

APPCARE
APPROPRIATE CARE PATHWAY

*APPCARE Final event
Bruxelles May 23rd 2019*

Effectiveness of appropriate care pathways for frail older adults

The Dutch study site

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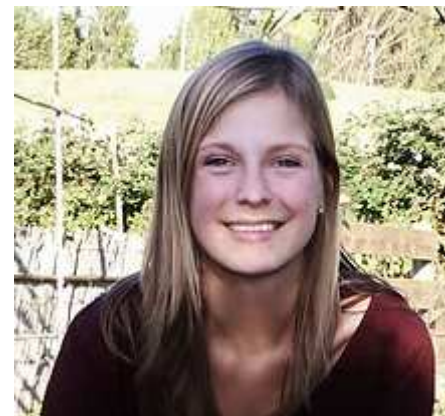
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Francesco Mattace Raso





*APPCARE Model –
Rotterdam study site*





APPCARE Model – Rotterdam study site

Hospital care

Patients \geq 75 years old entering the geriatric ward

*FURTHER ASSESSMENT AND
INTERVENTION*

Coordinated care

*Follow-up by primary health care centers
Geriatric clinical follow up at the hospital*

Preventive care

*Fall prevention
Polypharmacy intervention
Social support*



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APPCARE Model – Rotterdam study site

Hospital care

Patients \geq 75 years old entering the geriatric ward

ErasmusMC



Hospital care

INCLUSION CRITERIA: Patients +75 coming from E.R. or admittance area, with NO severe cognitive impairment and NO living in residential care facilities.

Geriatric team

- Inpatient stay:
 - Comprehensive Geriatric Assessment
 - Medical assessment
 - Social and environmental assessment
 - Diagnosis and clinical and care plan
- Discharge:
 - Diagnosis, co-morbidity and indication on transfer
 - Coordinated and preventive care models



Comprehensive Geriatric Assessment

<i>Outcome</i>	<i>Instrument</i>
Functional Status	BARTHEL INDEX
Severity of disease	HALM's CRITERIA
Comorbidity	CIRS
Delirium	Clinical judgement (using CAM)
Risk of pressure ulcer	BRADEN scale
Dementia	MMSE



Medical assessment

- Temperature
- Mean arterial pressure
- Heart rate
- Respiratory rate
- Glasgow Coma Scale
- Laboratory tests



Social and environmental assessment

- Demographic and socio-cultural context
- Healthy life styles (smoking; alcohol use; BMI)
- Living condition before hospital admission
- Premorbid health conditions
- Disability via IADL and ADL
- Use of aids
- Physical activity and limitations
- Health-related QoL
- Frailty
- **Fear of falling**
- **Polypharmacy**
- **Loneliness**





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Recruitment at hospitals

Hospital	<u>Started 2016</u>	<u>Started 2017</u>	<u>Start 2018</u>
Erasmus MC	Inpatient ward	Daycare admissions	
Amphia	Inpatient ward		
Vlietland		Inpatient ward	
Maasstad		Inpatient ward	
Havenpolikliniek			Outpatient clinic

Recruitment at hospitals

Hospital	<u>Started 2016</u>	<u>Started 2017</u>	<u>Start 2018</u>
Erasmus MC	Inpatient ward	Daycare admissions	
Amphia	Inpatient ward		
Vlietland		Inpatient ward	
Maasstad		Inpatient ward	
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Community sample: 149 citizens \geq 70 years hospitalized in the past 6 months



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Follow up

- Improvement social and environmental context
- Adherence to pathways
- User experiences

What is your satisfaction with the care you received?

I am satisfied with the care I received from doctors

I am satisfied with the care I received from nurses

The doctor/nurse discussed a care plan with me for the period after discharge

I followed the care plan as discussed with me

I felt I had a say in decisions that were made about my health

On a scale from 1-10 how satisfied were you with the care you received?



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Coordinated care

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Geriatric clinical follow up at the hospital*

ErasmusMC





Coordinated care

	Total Patients assessed (Hospital Care Model)	Patients meeting inclusion criteria	Patients included in the follow up
N	137	137	79
%	100.0	100.0	57.7
	Total Patients assessed (community sample)	Patients meeting inclusion criteria	Patients included in the follow up
N	865	149	128
%	100.0	17.2	85.9

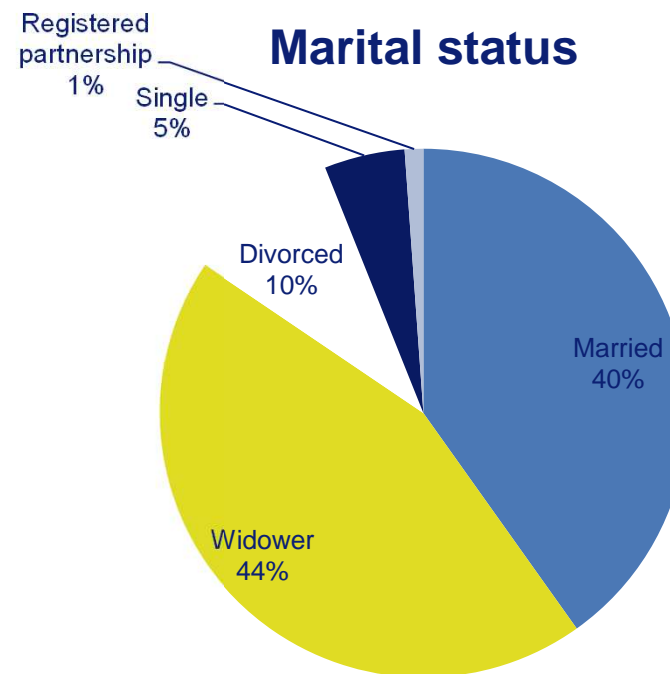
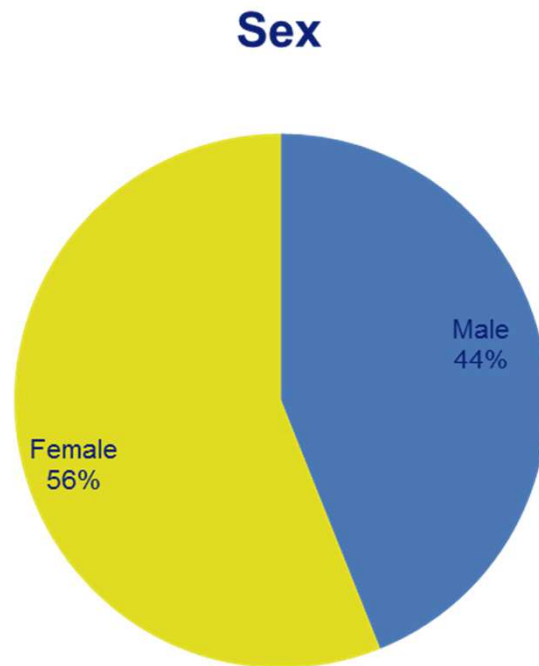


Coordinated care

	Total Patients assessed (Hospital Care Model)	Patients meeting inclusion criteria	Patients included in the follow up
N	1,002	286	207
%	100.0	28.5	72.4

Participant's profile (n=286)

Mean age 80.6 years (SD=7.1)



Pre-post intervention results

91.9% received follow-up by primary health care centers

Health care use in past 6 months	Pre-Mean \pm SD	Post-Mean \pm SD	P-value Pre- post difference*
Number of visits with family doctor	4,9 \pm 4,9	5,8 \pm 4,7	P <0,018

**Paired sample T-test*

Pre-post intervention results

45.4% received a geriatric clinical follow up in the hospital

Health care use in past 6 months	Pre- Mean \pm SD	Post- Mean \pm SD	P-value Pre- post difference*
Number of inpatient days at the hospital	4,3 \pm 5,7	12,1 \pm 13,8	P <0,005

**Paired sample T-test*



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Preventive care

Fall prevention
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Erasmus MC





Preventive care

Fall Prevention : 21.6%

home-based exercise programmes, group exercise programmes and multifactorial assessment and intervention programmes

Polypharmacy intervention: 88.3%

self-monitoring programmes to improve adherence to medications

Social Support : 16.9%

social activities or support within a group format

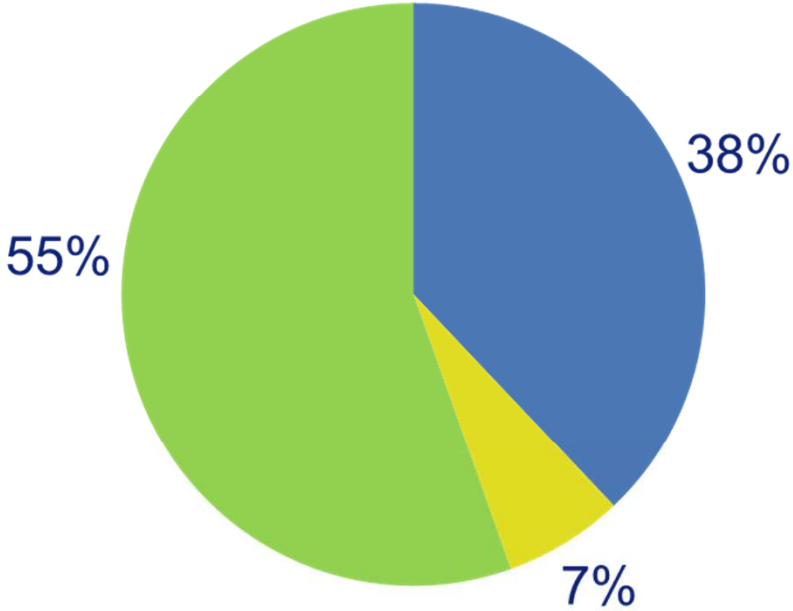


Preventive care Results

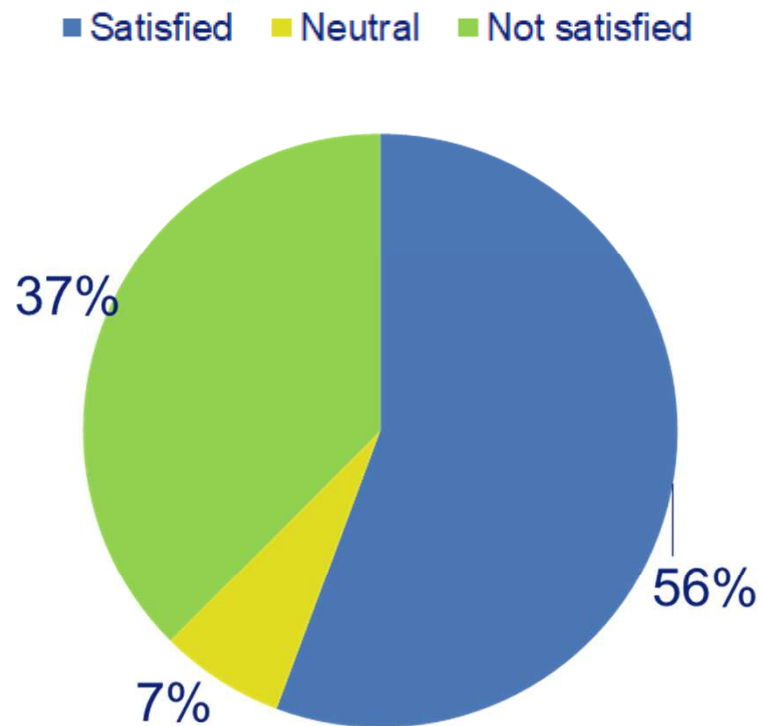
	PRE Mean ± SD	POST Mean ± SD	Pre-Post difference
Fear of falling Are you afraid of falling? (yes/no)	0,52 ± 0,50	0,50 ± 0,50	<i>p</i> =0,649
Polypharmacy Is it difficult for you to take your medications as prescribed? (yes/no)	0,08 ± 0,28	0,07 ± 0,26	<i>p</i> =1,000
Loneliness Do you sometimes miss having people around you? (yes/no)	0,47 ± 0,50	0,47 ± 0,50	<i>p</i> =1,000
			<i>*Student's t-test</i>

I am satisfied with the care I received from doctors

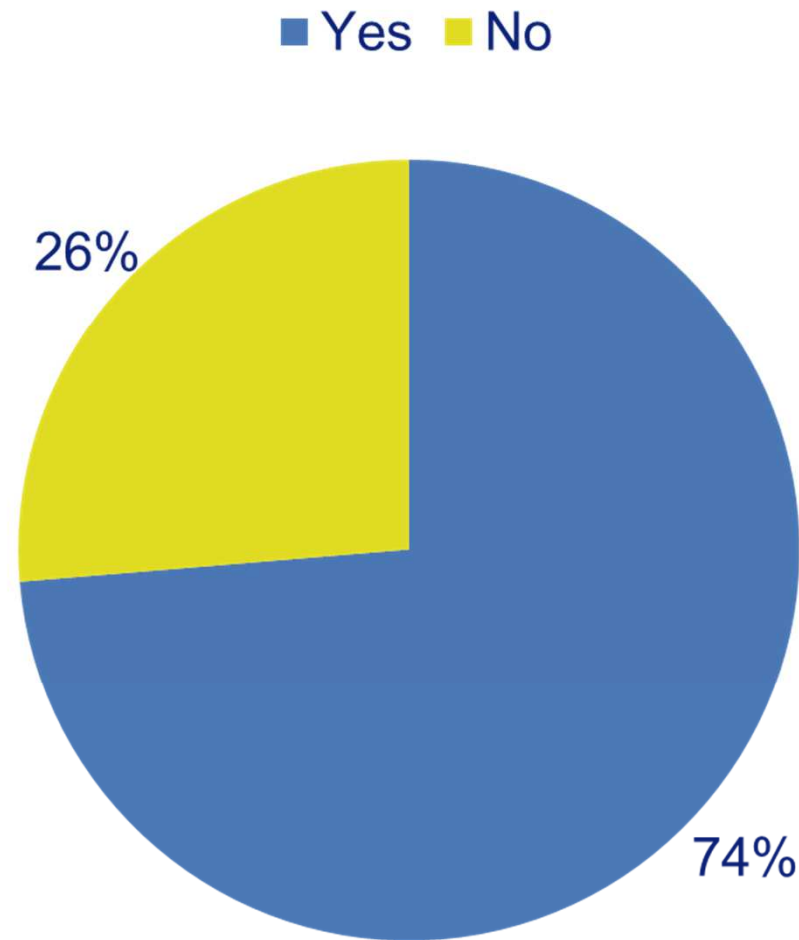
■ Satisfied ■ Neutral ■ Not satisfied



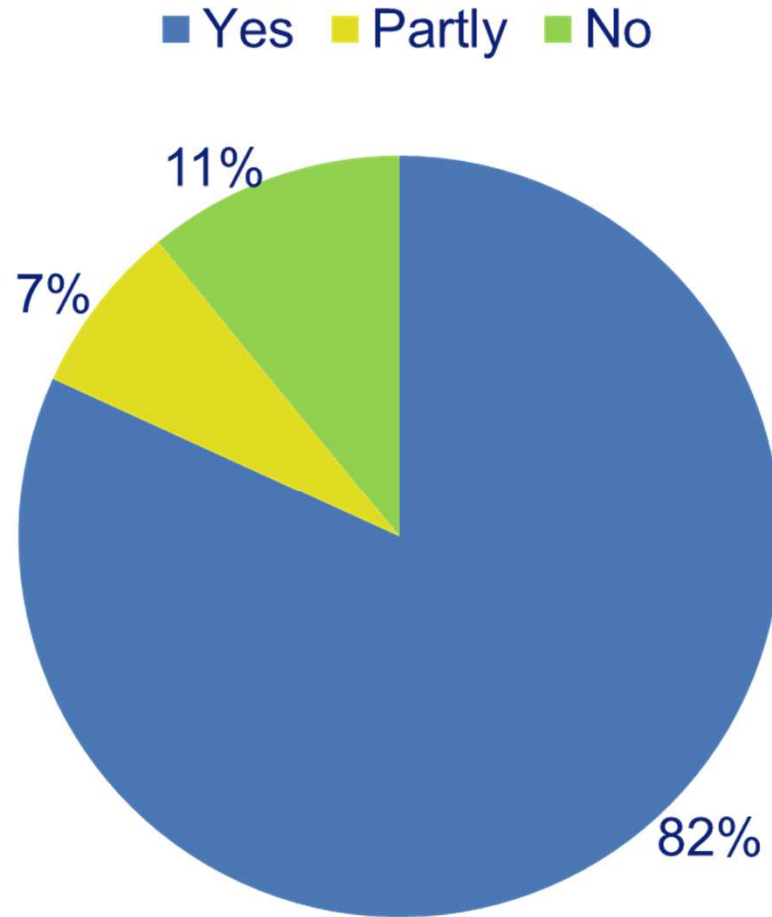
I am satisfied with the care I received from nurses



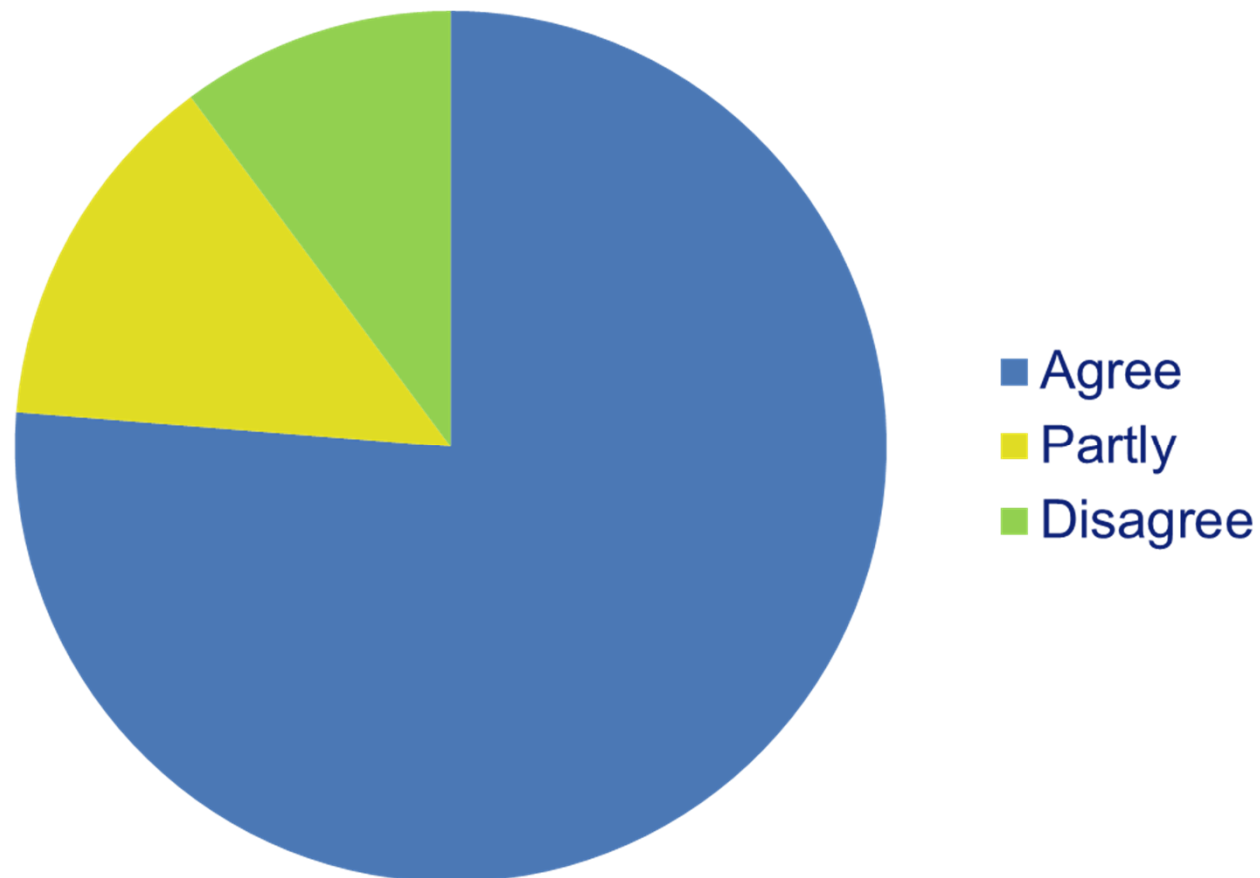
The doctor/nurse discussed a care plan with me for the period after discharge



I followed the care plan as discussed with me



I felt I had a say in decisions that were made about my health





Overall satisfaction

On a scale from 1 (low satisfaction) to 10 (high satisfaction) patients rated the care they received in the hospital with a 7,96 (SD=1,4).

Thank you for your attention!