



Quality of Care

Validity of the interRAI-HC for Cost of Care Assessments


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Lisanne van Lier, PhD-student
Amsterdam, the Netherlands

No conflict of interest



Background

- Demand for (long-term) care services 
- Allocate health care resources in most efficient way
 - **Economic evaluations**
 - **Costs**
 - **Consequences (outcomes, effects)**
 - quantify utilisation of care services

InterRAI for cost of care assessment

- Routine care assessments
 - Individuals not exposed to additional questionnaires
 - = Important **advantage** in vulnerable patient groups
- Resource utilisation measurement and cost estimates valid?



Aim

To assess the **convergent validity** of the **interRAI-HC** instrument in comparison with the **RUD Lite** instrument for the calculation of societal costs.



Method

- Cross sectional within-subject design
- Participants
 - Substudy IBenC project
 - 65 years and older
 - received professional community care in six countries (100 clients per country)
- RUD Lite administered within four weeks after the interRAI-HC assessment
- Primary informal caregiver



Instruments

- **InterRAI-HC** (version 9.1)
 - Resource utilisation
- **RUD Lite**
 - Developed to measure resource utilisation from a societal perspective among older adults with dementia
 - Adapted for IBenC purposes
- **Cost estimates: Resource use was valued using Dutch standard costs**

Resource utilisation

Service use category	Recal period interRAI-HC	Extrapolation
Home health and domestic care	7 days	*13
Physician visits (GP + outpatient clinic visits)	3 months	
Other health care services	7 days	*13
Hospital admission with overnight stay		
- Times	3 months	
- Nights (OECD database)	-	
Emergency room visits	3 months	
Supportive care	7 days	*13
Informal care	3 days	/3 *91



Hypotheses

- Correlation assessed using **Spearman's ρ**
- Strong correlation (Spearman's $\rho > 0.5$)
 - resource utilisation estimates
 - costs of care estimates
 - total societal cost estimates

>> 17 hypotheses in total
- Complete cases



Results

Demographics	All countries (n=656)
Mean age (SD)	83.3 (7.2)
Female (n, %)	439 (67%)
Living alone (n, %)	472 (72%)
Cognitive impairment (CPS \geq 3) (n, %)	61 (9%)
Depressive symptoms (DRS \geq 3) (n, %)	82 (13%)



Results (resource use)

	Service use category	Spearman's $\rho > 0.5$
Home care	Home health and domestic care	✓
Physician visits	Physician visits (GP + outpatient clinic visits)	✓
Other health care services	Physical therapy	✓
	Occupational therapy	✗
	Psychological treatment	✓
Hospital admissions	Hospital admission with overnight stay	✓
	- times	✓
	- nights	✓
	Emergency room visits	✗
Supportive care services	Meals on wheels	✓
Informal care	Informal care	✓

Results (resource use)

An example.. informal caregiver time

RUD Lite (n=656)		InterRAI-HC (n=656)		Mean Difference (RUD Lite minus interRAI-HC)	Spearman's ρ
Use of service, n (%)	Mean (SD)	Use of service, n (%)	Mean (SD)	Mean (95% CI)	
413 (63%)	212 (499)	483 (74%)	211 (426)	0.8 (-28; 32)	0.61

Informal care: € 13.57 per hour

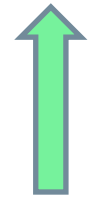
Results (costs)

Service use category	RUD Lite (n=656) Mean (SD)	InterRAI-HC (n=656) Mean (SD)	Mean Difference (RUD Lite minus interRAI-HC)	Spearman's $\rho > 0.5$
Home care	2369 (2860)	2603 (2505)	-233	✓
Physician visits	83 (158)	93 (178)	-10	✓
Other health care services	108 (265)	118 (316)	-10	✓
Hospital admissions	680 (2568)	1197 (3737)	-517	✓
Supportive care services	177 (277)	222 (279)	-45	✓
Informal care	2877 (6770)	2866 (5787)	10	✓
Total societal costs	6295 (8221)	7099 (7428)	-804	✓

Cost estimates (€) over a three month period.

Conclusion

- InterRAI-HC has **good convergent validity** as compared with the RUD-Lite instrument
- Performing economic evaluations among community dwelling older adults using interRAI-HC



Next step..





Website
www.ibenc.eu

Questions?
l.vanlier@vumc.nl

