The patient has any change in appetite, weight, or eating habits	2,61	3,20	0,89	1,04	0,63	0,95
The patient has a change in the kind of food he/she likes	1,68	2,89	0,58	0,97	0,41	0,87
The patient has an increase in appetite	1,63	2,82	0,59	0,94	0,40	0,79
The patient has a decrease in appetite	2,23	3,06	0,77	1,08	0,50	0,98

Table 13. Q2. Social activities

	Frequency		Severity		Discomfort	
	Mean	SD	Mean	SD	Mean	SD
Participating in conversation						
The patient has the amount of speech significantly decreased	4,94	2,98	1,76	1,10	1,37	1,13
The patient has lost the ability to converse	4,92	2,87	1,95	1,08	1,42	1,12
Activities with family and friends						
The patient lost interest in friends or daily activities	4,54	3,16	1,53	1,18	1,06	1,09
The patient lost interest in friends or family members	4,47	3,18	1,44	1,14	1,04	1,06
Engagement in hobbies and recreation						
The patient lost interest in doing things or lack motivation for starting new activities	5,33	2,89	1,81	1,14	1,25	1,15
The patient is less enthusiastic about his/her usual interests	4,56	3,20	1,59	1,22	1,11	1,16
Socially acceptable conduct						
The patient do things outside what are acceptable	2,46	3,22	0,78	1,04	0,61	0,95
The patient is rude, or childish	2,73	3,27	0,87	1,02	0,66	0,92

Table 14. Q2. Behaviour

	Frequency		Severity		Discomfort	
	Mean	SD	Mean	SD	Mean	SD
Suspiciousness and false beliefs						
The patient believes in things that you know are unreal	2,65	3,19	0,89	1,03	0,67	0,98
The patient has hallucinations such as seeing false visions or hearing false voices	1,98	3,03	0,69	1,04	0,51	0,95
General mood						
The patient loses their emotional responsiveness	4,03	3,32	1,29	1,11	0,93	1,05
The patient appears sad or depressed	3,29	3,35	1,03	1,03	0,83	0,99
The patient cries sometimes	1,90	2,97	0,57	0,90	0,51	0,92
The patient expresses feelings of sadness or depression	2,41	3,21	0,73	0,91	0,61	0,95
The patient comments about death of self or others (e.g. "Life isn't worth living", "I'd be better off dead")	1,48	2,76	0,46	0,85	0,40	0,83
The patient comments about feeling worthless or being a burden to others	1,78	2,92	0,47	0,83	0,42	0,86
The patient comments about feeling like a failure or about not having any worthwhile accomplishments in life	0,65	1,93	0,21	0,59	0,21	0,66
The patient talks about feeling lonely	1,40	2,67	0,47	0,87	0,42	0,87
Anxiety level						
The patient appears to be anxious, worried or frightened for no apparent reason	1,96	2,98	0,65	0,93	0,58	0,96
The patient appears to be uneasy or nervous	2,79	3,23	0,85	0,95	0,74	0,97

Agitation, lack of inhibition, aggressiveness						
The patient destroys the property	0,94	2,31	0,28	0,64	0,26	0,67
The patient does things that embarrass you	1,87	2,87	0,64	0,83	0,58	0,88
The patient talks loudly and rapidly	1,56	2,83	0,44	0,79	0,40	0,84
The patient engages in behaviour that is potentially dangerous to self or others	0,95	2,38	0,26	0,63	0,32	0,81
The patient threatened of hurting him/herself	0,36	1,47	,08	0,31	0,10	0,45
The patient has been verbally aggressive to you or others	2,08	2,87	0,75	1,03	0,65	0,97

Table 15. Q2. Cognitive activities

	Frequency		Severity		Discomfort	
	Mean	SD	Mean	SD	Mean	SD
Name and event recollection						
The patient has trouble remembering the names of relatives or friends	4,87	3,01	1,72	1,11	1,28	1,17
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	5,57	2,60	2,03	1,09	1,42	1,19
The patient asks the same question many times	3,92	3,32	1,46	1,24	1,05	1,17
The patient has trouble remembering significant past events	4,20	3,27	1,50	1,21	1,12	1,16
The patient loses or misplace things	3,39	3,32	1,28	1,22	0,90	1,09
Finding appropriate words						
The patient has trouble finding the appropriate word when trying to communicate	4,92	2,98	1,77	1,16	1,26	1,16
The patient makes language or pronunciation errors	3,96	3,34	1,32	1,24	0,97	1,17
Orientation						
The patient loses his/her orientation in common places	4,96	2,98	1,99	1,31	1,33	1,22
The patient does not know the date (month, day and time)	5,15	2,91	1,95	1,29	1,56	4,05
Awareness of the environment						
The patient has difficulty concentrating on a task	5,13	2,91	1,80	1,14	1,31	1,18
The patient loses the interest in the world around him/her	4,64	3,20	1,73	1,21	1,26	1,21
The patient is unaware of problems/changes or deny them when discussed	4,59	3,18	1,69	1,26	1,34	1,22
The patient is not able to follow instructions	4,46	3,20	1,49	1,12	1,22	1,14
Make decision						
The patient is not able to make decisions about daily life (choosing clothes or food)	4,65	3,19	1,71	1,24	1,11	1,22
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	4,11	3,32	1,51	1,27	1,13	1,20

Table 16. Q2. Selected items: Highly relevant tags

	Frequency		Severity	
	Mean	SD	Mean	SD
The patient lost interest in friends or daily activities	4,54	3,16	1,53	1,18
The patient lost interest in friends or family members	4,47	3,18	1,44	1,14
The patient lost interest in doing things or lack motivation for starting new activities	5,33	2,89	1,81	1,14
The patient is less enthusiastic about his/her usual interests	4,56	3,20	1,59	1,22
The patient loses their emotional responsiveness	4,03	3,32	1,29	1,11
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	5,57	2,60	2,03	1,09
The patient has trouble remembering significant past events	4,20	3,27	1,50	1,21
The patient loses his/her orientation in common places	4,96	2,98	1,99	1,31
The patient does not know the date (month, day and time)	5,15	2,91	1,95	1,29
The patient loses the interest in the world around him/her	4,64	3,20	1,73	1,21
The patient is unaware of problems/changes or deny them when discussed	4,59	3,18	1,69	1,26
The patient is not able to make decisions about daily life (choosing clothes or food)	4,65	3,19	1,71	1,24

Table 17. Q2. Selected items: Relevant tags

	Frequency		Severity	
	Mean	SD	Mean	SD
The patient does not take as much care of his/her personal hygiene and appearance as usually	4,48	3,23	1,57	1,21
The patient has the amount of speech significantly decreased	4,94	2,98	1,76	1,10
The patient has lost the ability to converse	4,92	2,87	1,95	1,08
The patient appears sad or depressed	3,29	3,35	1,03	1,03
The patient appears to be uneasy or nervous	2,79	3,23	0,85	0,95
The patient has trouble remembering the names of relatives or friends	4,87	3,01	1,72	1,11
The patient asks the same question many times	3,92	3,32	1,46	1,24
The patient has trouble finding the appropriate word when trying to communicate	4,92	2,98	1,77	1,16
The patient makes language or pronunciation errors	3,96	3,34	1,32	1,24
The patient has difficulty concentrating on a task	5,13	2,91	1,80	1,14

The patient is not able to follow instructions	4,46	3,20	1,49	1,12
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	4,11	3,32	1,51	1,27

PROFESSIONAL ASSESSMENT-QUESTIONNAIRE 3

The following part of this result section shows a series of tables recording the point of view of the professional caregivers with regard to the daily situations that may arise during the care of the patient. Each table records the frequency for the behaviour (how often the problem affects the caregiver in daily live) and the severity for the behaviour (how does the problem affect the caregiver in the daily life situation and also the patient's daily life situation).

1. Selection of tags

These tables contain the results collected during the Professional Assessment of the patient, and correspond to the Questionnaire 3 document. The tables are separated by the Main Categories used to classify the deficits of the patients: Table 18: Daily tasks, Table 19: Social activities, Table 20: Behaviour and Table 21: Cognitive activities. These tables contain the number of professional caregivers that chose an answer ("n") and also the percentage ("%"). In order to select those questions that will be included in the "UnderstAID Platform" Menu, it was taken into account the **frequency** of every situation. Discarded were those questions in which the number of caregivers that chose the "Occasionally" option was higher than the total number of caregivers that chose any of the three other options (Often, Frequently, Very frequently).

2. Classification of tags

Once selected the questions, the items were classified as "Highly relevant" tags, "Relevant" tags or "Not particular relevant" tags. To do that, it was reviewed the number of professional caregivers that selected every answer ("n"; Often, Frequently, Very frequently) and the more frequent answer was chosen. If the more frequent was "Very frequently", it was considered as "Highly relevant" tag to be included in the platform. If the more frequent answer was "Frequently" it was considered as "Relevant" tag to be included in

the platform. And finally, if the more frequent answer was “Often” it was considered as “Not particular relevant” tag to be included in the platform. In the cases of several options with the same “n”, it was calculated the mean to choose the category.

3. Results: selection of tags

Table 18, Daily Tasks, records these sub-categories: Personal hygiene, Personal appearance, Household chores, Sleep behaviour or disorders and Appetite and eating changes. Following the instructions explained earlier, 8 items were selected for further evaluation. All the items from the sub-categories Personal appearance and Household chores were selected and one from the sub-category Personal hygiene was selected.

Table 19, Social activities, records these sub-categories: Participation in conversation, Activities with family and friends, Engagement in hobbies and recreation and Socially acceptable conduct. Only 1 item belonging to the sub-category “Socially acceptable conduct” was discarded, so the rest of categories were passed on for further evaluation.

Table 20, Behaviour, records these sub-categories: Suspiciousness and false beliefs, General mood, Anxiety level, Indifference/Apathy/Motivation to act, Apprehension/Uneasiness and Agitation/Lack of inhibition/Aggressiveness. After applying the selection criteria, 19 items were discarded (not to be included for further on). The sub-category Suspiciousness and false beliefs, Anxiety level and Agitation, lack of inhibition, aggressiveness level was completely discarded from the point of view of the professional. All items in sub-category Indifference/Apathy/Motivation to act were selected for further evaluation.

Table 21, Cognitive activities, contains these sub-categories: Finding appropriate words, Name and event recollection, Orientation, Awareness of the

environment and Make decisions. None of the questions were discarded so all questions/categories were past on for further evaluation.

In total 36 items were selected for classification.

4. Results: classification of tags

Tables 22 and 23 contains the selected items for “High relevant” tags and “Not particular relevant” tags, respectively. No items were classified as “Relevant”.

Only one item was classified as “Not particular relevant” and that was the item “The patient is irritable, argue or complain” from the sub-category “Apprehension/Uneasiness” under the main category “Behaviour”. The rest were given the “High relevant” tag.

All the items in the main category “Cognitive activities” were selected for “High relevant” tags.

In the main category “Behaviour” all items from the sub-category “Indifference/Apathy/Motivation to act” were given the “High relevant” tag. One item in the sub-category “General mood” and one in sub-category “Apprehension/ Uneasiness” were given the “High relevant” tag.

All items in the main category “Social activities” were “High relevant” tags a part from “The patient is rude, or childish” in the sub-category “Social acceptable conducts”.

In the main category “Daily task”, all items in the sub-category “Personal appearance” and “Household chores” were “High relevant” tag. Also the item “The patient does not take as much care of his/her personal hygiene and appearance as usually” from the sub-category “Personal hygiene” were given the “High relevant” tag.

Table 18. Q3. Daily task (n, %)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
Personal hygiene									
The patient does not take as much care of his/her personal hygiene and appearance as usually	19 (20,9)	11 (12,1)	8 (8,8)	53 (58,2)	0 (0,0)	33 (30,8)	22 (20,6)	32 (29,9)	0 (0,0)
The patient gets upset with those trying to care for him/her or resist activities such as bathing or changing clothes	54 (58,1)	18 (19,4)	8 (8,6)	13 (14,0)	0 (0,0)	51 (56,7)	23 (25,6)	16 (17,8)	0 (0,0)
Personal appearance									
You have to tell the patient that he/she should brush his/her teeth or comb his/her hair	27 (31,0)	4 (4,6)	9 (10,3)	47 (54,0)	0 (0,0)	39 (36,1)	18 (16,7)	24 (22,2)	0 (0,0)
You have to assist the patient in brushing his teeth	26 (31,0)	3 (3,6)	8 (9,5)	46 (54,8)	1 (1,2)	40 (48,8)	18 (22,0)	23 (28,0)	1 (1,2)
You have to assist the patient in combing his hair	26 (30,6)	5 (5,9)	5 (5,9)	48 (56,5)	1 (1,2)	46 (57,5)	14 (17,5)	19 (23,8)	1 (1,3)
You have to assist the patient to get ready	21 (24,1)	7 (8,0)	8 (9,2)	51 (58,6)	0 (0,0)	43 (53,1)	17 (21,0)	21 (25,9)	0 (0,0)
Household chores									
You have to assist the patient in shopping	2 (3,0)	3 (4,5)	7 (10,6)	54 (81,8)	0 (0,0)	36 (43,4)	10 (12,0)	21 (25,3)	16 (19,3)
You have to assist the patient in cooking	9 (8,6)	2 (1,9)	18 (17,1)	53 (50,5)	0 (0,0)	37 (44,6)	7 (8,4)	22 (26,5)	17 (20,5)
You have to assist the patient to use the electrical appliances	15 (18,5)	2 (2,5)	20 (24,7)	44 (54,3)	0 (0,0)	37 (45,7)	9 (11,1)	23 (28,4)	12 (14,8)

Sleep behaviour or disorders									
The patient has difficulty sleeping	34 (55,7)	11 (18,0)	6 (9,8)	10 (16,4)	0 (0,0)	39 (43,3)	12 (13,3)	8 (8,9)	0 (0,0)
The patient wanders at night or get dressed	42 (71,2)	8 (13,6)	2 (3,4)	6 (10,2)	1 (1,7)	42 (73,7)	8 (14,0)	6 (10,5)	1 (1,8)
The patient awakes you or any member of your family during the night	37 (61,7)	8 (13,3)	5 (8,3)	10 (16,7)	0 (0,0)	41 (70,7)	7 (12,1)	10 (17,2)	0 (0,0)
Appetite and eating changes									
The patient has any change in appetite, weight, or eating habits	65 (69,9)	7 (7,5)	9 (9,7)	12 (12,9)	0 (0,0)	22 (19,3)	71 (62,3)	14 (12,3)	7 (6,1)
The patient has a change in the kind of food he/she likes	76 (82,6)	5 (5,4)	4 (4,3)	7 (7,6)	0 (0,0)	81 (89,0)	6 (6,6)	4 (4,4)	0 (0,0)
The patient has an increase in appetite	71 (78,0)	4 (4,4)	3 (3,3)	7 (7,7)	6 (6,6)	74 (84,1)	3 (3,4)	5 (5,7)	6 (6,8)
The patient has a decrease in appetite	24 (72,7)	2 (6,1)	2 (6,1)	2 (6,1)	3 (9,1)	23 (71,9)	3 (9,4)	3 (9,4)	3 (9,4)

Table 19. Q3. Social activities (n, %)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
Participating in conversation									
The patient has the amount of speech significantly decreased	30 (32,3)	10 (10,8)	16 (17,2)	33 (35,5)	4 (4,3)	33 (29,2)	27 (23,9)	29 (25,7)	4 (3,5)
The patient has lost the ability to converse	26 (27,4)	9 (9,5)	12 (12,6)	43 (45,3)	5 (5,3)	32 (34,4)	24 (25,8)	32 (34,4)	5 (5,4)

Activities with family and friends									
The patient lost interest in friends or daily activities	39 (41,9)	7 (7,5)	17 (18,3)	27 (29,0)	3 (3,2)	50 (45,5)	20 (18,2)	19 (17,3)	3 (2,7)
The patient lost interest in friends or family members	35 (39,3)	7 (7,9)	18 (20,2)	26 (29,2)	3 (3,4)	49 (55,7)	15 (17,0)	21 (23,9)	3 (3,4)
Engagement in hobbies and recreation									
The patient lost interest in doing things or lack motivation for starting new activities	25 (25,5)	6 (6,1)	11 (11,2)	55 (56,1)	1 (1,0)	45 (39,1)	18 (15,7)	31 (27,0)	1 (0,9)
The patient is less enthusiastic about his/her usual interests	32 (34,8)	6 (6,5)	11 (12,0)	42 (45,7)	1 (1,1)	46 (51,1)	19 (21,1)	24 (26,7)	1 (1,1)
Socially acceptable conduct									
The patient do things outside what are acceptable	43 (43,9)	8 (8,2)	11 (11,2)	35 (35,7)	1 (1,0)	46 (41,1)	15 (13,4)	31 (27,7)	1 (0,9)
The patient is rude, or childish	64 (66,0)	13 (13,4)	10 (10,3)	9 (9,3)	1 (1,0)	69 (74,2)	12 (12,9)	11 (11,8)	1 (1,1)

Table 20. Q3. Behaviour (n, %)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
Suspiciousness and false beliefs									
The patient believes in things that you know are unreal	53 (56,4)	14 (14,9)	7 (7,4)	15 (16,0)	5 (5,3)	54 (47,8)	21 (18,6)	11 (9,7)	5 (4,4)
The patient has hallucinations such as seeing false visions or hearing false voices	62 (66,7)	13 (14,0)	4 (4,3)	11 (11,8)	3 (3,2)	68 (76,4)	8 (9,0)	10 (11,2)	3 (3,4)
General mood									
The patient loses their emotional responsiveness	32 (33,3)	10 (10,4)	16 (16,7)	38 (39,6)	0 (0,0)	38 (33,0)	15 (13,0)	42 (36,5)	0 (0,0)
The patient appears sad or depressed	57 (57,6)	21 (21,2)	14 (14,1)	7 (7,1)	0 (0,0)	67 (68,4)	22 (22,4)	9 (9,2)	0 (0,0)
The patient cries sometimes	77 (80,2)	6 (6,3)	9 (9,4)	3 (3,1)	1 (1,0)	79 (82,3)	5 (5,2)	11 (11,5)	1 (1,0)
The patient expresses feelings of sadness or depression	62 (63,3)	14 (14,3)	8 (8,2)	4 (4,1)	10 (10,2)	65 (67,7)	14 (14,6)	7 (7,3)	10 (10,4)
The patient comments about death of self or others (e.g. "Life isn't worth living", "I'd be better off dead")	78 (83,9)	2 (2,2)	1 (1,1)	2 (2,2)	10 (10,8)	75 (80,6)	6 (6,5)	2 (2,2)	10 (10,8)
The patient comments about feeling worthless or being a burden to others	77 (82,8)	4 (4,3)	0 (0,0)	2 (2,2)	10 (10,8)	74 (80,4)	7 (7,6)	1 (1,1)	10 (10,9)
The patient comments about feeling like a failure or about not having any worthwhile accomplishments in life	74 (81,3)	5 (5,5)	1 (1,1)	1 (1,1)	10 (11,0)	71 (78,9)	8 (8,9)	1 (1,1)	10 (11,1)

The patient talks about feeling lonely	72 (78,3)	4 (4,3)	4 (4,3)	2 (2,2)	10 (10,9)	68 (74,7)	9 (9,9)	4 (4,4)	10 (11,0)
The patient change significantly his/her mood	67 (67,7)	9 (9,1)	4 (4,0)	14 (14,1)	5 (5,1)	66 (67,3)	17 (17,3)	10 (10,2)	5 (5,1)
Anxiety level									
The patient appears to be anxious, worried or frightened for no apparent reason	67 (70,5)	16 (16,8)	5 (5,3)	7 (7,4)	0 (0,0)	68 (61,3)	17 (15,3)	8 (7,2)	0 (0,0)
The patient appears to be uneasy or nervous	55 (56,1)	21 (21,4)	7 (7,1)	15 (15,3)	0 (0,0)	57 (60,0)	28 (29,5)	9 (9,5)	1 (1,1)
Indifference/Apathy/Motivation to act									
The patient has lack of initiative	16 (16,7)	9 (9,4)	14 (14,6)	57 (59,4)	0 (0,0)	40 (36,0)	21 (18,9)	33 (29,7)	0 (0,0)
The patient seems less spontaneous or less active than usual	32 (33,3)	11 (11,5)	13 (13,5)	40 (41,7)	0 (0,0)	54 (56,8)	14 (14,7)	27 (28,4)	0 (0,0)
The patient seems less interested in the activities and plans of others	34 (37,4)	5 (5,5)	10 (11,0)	42 (46,2)	0 (0,0)	56 (63,6)	13 (14,8)	19 (21,6)	0 (0,0)
Apprehension, uneasiness									
The patient feels uneasy or hyperactive	44 (46,8)	9 (9,6)	13 (13,8)	28 (29,8)	0 (0,0)	47 (42,7)	16 (14,5)	28 (25,5)	0 (0,0)
The patient does things over and over such as pace, opening closets or drawers, or repeatedly pick at things, etc.	55 (57,9)	12 (12,6)	12 (12,6)	16 (16,8)	0 (0,0)	65 (69,1)	18 (19,1)	11 (11,7)	0 (0,0)
The patient is irritable, argue or complain	58 (60,4)	17 (17,7)	12 (12,5)	6 (6,3)	3 (3,1)	62 (63,9)	22 (22,7)	10 (10,3)	3 (3,1)
Agitation, lack of inhibition, aggressiveness									
The patient destroys the property	85 (92,4)	5 (5,4)	0 (0,0)	2 (2,2)	0 (0,0)	85 (76,6)	5 (4,5)	2 (1,8)	0 (0,0)
The patient does things that embarrass you	77 (83,7)	6 (6,5)	5 (5,4)	4 (4,3)	0 (0,0)	81 (88,0)	7 (7,6)	4 (4,3)	0 (0,0)

The patient talks loudly and rapidly	63 (66,3)	6 (6,3)	8 (8,4)	10 (10,5)	8 (8,4)	68 (72,3)	8 (8,5)	10 (10,6)	8 (8,5)
The patient engages in behaviour that is potentially dangerous to self or others	77 (83,7)	7 (7,6)	2 (2,2)	6 (6,5)	0 (0,0)	76 (84,4)	5 (5,6)	9 (10,0)	0 (0,0)
The patient threatened of hurting him/herself	83 (91,2)	1 (1,1)	1 (1,1)	1 (1,1)	5 (5,5)	78 (87,6)	4 (4,5)	2 (2,2)	5 (5,6)
The patient has been verbally aggressive to you or others	61 (64,9)	15 (16,0)	4 (4,3)	6 (6,4)	8 (8,5)	64 (69,6)	9 (9,8)	10 (10,9)	8 (8,7)

Table 21. Q3. Cognitive activities (n, %)

	Frequency					Severity			
	Occasionally	Often	Frequently	Very frequently	NA	Mild	Moderate	Intense	NA
Finding appropriate words									
The patient has trouble finding the appropriate word when trying to communicate	30 (30,9)	11 (11,3)	11 (11,3)	38 (39,2)	7 (7,2)	41 (36,0)	22 (19,3)	27 (23,7)	7 (6,1)
The patient makes language or pronunciation errors	40 (42,6)	6 (6,4)	13 (13,8)	28 (29,8)	7 (7,4)	46 (48,9)	17 (18,1)	24 (25,5)	7 (7,4)
Name and event recollection									
The patient has trouble remembering the names of relatives or friends	19 (20,0)	17 (17,9)	18 (18,9)	33 (34,7)	8 (8,4)	38 (33,9)	29 (25,9)	19 (17,0)	8 (7,1)
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	9 (9,6)	12 (12,8)	18 (19,1)	48 (51,1)	7 (7,4)	34 (36,6)	28 (30,1)	24 (25,8)	7 (7,5)
The patient asks the same question many times	44 (45,8)	14 (14,6)	10 (10,4)	20 (20,8)	8 (8,3)	50 (52,1)	28 (29,2)	10 (10,4)	8 (8,3)
The patient has trouble remembering significant past events	26 (27,4)	17 (17,9)	16 (16,8)	30 (31,6)	6 (6,3)	41 (43,6)	28 (29,8)	19 (20,2)	6 (6,4)

The patient loses or misplace things	28 (31,1)	13 (14,4)	13 (14,4)	33 (36,7)	3 (3,3)	43 (48,3)	21 (23,6)	22 (24,7)	3 (3,4)
Orientation									
The patient loses his/her orientation in common places	32 (33,7)	14 (14,7)	5 (5,3)	43 (45,3)	1 (1,1)	50 (44,6)	19 (17,0)	23 (20,5)	1 (0,9)
The patient does not know the date (month, day and time)	20 (21,5)	8 (8,6)	5 (5,4)	59 (63,4)	1 (1,1)	39 (43,3)	17 (18,9)	32 (35,6)	2 (2,2)
Awareness of the environment									
The patient has difficulty concentrating on a task	21 (21,9)	14 (14,6)	16 (16,7)	45 (46,9)	0 (0,0)	45 (40,5)	26 (23,4)	21 (18,9)	0 (0,0)
The patient loses the interest in the world around him/her	26 (28,0)	12 (12,9)	13 (14,0)	42 (45,2)	0 (0,0)	46 (52,3)	15 (17,0)	27 (30,7)	0 (0,0)
The patient is unaware of problems/changes or deny them when discussed	22 (24,7)	11 (12,4)	8 (9,0)	48 (53,9)	0 (0,0)	33 (37,9)	22 (25,3)	30 (34,5)	2 (2,3)
The patient is not able to follow instructions	26 (27,1)	11 (11,5)	23 (24,0)	36 (37,5)	0 (0,0)	37 (40,7)	22 (24,2)	31 (34,1)	1 (1,1)
Make decision									
The patient is not able to make decisions about daily life (choosing clothes or food)	14 (14,9)	10 (10,6)	9 (9,6)	59 (62,8)	2 (2,1)	31 (27,7)	22 (19,6)	38 (33,9)	3 (2,7)
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	24 (25,5)	9 (9,6)	15 (16,0)	43 (45,7)	3 (3,2)	33 (36,3)	22 (24,2)	33 (36,3)	3 (3,3)

Table 22. Q3. Selected items: Highly relevant tags (%)

	Severity			
	Mild	Moderate	Intense	NA
The patient does not take as much care of his/her personal hygiene and appearance as usually	30,8	20,6	29,9	0,0
You have to tell the patient that he/she should brush his/her teeth or comb his/her hair	36,1	16,7	22,2	0,0
You have to assist the patient in brushing his teeth	48,8	22,0	28,0	1,2

You have to assist the patient in combing his hair	57,5	17,5	23,8	1,3
You have to assist the patient to get ready	53,1	21,0	25,9	0,0
You have to assist the patient in shopping	43,4	12,0	25,3	19,3
You have to assist the patient in cooking	44,6	8,4	26,5	20,5
You have to assist the patient to use the electrical appliances	45,7	11,1	28,4	14,8
The patient has the amount of speech significantly decreased	29,2	23,9	25,7	3,5
The patient has lost the ability to converse	34,4	25,8	34,4	5,4
The patient lost interest in friends or daily activities	45,5	18,2	17,3	2,7
The patient lost interest in friends or family members	55,7	17,0	23,9	3,4
The patient lost interest in doing things or lack motivation for starting new activities	39,1	15,7	27,0	0,9
The patient is less enthusiastic about his/her usual interests	51,1	21,1	26,7	1,1
The patient do things outside what are acceptable	41,1	13,4	27,7	0,9
The patient loses their emotional responsiveness	33,0	13,0	36,5	0,0
The patient has lack of initiative	36,0	18,9	29,7	0,0
The patient seems less spontaneous or less active than usual	56,8	14,7	28,4	0,0
The patient seems less interested in the activities and plans of others	63,6	14,8	21,6	0,0
The patient feels uneasy or hyperactive	42,7	14,5	25,5	0,0
The patient has trouble finding the appropriate word when trying to communicate	36,0	19,3	23,7	6,1
The patient makes language or pronunciation errors	48,9	18,1	25,5	7,4
The patient has trouble remembering the names of relatives or friends	33,9	25,9	17,0	7,1
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)	36,6	30,1	25,8	7,5
The patient asks the same question many times	52,1	29,2	10,4	8,3
The patient has trouble remembering significant past events	43,6	29,8	20,2	6,4
The patient loses or misplace things	48,3	23,6	24,7	3,4
The patient loses his/her orientation in common places	44,6	17,0	20,5	0,9
The patient does not know the date (month, day and time)	43,3	18,9	35,6	2,2
The patient has difficulty concentrating on a task	40,5	23,4	18,9	0,0
The patient loses the interest in the world around him/her	52,3	17,0	30,7	0,0
The patient is unaware of problems/changes or deny them when discussed	37,9	25,3	34,5	2,3
The patient is not able to follow instructions	40,7	24,2	34,1	1,1

The patient is not able to make decisions about daily life (choosing clothes or food)	27,7	19,6	33,9	2,7
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment	36,3	24,2	36,3	3,3

Table 23. Q3. Selected items: Not particular relevant tags (%)

	Severity			
	Mild	Moderate	Intense	NA
The patient is irritable, argue or complain	63,9	22,7	10,3	3,1

CONCLUSIONS

1. Selection of tags

All selected items from every questionnaire were compiled in a new table (Table 24) recording not only the importance for the tag (High relevant; HR, Relevant; R, Not particular relevant; NPR) but also the Questionnaire of origin (Questionnaire 1; Q1, Questionnaire 2; Q2, Questionnaire 3; Q3).

In conclusion, a total of 38 items were selected in different levels of importance. In general the professionals rated their selected items as High relevant, and it is worth noting that there is large differences in the items selected in the Daily Task main category, where caregivers only found one topic relevant I contrast to the professionals. I the case where the relative either in Q1 or Q2 had rated a topic as "High relevant", there are an agreement with the professionals in 24 of the 38 items. It is recommended to take into account not only the level of relevance for the selected topics, but also who selected the topic in order to adapt the UnderstAID platform to the end user.

Table 24. Items selected

	Q1			Q2			Q3		
	NPR	R	HR	NPR	R	HR	NPR	R	HR
DAILY TASKS									
The patient does not take as much care of his/her personal hygiene and appearance as usually			X		X				X
You have to tell the patient that he/she should brush his/her teeth or comb his/her hair									X
You have to assist the patient in brushing his teeth									X
You have to assist the patient in combing his hair									X
You have to assist the patient to get ready									X
You have to assist the patient in shopping									X
You have to assist the patient in cooking									X
You have to assist the patient to use the electrical appliances									X
BEHAVIOR									
The patient loses their emotional responsiveness			X			X			X
The patient appears sad or depressed	X				x				
The patient has lack of initiative			X						X
The patient seems less spontaneous or less active than usual			X						X
The patient seems less interested in the activities and plans of others			X						X

The patient feels uneasy or hyperactive			X						X
The patient appears to be uneasy or nervous					X				
	Q1			Q2			Q3		
	NPR	R	HR	NPR	R	HR	NPR	R	HR
The patient is irritable, argue or complain							X		
SOCIAL ACTIVITIES									
The patient has the amount of speech significantly decreased			X		X				X
The patient has lost the ability to converse	X				X				X
The patient lost interest in friends or daily activities	X					X			X
The patient lost interest in friends or family members			X			X			X
The patient lost interest in doing things or lack motivation for starting new activities			X			X			X
The patient is less enthusiastic about his/her usual interests			X			X			X
The patient do things outside what are acceptable			x						X
COGNITIVE ACTIVITIES									
The patient has trouble remembering the names of relatives or friends			X		X				X
The patient has trouble remembering recent events (e.g. items in the newspaper or on TV)			X			X			X
The patient asks the same question many times	X				X				X
The patient has trouble remembering significant past events	X					X			X
The patient loses or misplace things			X						X
The patient has trouble finding the appropriate word when trying to communicate					X				X
The patient makes language or pronunciation errors					X				X
The patient loses his/her orientation in common places			X			X			X
The patient does not know the date (month, day and time)			X			X			X
The patient has difficulty concentrating on a task			X		X				X
The patient loses the interest in the world around him/her			X			X			X
The patient is unaware of problems/changes or deny them when discussed	X					X			X
The patient is not able to follow instructions			X		X				X
The patient is not able to make decisions about daily life (choosing clothes or food)			X			X			X
The patient has been acting impulsively, irresponsibly, neglectfully or in poor judgment			X		X				X