

Assistive Products in Home Assistive Services: analysis of costs & benefits

Ricard Barberà i Guillem



Socio-economic assessment of Assistive Technology

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INSTITUTO DE
BIOMECÁNICA
DE VALENCIA

*Rakel Poveda, Lucía Fernández,
Francisco Ródenas, Jorge Garcés*



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PRESENTATION OF THE PROJECT

- **Summary:** Incorporation of Technological Assistive Products in the extension of Home Care Services, considering different levels of capabilities and degrees of intervention (including low and High cost elements)
- **Sponsor:** Ministry of Labour and Social Affairs, Secretary for Social Security.
- **Partners:** IBV & Polibienestar

USER'S PROFILE

- Women
- 75 years old
- Widow
- Without primary studies
- Low incomes (557.5€/month)
- Related illness:
 - ❖ Osteoporosis
 - ❖ Diabetes
 - ❖ Depression
 - ❖ Blindness or loss of vision
 - ❖ Hypertension

USER'S PROFILE

USER'S NEEDS

- Toilet
- Bath/shower
- Move around the house
"from armchair to bed"
- Three different levels of equipment

DEFINITION OF SCENARIOS

Toileting function

- | | |
|-----------------------|--|
| Intervention 1 | Grab rails + WC elevator |
| Intervention 2 | Grab rails + WC elevator + Fall sensor |
| Intervention 3 | Grab rails + WC-bidet + Fall sensor |

DEFINITION OF SCENARIOS

Bathing / showering

- Intervention 1** Grab rails + rubber carpet + transference table
- Intervention 2** Grab rails + rubber carpet + turning bath chair + one lever Tap
- Intervention 3** Grab rails + bath chair + one lever tap + toweller + bathing accessories + shower plate installation + falls sensors

DEFINITION OF SCENARIOS

From armchair to bed

- Intervention 1** rising pieces (armchair/bed) + walking stick + bed rails
- Intervention 2** rising pieces (armchair/bed) + walking stick + bed rails + bed raising triangle + corridor rails
- Intervention 3** Catapult armchair + walking stick + articulated bed (sore prevention) + corridor rails + light sensors

DEFINITION OF SCENARIOS

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COST ANALYSIS

Direct cost of AT

Intervention 1

860,00 €

Intervention 2

1.730,00 €

Intervention 3

5.810,00 €

COST ANALYSIS

	Annual AT Cost	Annual Cost HAS
Intervention 1	204,16 €	2609,21 €
Intervention 2	410,70 €	2609,21 €
Intervention 3	1379,27 €	2609,21 €

BENEFITS in terms of...

- Hip fracture
- Pressure sore
- Institutionalisation in nursing homes
- Care giver injuries (formal)
- Care giver time reduction (informal)

BENEFITS in terms of...

- Hip fracture (13.912,48 €)
 - hospital
 - pharmacological
 - Family care
- Pressure sore (112,64 €)
 - Primary attention

BENEFITS in terms of...

- Institutionalization in nursing homes
 - I1. 6 month (8.898,98 €)
 - I2. 1 year (17.797,96 €)
 - I3. 1,5 years (26.696,94 €)
- Care giver injuries (recovery days)
 - I1 (25%), 10,25 days (306,92 €)
 - I2 (50%), 20,50 days (613,85 €)
 - I3 (100%), 41,00 days (1.227,69 €)

BENEFITS in terms of...

- Care giver time reduction (family)
 - I1 (30%), 5,65 h/m (28,45 €)
 - I2 (60%), 11,30 h/m (56,91 €)
 - I3 (90%), 16,95 h/m (85,36 €)

BENEFITS in terms of...

- Hip fracture (5.393)
- Pressure sore (4.484)
- Institutionalisation in nursing homes (773)
 - help in 3 ADL + HIP fracture
- Care giver injuries (19.048)
- Care giver time reduction (179.061)

TOTAL HAS POPULATION: 330.371

COST/BENEFIT

	100%	75%	50%	33,76%
I 1	- 25,56 M€	- 19,17 M€	- 12,78 €	- 8,61 M€
I 2	25,21 M€	18,90 M€	12,60 M€	8,49 M€
I 3	321,88 M€	241,41 M€	160,94 M€	108,39 M€

COST/BENEFIT

Intervention 1	benefit/cost	1,38
Intervention 2	benefit/cost	0,81
Intervention 3	benefit/cost	0,29

CONCLUSIONS

- To recommend intervention 1
- To make more studies to improve the model, specially the validation for policy making.

CONCLUSIONS

It's better to be vaguely right
than exactly wrong

Grazie mille!



INSTITUT DE BIOMECÀNICA DE VALÈNCIA
Universitat Politècnica de València · Edifici 9C
Camí de Vera s/n · E-46022 · València (ESPANYA)
☎ +34 96 387 91 60 · Fax +34 96 387 91 69
ibv@ibv.upv.es · www.ibv.org

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