

What makes the difference in Home care in Europe – Formal care, informal care, or carers' attitudes?

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Outline

- Disclosure
- Acknowledgements
- Introduction
- Research question
- Methods
- Results
- Main findings
- Discussion

Disclosure

- Nothing to disclose

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Introduction

- One of the burning questions in the aging society is how to support older individuals to live at home as long as possible
- Home care recipients are vulnerable, have multiple diseases, polypharmacy and tendency for loss of functional capacity due to various reasons
- Heterogeneity of aging, diseases, and deterioration of functional capacity together with variety of the social- and health services between and within countries, blurs the picture for what should be done

Research question

- What were the strongest associates of improved ADLs among HC clients, in Europe
 - Level of impairment?
 - Diseases?
 - Available staffing hours?
 - Informal care hours?
 - Used social and health services?
 - Attitudes of the care recipients or professionals?

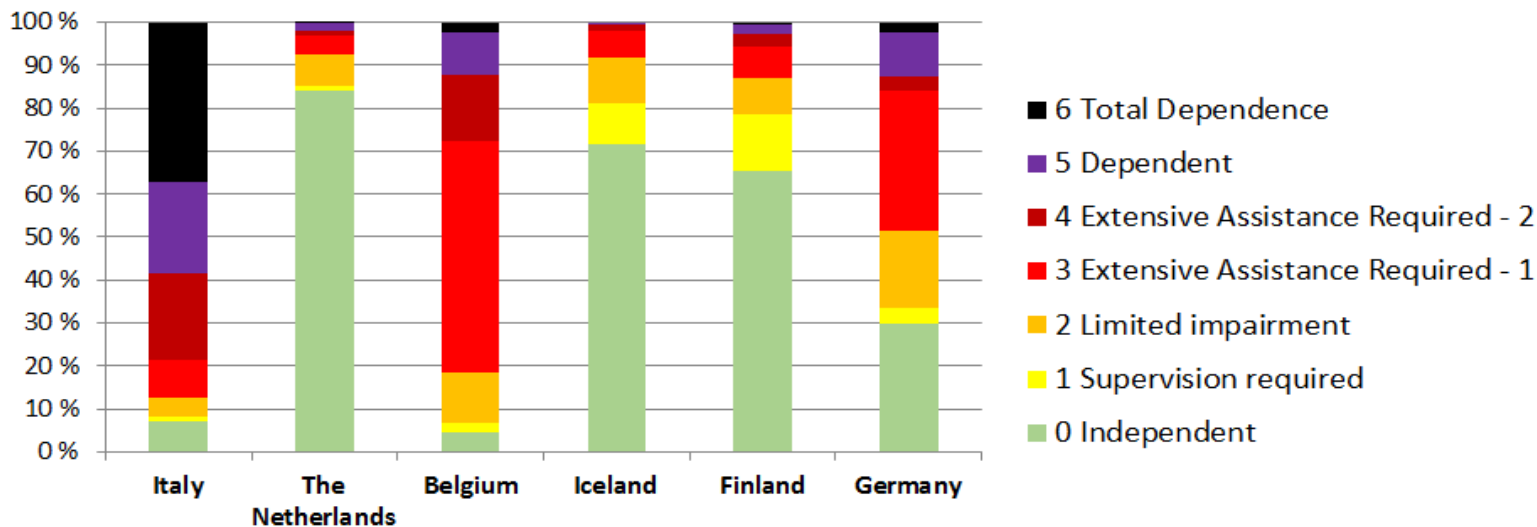
Methods

- Included t0 (baseline)
- Excluded: Comatose, terminal prognosis, any type of senior housing.
- n=2690 HC-recipients during 2013-2014
 - Of those 178 (6,62 %) clients had improved their ADL-performance during the 3 months prior to the assessment
- Cross sectional retrospective analysis
- Associations tested
 - Chi-square
 - Logistic regression analysis
 - Software: SAS



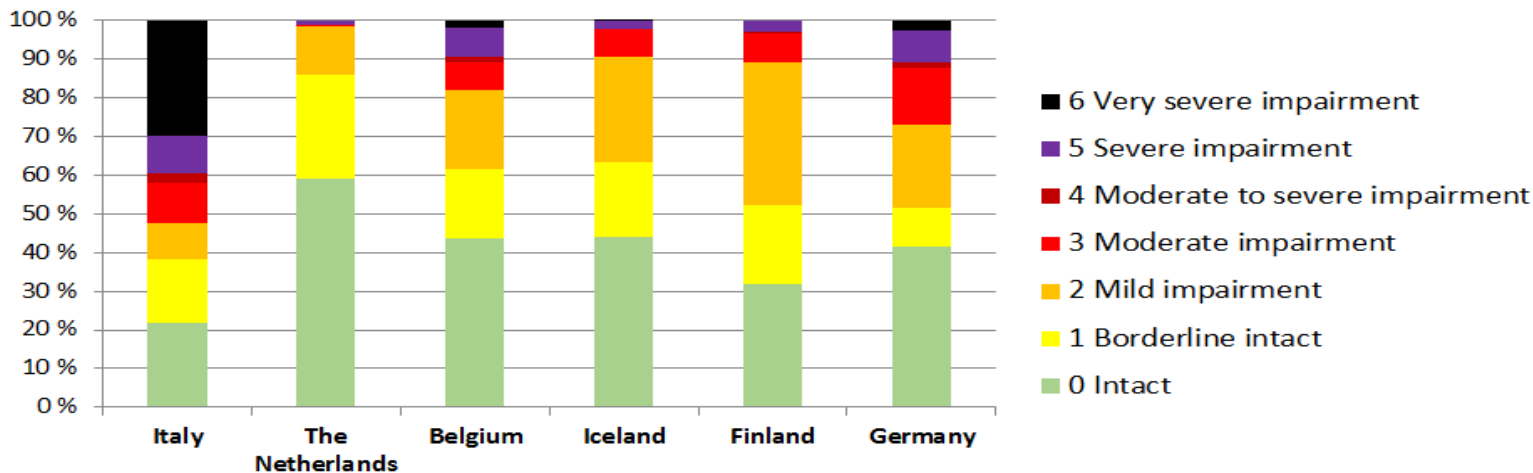
ADLH

- Personal hygiene
- Locomotion
- Toilet use
- Eating



- Decision making
- Short term memory
- Understood by others
- Eating

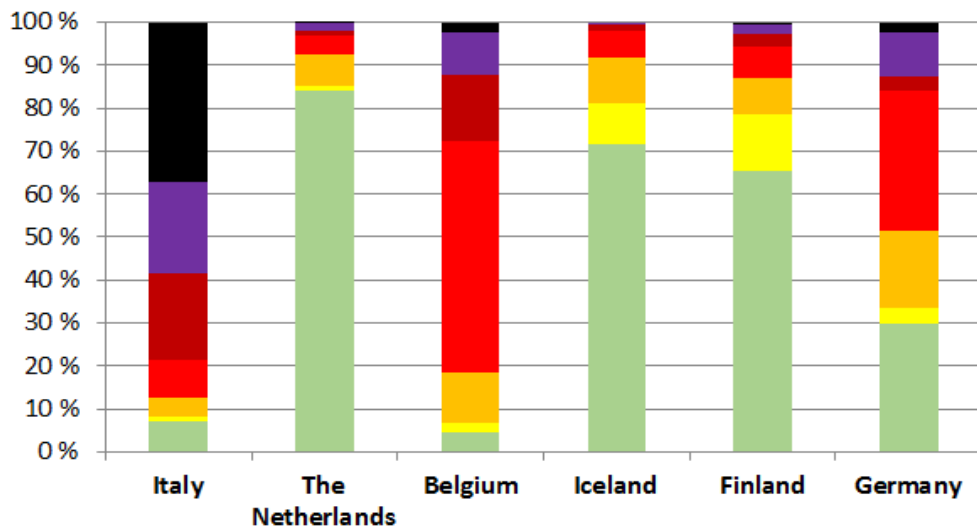
CPS





ADLH

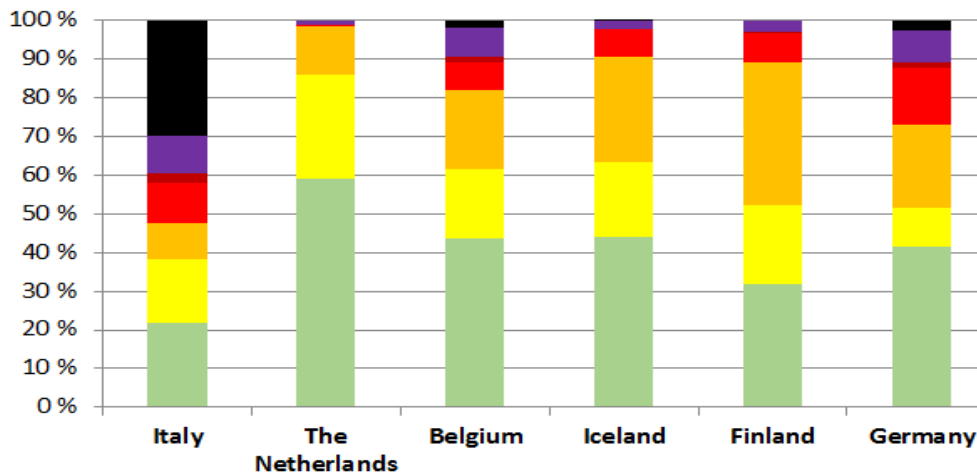
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7,3% 7,8% 4,1% 8,1% 4,4% 8,4%

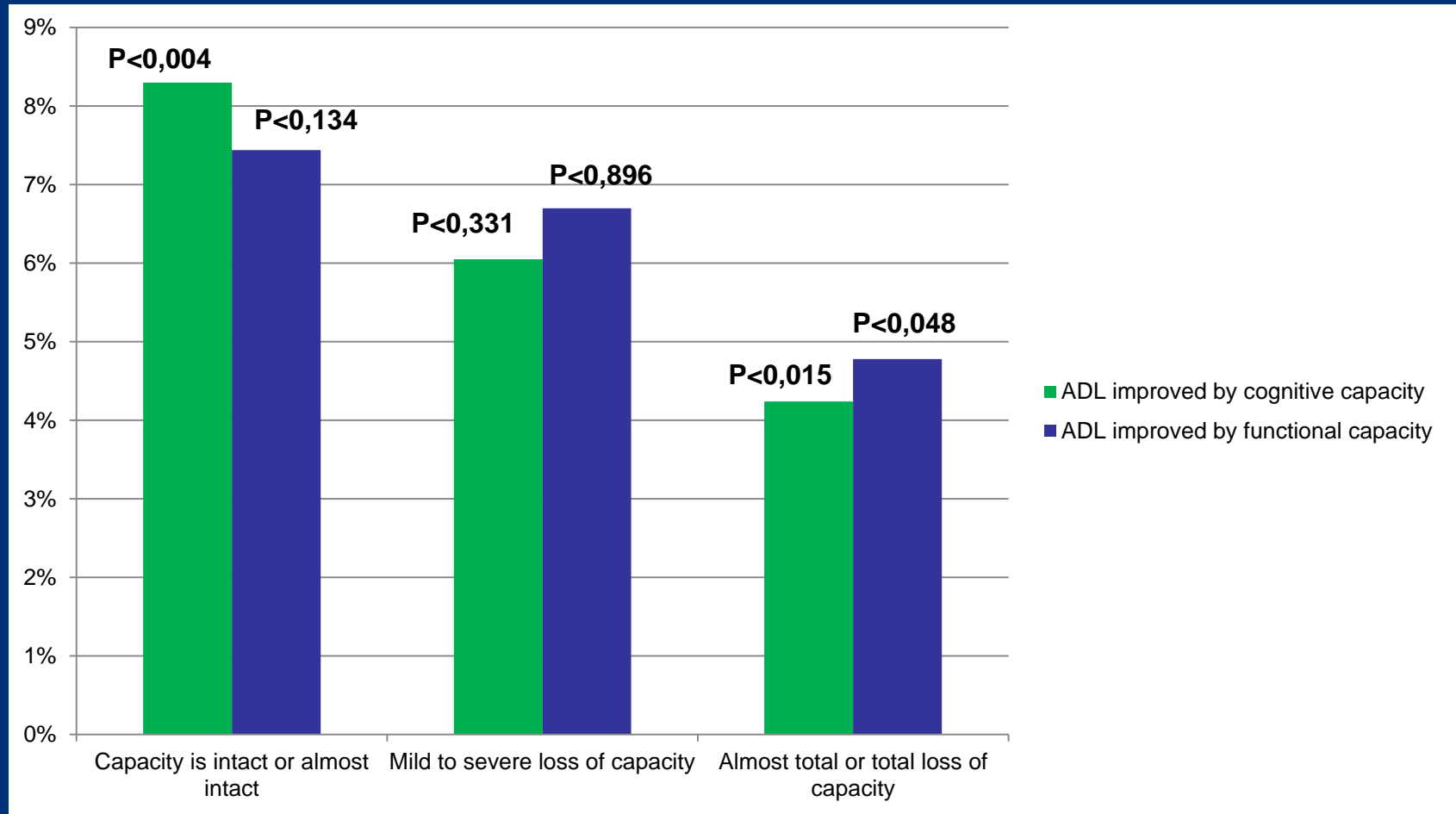
ADL IMPROVED WITHIN 3 MONTHS Mean 6,6%

- Decision making
- Short term memory
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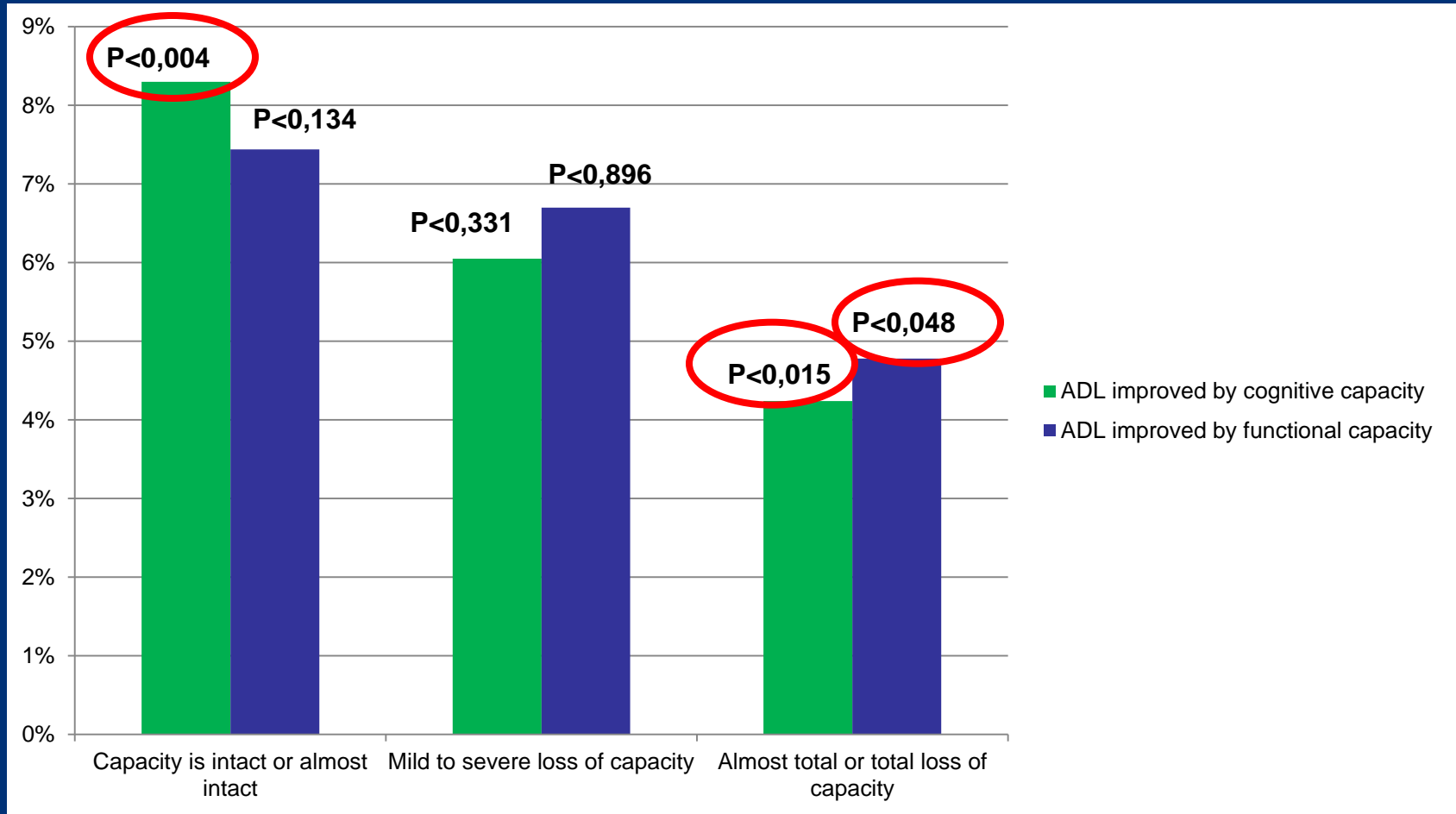
CPS

ADL improved within 3 months according to ADL and Cognition





ADL improved within 3 months according to ADL and Cognition



Role of organization

- Of the 45 organizations (size n=8 to n=418)
 - The share of ADL-improvement within 3 months 0-20%
 - 15 had no care recipients with ADL-improvement within 3 months
 - 22 had more than average share (>6,6%) of care recipients with ADL-improvement within 3 months



Hours of formal care per week and informal care per 3 dd by country

Country	Label	N	Mean	Std Dev	Min.	Max.
Italy	Hours of informal care and active monitoring during last 3 days	386	22,46	22,24	0	72
The NL		450	6,48	13,11	0	72
Belgium		492	0,00	0,00	0	0
Iceland		418	8,74	14,75	0	72
Finland		455	4,92	12,57	0	72
Germany		489	4,84	11,28	0	72
Country	Label	N	Mean	Std Dev	Min.	Max.
Italy	Formal care hours /week	386	1,17	2,18	0	21
The NL		450	4,97	4,84	0	39,83
Belgium		492	8,83	7,75	0	95,92
Iceland		418	3,92	4,05	0	36,25
Finland		455	5,19	5,26	0	51
Germany		489	8,53	8,33	0	50,28



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Minutes of nursing care, physio- and occupational therapy during 1 week

Country	Label	N	Mean	Std Dev	Min.	Max.
Italy	Physical therapy - total minutes in last week	386	1,02	7,46	0	90
The NL		450	10,45	31,89	0	480
Belgium		492	16,93	42,45	0	300
Iceland		418	20,08	44,34	0	240
Finland		455	3,07	14,50	0	120
Germany		489	5,02	17,78	0	180
Country	Label	N	Mean	Std Dev	Min.	Max.
Italy	Occupational therapy - total minutes in last week	386	0,00	0,00	0	0
The NL		450	0,51	5,54	0	90
Belgium		492	3,21	14,93	0	200
Iceland		418	1,00	15,23	0	300
Finland		455	0,13	2,81	0	60
Germany		489	51,80	241,22	0	2160
Country	Label	N	Mean	Std Dev	Min.	Max.
Italy	Home nurse - total minutes in last week	386	36,35	66,03	0	700
The NL		450	19,80	114,37	0	2030
Belgium		492	171,31	119,78	0	840
Iceland		418	19,67	42,51	0	420
Finland		455	37,22	86,42	0	1260
Germany		489	70,53	93,07	0	1240



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Home health aides and home-making services

Country	Label	N	Mean	Std Dev	Minimum	Maximum
Italy	Home health aides - total minutes in last week	386	21,8368	56,887	0	420
	Homemaking services - total minutes in last week	386	10,5	74,867	0	840
Belgium	Home health aides - total minutes in last week	450	123,98	199,833	0	1368
	Homemaking services - total minutes in last week	450	142,8	113,131	0	960
The NL	Home health aides - total minutes in last week	492	226,695	402,773	0	5380
	Homemaking services - total minutes in last week	492	110,585	133,505	0	720
Íceland	Home health aides - total minutes in last week	418	91,9593	163,57	0	1880
	Homemaking services - total minutes in last week	418	101,742	148,954	0	2100
Finland	Home health aides - total minutes in last week	455	238,974	260,408	0	2205
	Homemaking services - total minutes in last week	455	31,6703	83,0308	0	600
Germany	Home health aides - total minutes in last week	489	328,509	335,582	0	1995
	Homemaking services - total minutes in last week	489	55,8875	77,0014	0	420



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Independent predictors for improved functional capacity

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
Person believes he / she is capable of improved performance in physical function	3,30	2,19	4,98
Decisionmaking improved within 3 mo	1,95	1,15	3,32
Carer believes that the care recipient is capable of improved performance in physical function	1,92	1,25	2,95
Country is Belgium	1,00	1,00	1,00
Country is Italy	1,53	0,83	2,83
Country is The Netherlands	1,66	0,93	2,95
Country is Iceland	1,28	0,70	2,33
Country is Finland	0,41	0,21	0,82
Country is Germany	1,80	1,02	3,16
C-statistics 0,726			

Tested were (p<0,05=*):

- Age
- Sex
- Living arrangements, marital status
- Diagnoses
 - [dementia, Hip fracture, MS]*
- Care time
 - Informal care
 - Nurses
 - Home aides*
 - Home makers
 - FT /OT/ Speech T
 - Psychological therapy
- Cognitive* and ADL capacity*
- Mood
- Environmental problems and safety
- Care recipients' attitudes*
- Carers' attitudes*
- Use of social and health services
 - [recent ER visits ,recent hospital stay]*

Main findings

- Care Recipients' and carers' attitudes had strong association with recent ADL improvement
- Site/local issues had a substantial role in recent ADL improvement
- None of the tested diagnoses – apart from any diagnosis of dementia, MS, and hip fracture – had any role with recent ADL improvement
- Level of cognitive impairment may have a role in recent ADL improvement

Discussion / Conclusion

- Limitations of the study /analysis:
 - crosssectional, (partially retrospective) design
 - Not a random sample from each country
- Client selection probably an issue
- More attention to be paid on local issues and care practices to understand what kind of HC-clients have improvement potential, and how it should be accelerated