



COGNOS

Care for people with Cognitive dysfunction A National Observational Study

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COGNOS members

Luxembourg Alzheimer Europe 2010



Care for people with cognitive dysfunction.
A national observational study



Requirements for reimbursement of cholinesterase inhibitors in Belgium:

- *Diagnosis of AD by a specialist*
- *MMSE 10-24*
- *bADL, iADL, GDS, NPI-Q*
- *CT scan/MRI*
- ***Careplan (not further specified by government)***

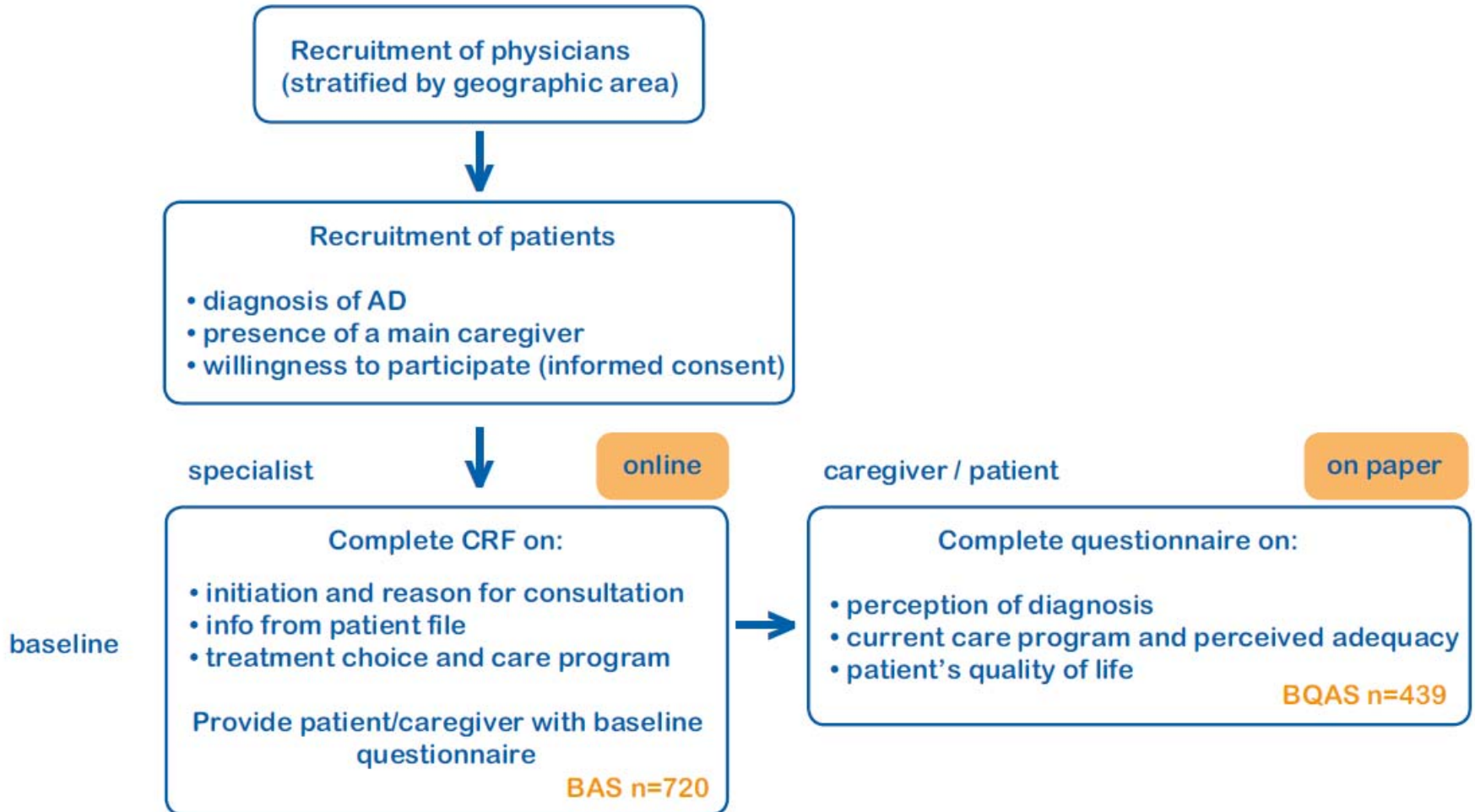


Goal of the non-interventional, nationwide observational study:

- *To **document** the diagnostic, therapeutic and care management of a cohort of patients diagnosed with Alzheimer's disease in specialist care from a **specialist's** and a **patient's** perspective*
- *Focus on content and implementation of the 'careplan', part of the reimbursement procedure for cholinesterase inhibitors.*
- *Study the implementation of the proposed careplan by the patients and patient's satisfaction with care.*

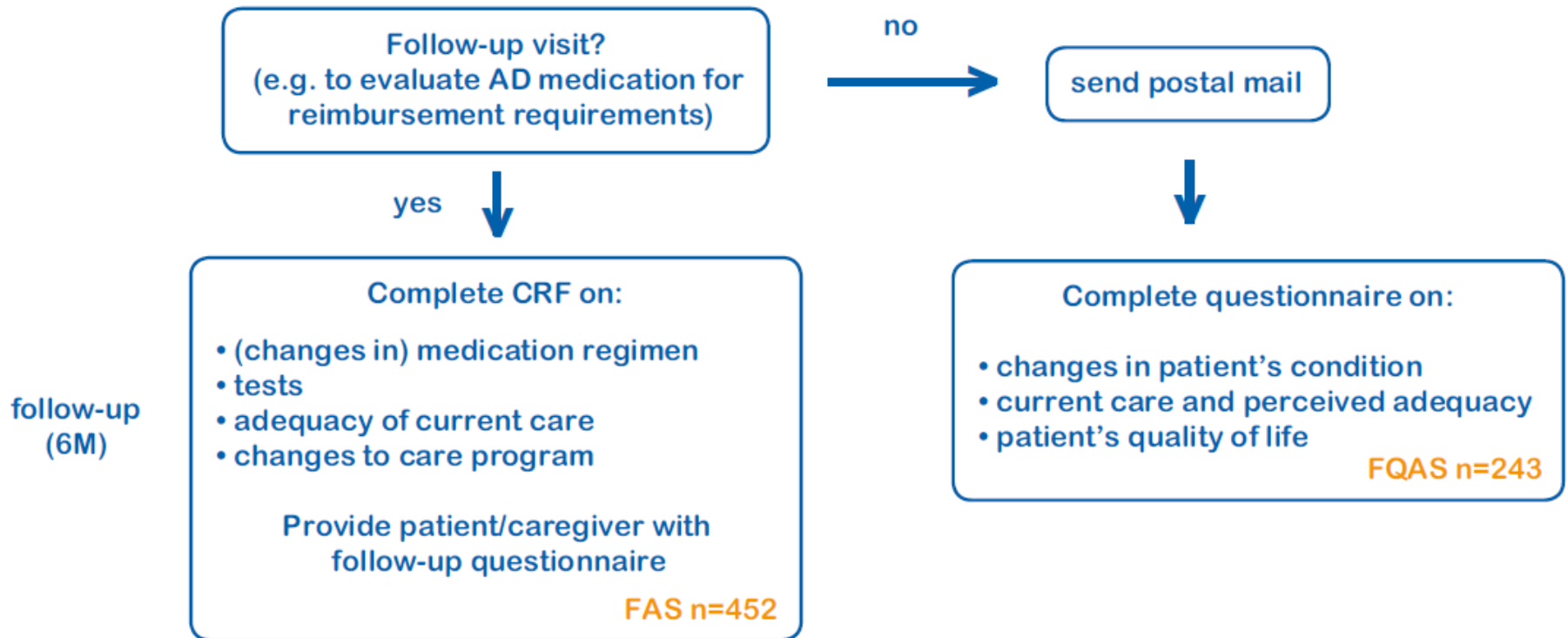
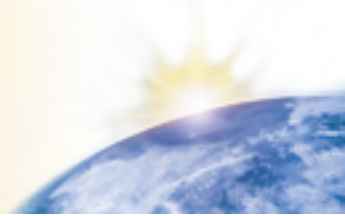


Study Design: baseline visit





Study design: follow-up visit



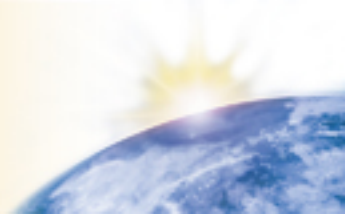


Patient inclusion criteria were:

- *Newly diagnosed with degenerative dementia of the Alzheimer type as the primary diagnosis*
- *Willingness to participate in the study and to complete the questionnaires, confirmed by written informed consent*
- *As the study takes patients with newly diagnosed AD (usually mild to moderate) as a starting point, patients who are institutionalized for AD or any other mental or physical condition will be excluded from participation*



Study population and investigators



	<i># patients</i>
<i>BAS</i>	<i>720</i>
<i>BQAS</i>	<i>439</i>
<i>FAS</i>	<i>452</i>
<i>FQAS</i>	<i>243</i>

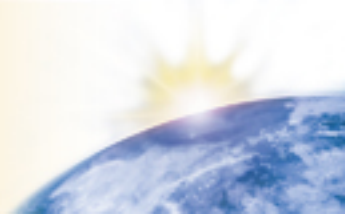
	<i># participating physicians</i>
<i>Neurologists</i>	<i>72</i>
<i>Geriatricians</i>	<i>13</i>

BAS: Baseline analysis set

BQAS: Baseline questionnaire analysis set

FAS: Follow-up analysis set

FQAS: Follow-up questionnaire analysis set



SPECIALIST:

Initiation of visit

Reason for visit (cognitive, behavioural, functional)

Communication of diagnosis (use word Alzheimer?)

Tests performed

Collaboration with other HCP/Specialists

Medications chosen (AChEI, antidepressants, benzo's, ...)

Care plan: what was proposed; in collaboration with whom?

PATIENT:

Situation at home

Perception of diagnosis

Activities of daily life

Quality of life (ACSA = visual analogue scale)

Did you need help filling out questionnaire?



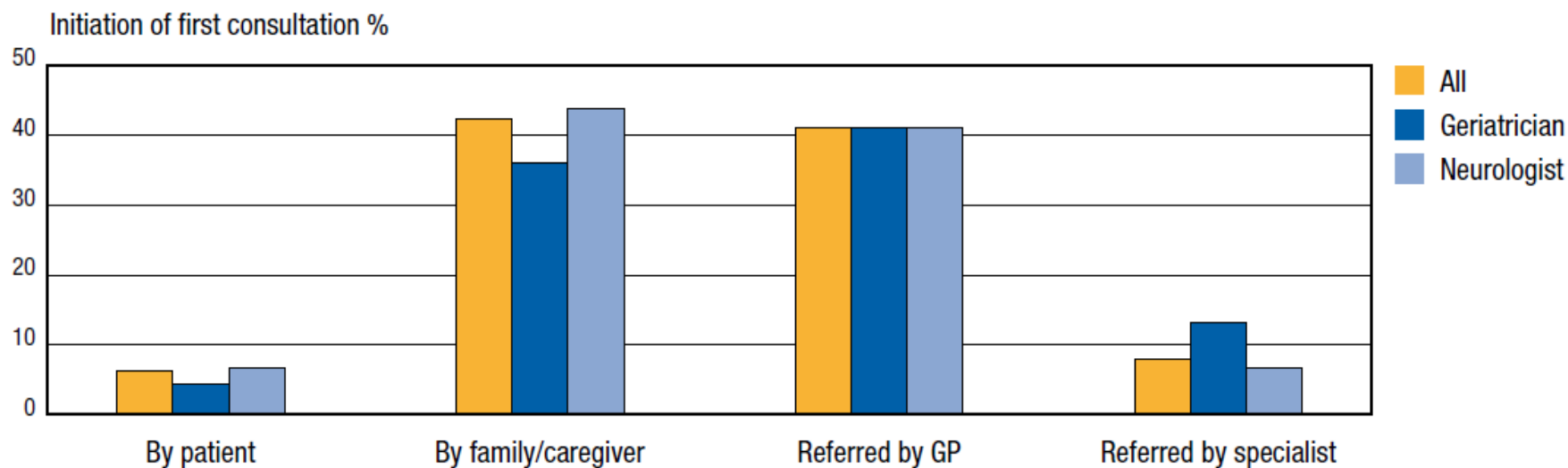
- **Initiation of first consultation by:**

%	All	Geriatrician	Neurologist
By patient	6.3	4.4	6.7
By family/caregiver	42.4	36.0	43.9
Referred by GP	41.1	41.2	41.1
Referred by specialist	8.0	13.2	6.7
Other	2.2	5.1	1.5

First consultation was mainly initiated by family/caregiver and GP



• Initiation of first consultation



First consultation was mainly initiated by family/caregiver and GP



- Reason for first consultation:

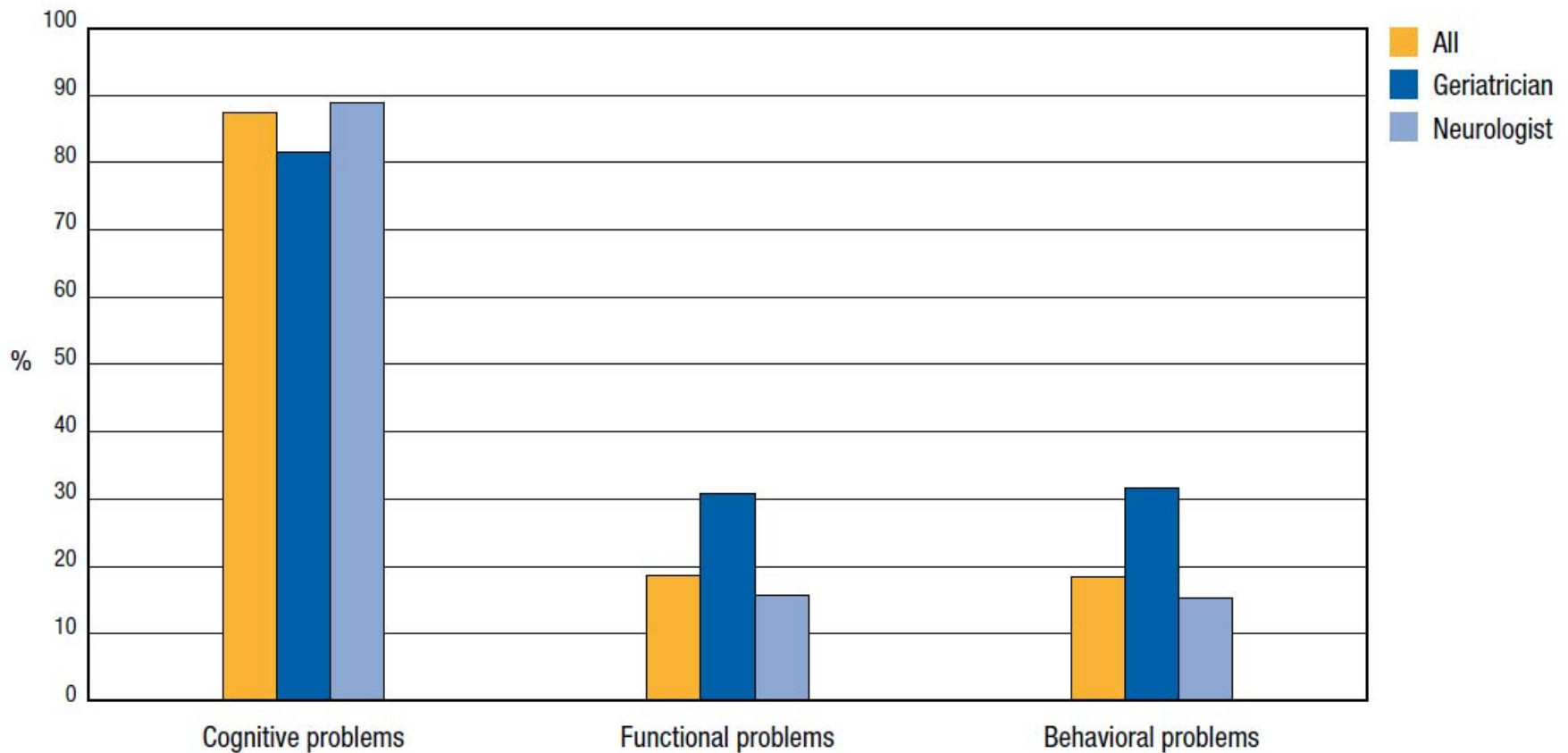
%	All	Geriatricians	Neurologists
Cognitive problems	87.4	81.6	88.8 <i>p<0.05</i>
Functional problems	18.7	30.9	15.8 <i>p<0.0001</i>
Behavioural problems	18.4	31.6	15.3 <i>p<0.0001</i>
Other	8.6	13.2	7.6 <i>P<0.05</i>

Patients consulted mainly for cognitive problems, then for functional or behavioural problems.

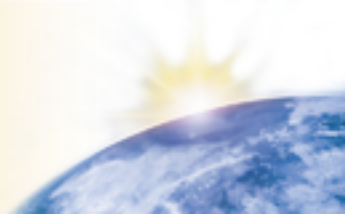
Consultation for functional and behavioural problems were twice more frequent in geriatric than in neurological care.



• Reason for first consultation



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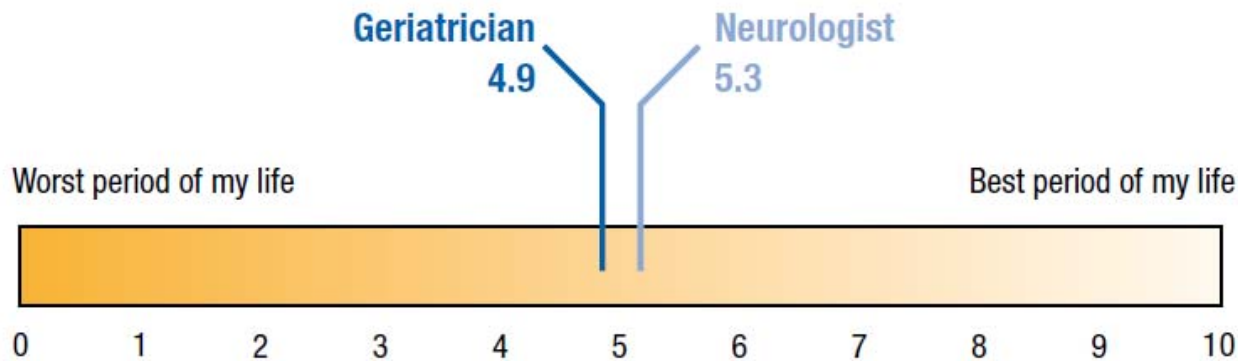
- **Perception of life of the BQAS using the Anamnestic Comparative Self Assessment (ACSA) Score**

Score	Mean
Geriatrician	4.9
Neurologist	5.3

Perception of life score at baseline was on average **5.2**, there was no difference between care settings.



- Perception of life of the BQAS using the Anamnestic Comparative Self Assessment (ACSA)



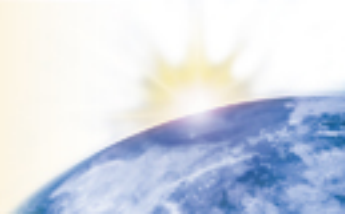
Perception of life score at baseline was on average 5.2, there was no significant difference between care settings.



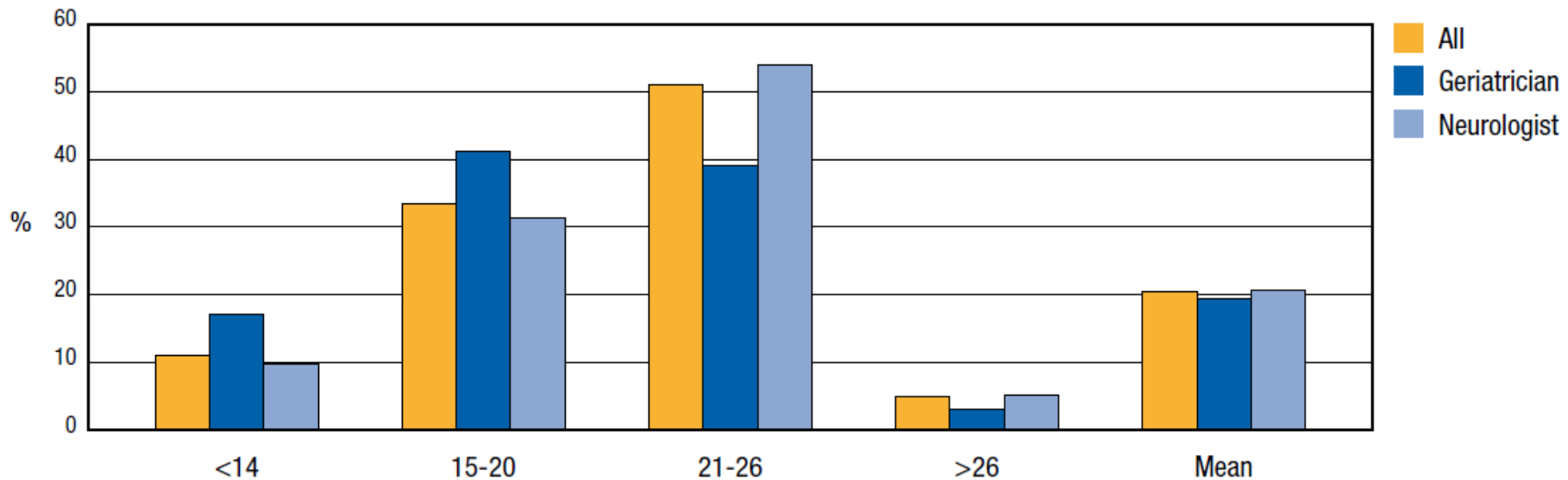
- **MMSE categories at baseline visit**

%	All	Geriatrician	Neurologist
<14	11	16.9	9.7
15-20	33.3	41.2	31.4
21-26	50.9	39.0	53.7
>26	4.8	2.9	5.2
Mean	20.5	19.4	20.7 <i>p<0.05</i>

Patients had their first consultation with a mean MMSE of 20. Patients in neurological care presented with a higher MMSE than patients in geriatric care



• MMSE at baseline visit



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Patients in neurological care presented with a higher MMSE than patients in geriatric care.



- Treatment given according to MMSE

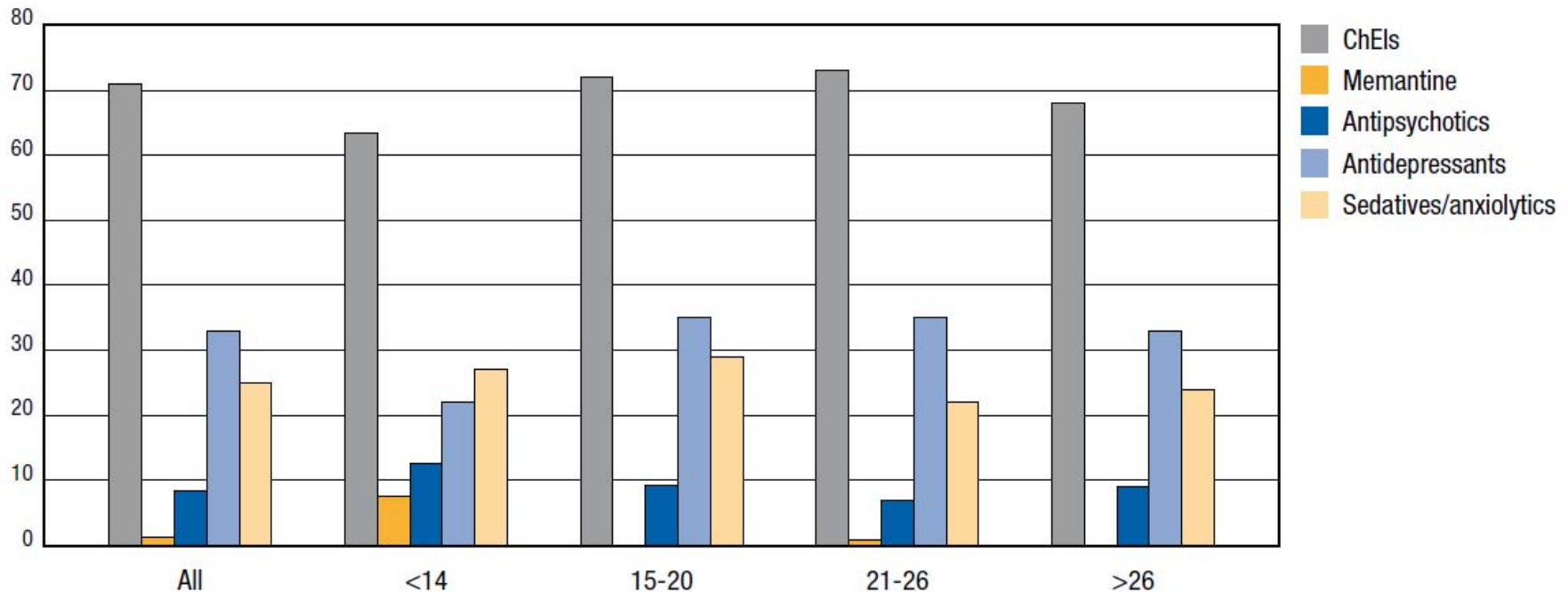
%	All	<14	15-20	21-26	>26
ChEIs	71	63.3	71.8	72.8	67.6
Memantine	1.3	7.6	0.0	0.8	0.0 $p<0.0001$
Herbals	2.2	2.5	0.8	3.0	2.9
Antioxydants/Vit E	1.5	0.0	0.4	1.9	8.8 $p<0.05$
Antipsychotics	8.3	12.7	9.2	6.9	8.8
Anticonvulsants	1.7	1.3	2.5	1.1	2.9
Antidepressants	32.9	21.5	34.5	34.6	32.4
Sedatives/anxiolytics	24.9	26.6	28.6	22.3	23.5



- 70% of patients were prescribed cholinesterase inhibitors, there was no difference between MMSE categories.
- Memantine was prescribed in only 1.3% in this mainly in severe dementia.
- Antidepressants were prescribed in 1/3 of patients with no difference between severity.
- Sedatives/anxiolytics were prescribed in 1/4 of patients with no difference between severity.



• Treatment given according to MMSE



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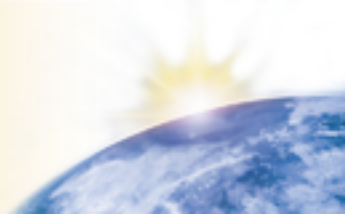
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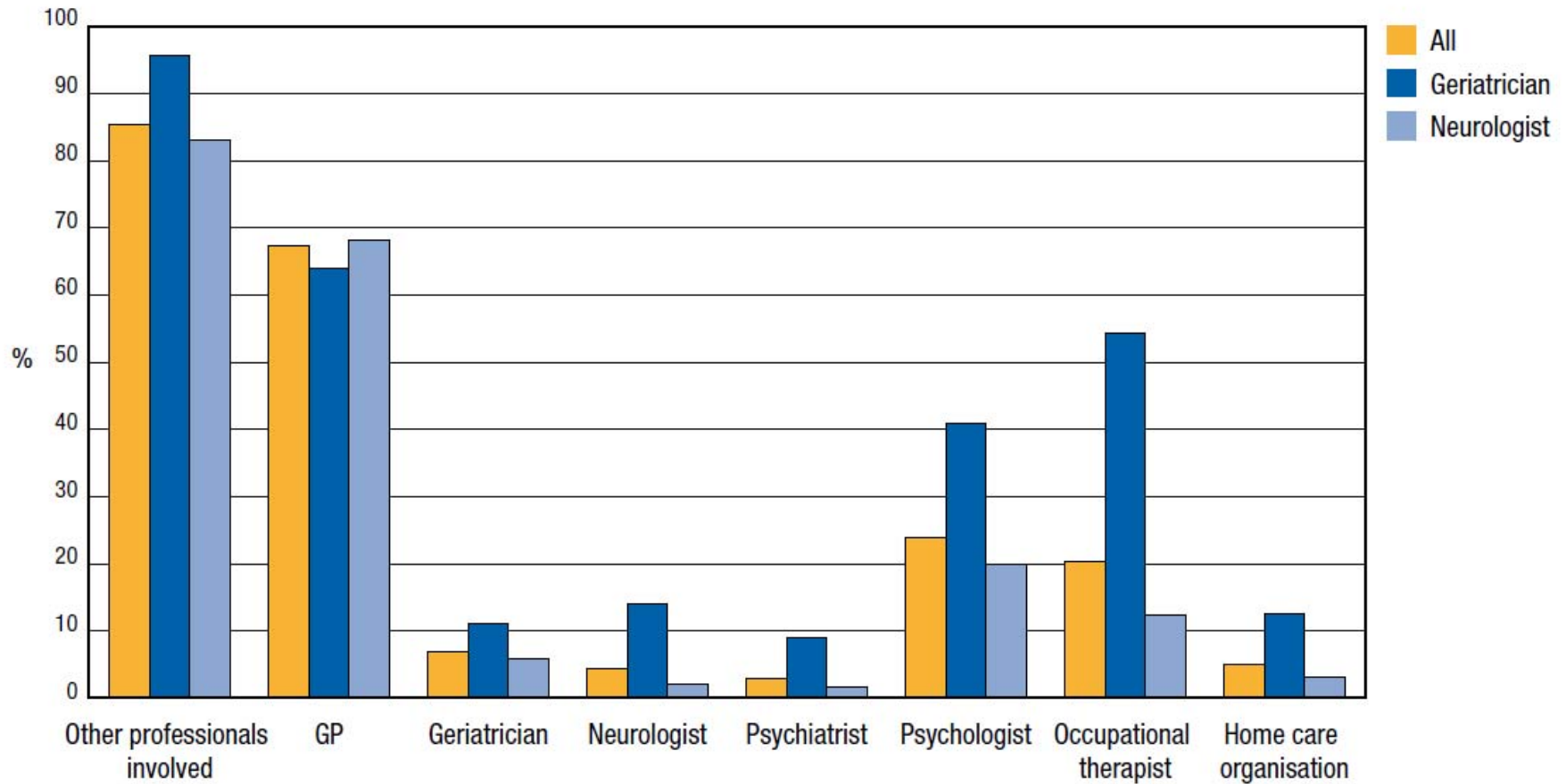
● Other professionals involved in the care plan

%	All	Geriatrician	Neurologist
Other prof	85.5	95.6	83.1 $p<0.05$
GP	67.4	64.0	68.2 $p<0.05$
Geriatrician	6.9	11.0	5.9 $p<0.05$
Neurologist	4.3	14.0	2.1 $p<0.05$
Psychiatrist	2.9	8.8	1.6 $p<0.05$
Psychologist	23.9	41.2	19.9 $p<0.05$
Occupational therapist	20.4	54.4	12.4 $p<0.05$
Home care organisation	4.9	12.5	3.1 $p<0.05$

Geriatric patients had more often other professionals involved in their care plan. Mainly GPs, psychologists and occupational therapists were involved in the careplan.



• Other professionals involved in the careplan

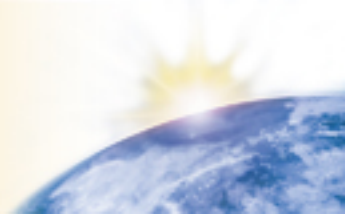


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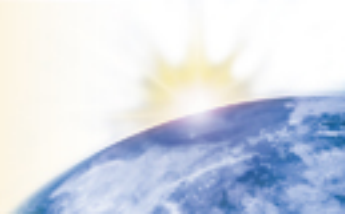


● Services advised in the care plan

%	All	Geriatrician	Neurologist
Services advised	68.3	62.4	77.2
Home care by nurse	24.5	35.3	21.9 <i>p<0.05</i>
Home care by professional care helper	22.1	27.9	20.7
Social worker	8.8	10.3	8.5
Cognitive training	20.4	35.3	16.9 <i>p<0.05</i>
Behavioural training	3.1	7.4	2.1 <i>p<0.05</i>
Physical therapy	10.2	20.6	7.8 <i>p<0.05</i>
Psychological support	5.6	8.1	9.3
Day care	9.1	8.1	9.3
Institutionalisation	9.5	20.6	6.9 <i>p<0.05</i>
Patient support group	9.9	9.6	10.0



Services were advised in 68% of patients. More geriatric than neurological treated patients were advised extra services. Mainly home care by a nurse or professional care helper were advised, or cognitive training.

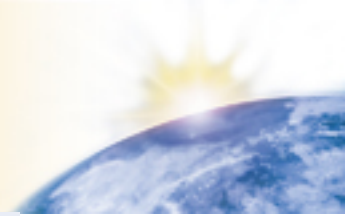


- **CGI-c in the FAS**

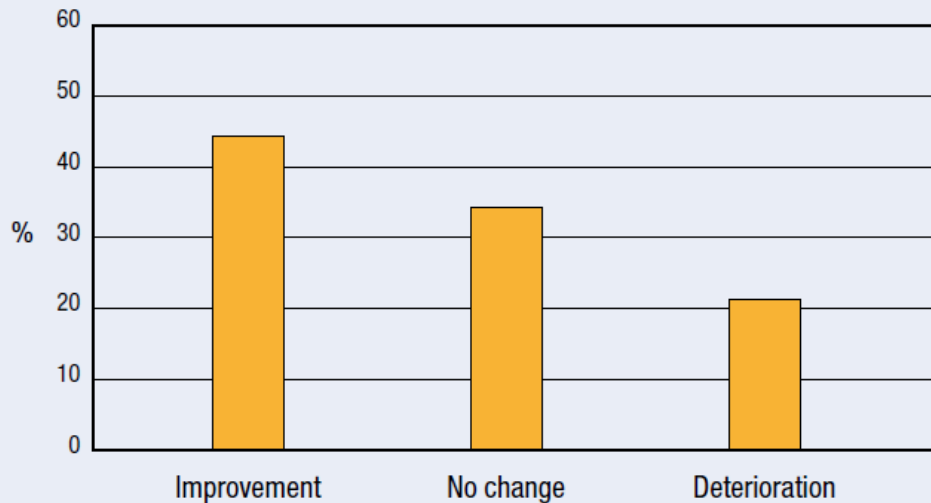
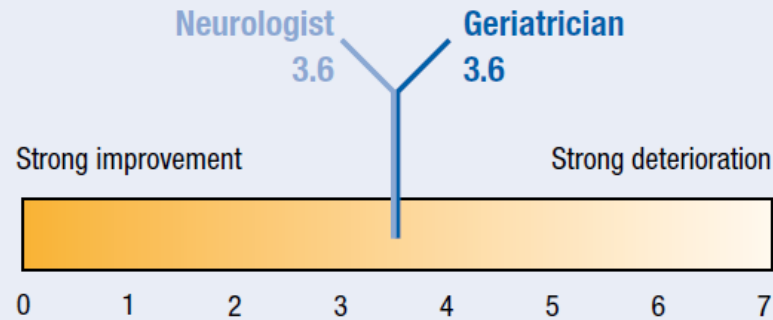
Score	Mean
Geriatrician	3.6
Neurologist	3.6

Improvement	44.4%
No change	34.3%
Deterioration	21.2%

CGI-c was on average 3.3, there was no difference between care settings. Almost 80% of patients were improved or stabilized.



- CGI-c in the FAS



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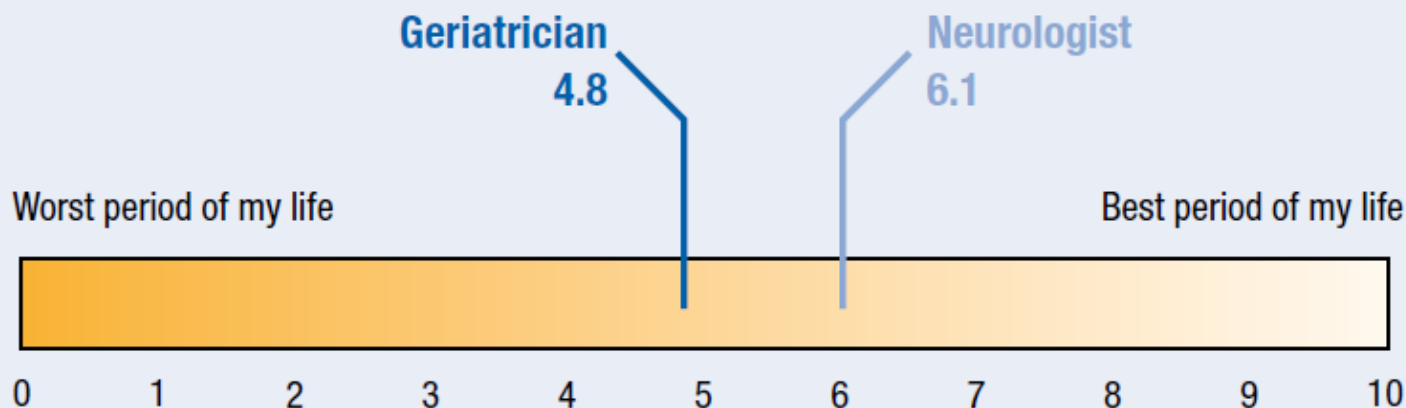
- **Perception of life score of the FQAS**

Score	Mean
Geriatrician	4.8
Neurologist	6.1

Perception of life score at follow-up was on average 5.8. The score was significantly higher in neurological than in geriatric care. The mean score increased significantly ($p=0.0013$) from baseline (5.3) to follow-up (5.8).



• Perception of life of the FQAS using the Anamnestic Comparative Self Assessment (ACSA)



Perception of life score at follow-up was on average 5.8.

The score was significantly higher in neurological than in geriatric care.

The mean score increased significantly from baseline (5.3) to follow-up (5.8).

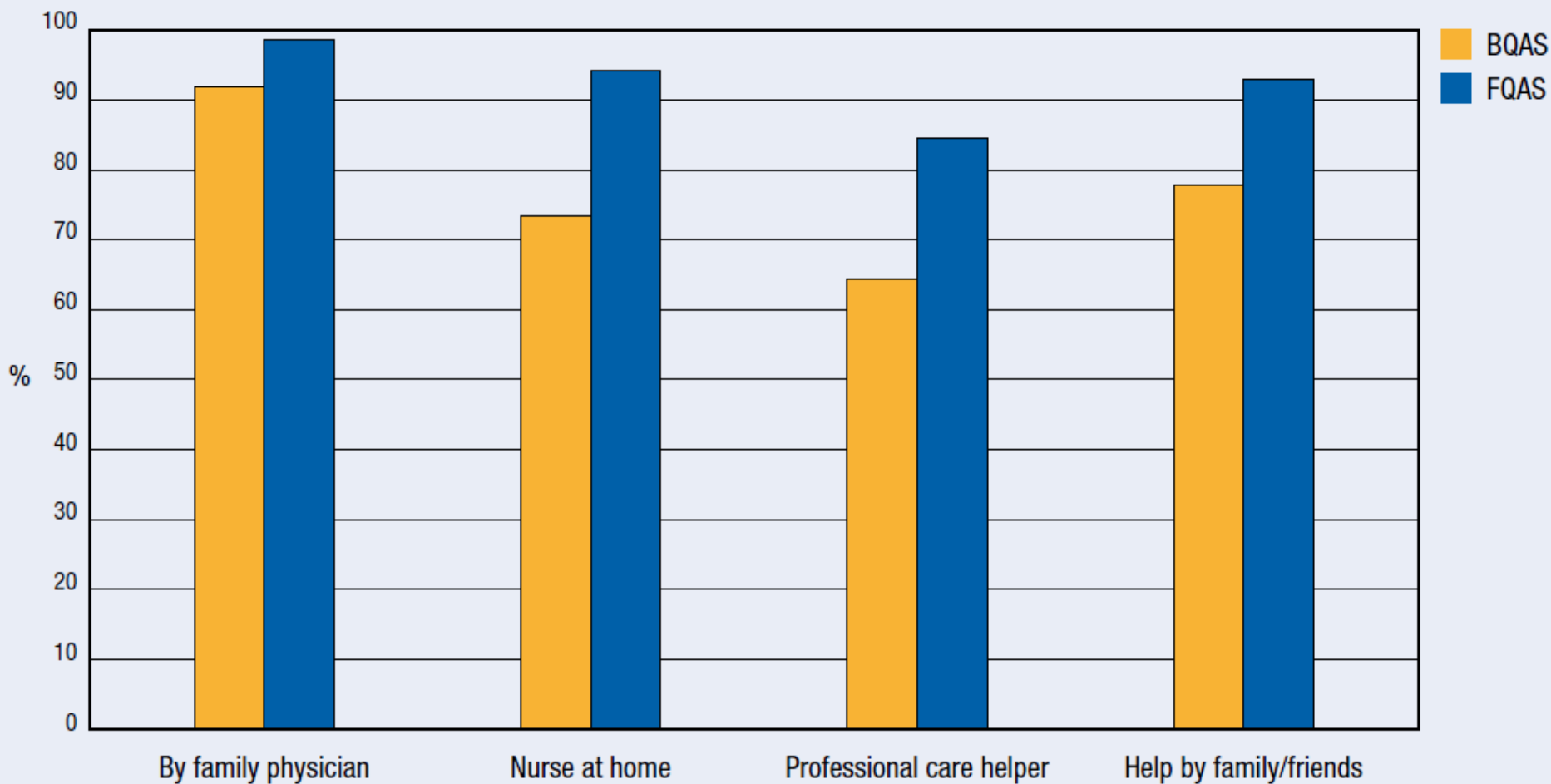


- **Sufficient professional help received according to family/patient:**

%	BQAS n=439	FQAS n=243
By family physician	91.8	98.6
By nurse at home	73.4	94.2
By professional care helper	64.3	84.6
By family/friends	77.8	93



• Sufficient professional help received according to family/patient





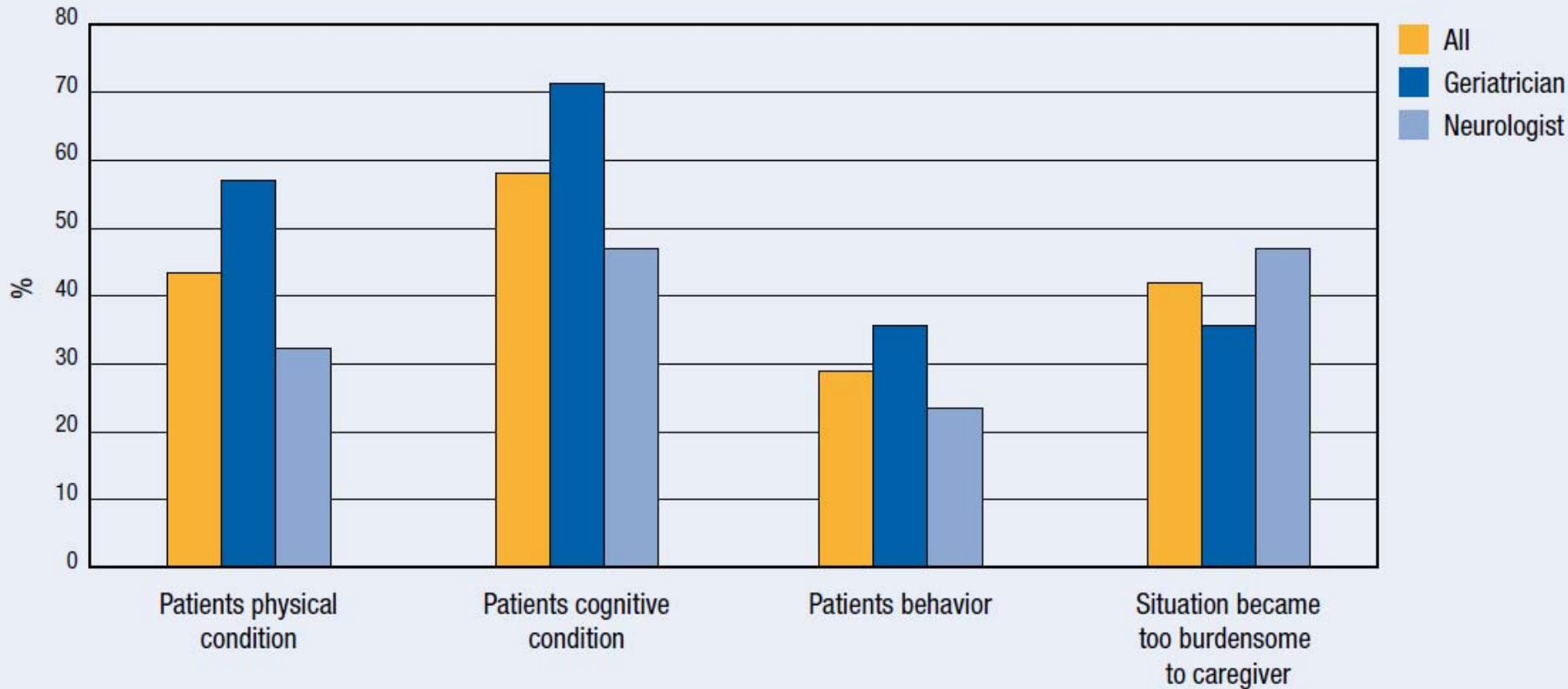
- **Principal reason for nursing home placement**

%	All	Geriatrician	Neurologist
Patients physical condition	43.5	57.1	32.4
Patients cognitive condition	58.1	71.4	47.1
Patients behaviour	29.0	35.7	23.5
Situation became too burdensome to caregiver	41.9	35.7	47.1
Other	11.3	7.1	14.7

Patient's cognitive condition was the most frequent reason for NHP, followed by his physical condition and the difficult situation for the caregiver.



Principal reason for nursing home placement according to the FAS



Patients cognitive condition was the most frequent reason for NHP, followed by his physical condition and the difficult situation for the caregiver.



- **Link between reason for first consultation and institutionalisation**



Patients with functional and behavioural problems are more likely to be institutionalized



Probability of being institutionalized:

Functional problems	1.9 x
Behavioural problems	2.6 x
Cognitive problems	0.5 x



Conclusion

The COGNOS study demonstrates that measures taken by the governmental institution to provide reimbursement for specific medication (for example requesting a “specific and individualized care plan”) can lead to better, holistic care of a patient.

N.B.: The content of the ‘careplan’ is not further specified by the government but its requirement itself for the reimbursement of medication, represents the beginning of a complete and therefore specified ‘careplan’.