

CEOQA

LTC network

Quality and cost-effectiveness in long-term care and dependency prevention



POLICY SUMMARY: ITALY

Up-Tech

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Policy theme	Case management, coordination of stakeholders, ICT in LTC
Design and implementation level	Local design, locally implemented
Policy objective	To support home care for patients with Alzheimer's Disease (AD)
Start date – End date	Experimental project: 2011 – 2014. Activities have continued after the experimental project through some local implementations.

Aims

The main objectives of the project are to:

1. reduce the care burden of family caregivers of AD patients;
2. maintain AD patients at home

Implementation

The aims are achieved by means of a coordinated set of measures: case-management strategies; new technologies in the home of patients; preventive home visits by trained nurses; and integration of existing services.

The case-management intervention is provided by an ad-hoc trained (and hired) case manager/social worker, providing support consisting of at least three sessions of individual counselling; monthly follow-up phone calls; stress management training; and information about services and benefits offered by the Italian social welfare system and the local volunteer organizations.

The technological device intervention involves the testing of a set of devices including luminous paths, home-leaving sensors, sensors to detect falls at night, gas and water leak sensors, and automatic lights. These devices are assembled by an external contractor and linked to a single-board micro-controller, which transmits alarm signals to the caregivers when

needed, thus functioning as a second-generation telecare system. In addition, all participants receive three home visits by a specially trained nurse. Home visits take place at baseline and at months 6 and 12.

The visits aim at collecting exposure and outcome data, but also at providing brief counselling/training of the caregiver regarding practical aspects of patient assistance, such as daily management of drug treatment, ergonomics of the home environment, stress management and care burden.

In addition, the plan is to restructure the whole process of dementia care at the regional level with the contribution of a collaborative working group composed of over 120 professionals, established by the project through the implementation of a web-based application. This ICT tool will support the overall governance of this sector and the evaluation of different pharmaceutical approaches to AD treatment.

Target group

The programme has two target populations: older AD patients and their family caregivers. By 2015, the experimental program had

reached 1,385 older people, including 438 patients suffering from AD, and 947 family caregivers.

Eligibility criteria

AD patients are subjects with a pre-existing diagnosis of AD, in an intermediate stage, according to the 2011 criteria of the National Institute on Aging-Alzheimer's Association, with a mini-mental state examination (MMSE) score between 10 and 20, living in the community, and assisted by at least one family caregiver.

Family caregivers are defined as those kin (if not habitually living with the patient, then living in the same municipality), who care for and directly support the patient with activities of daily living (ADL) and instrumental activities of daily living (IADL) for at least one hour per day in the last six months. Where there is more than one family caregiver, the primary caregiver (the family member who spends more hours assisting the patient) will be included in the trial.

The exclusion criteria are:

1. lack of informed consent from the AD patient (or from the caregiver, if the patient either has been declared legally incompetent, has a support administrator appointed, or has been classified as naturally incapacitated by the local Alzheimer Evaluation Unit (AEU));
2. presence of severe diseases associated with disability in ADLs, life expectancy less than six months in addition to AD, or unstable chronic conditions in both the AD patient and the family caregiver, as assessed by the AEU and other professionals in the health district;
3. intention of moving out of the health district within 12 months;
4. being enrolled in another experimental trial;
5. lack of a family caregiver or presence of a primary caregiver who is under 18 years.

Resources

For the implementation of the programme, €1,080,000 was invested through joint funding from the Ministry of Labour and Social Policies' LTC Fund and the Marche region over four years (2011–2014).

A multi-component strategy has been implemented in order to increase the participation of stakeholders. The engagement of service staff (neurologists, geriatricians, other physicians, nurses and social workers) was stimulated by raising the public visibility of the project through:

1. the establishment of a project steering committee, including members from all institutions involved;
2. a press conference, attended by local politicians and regional experts;
3. in loco meetings with professionals working in the five districts, including GPs and other municipal staff;
4. producing advertising materials for mass distribution, such as a brochure explaining the project in plain terms.

Performance assessment and monitoring

The experimental project designed a set of guidelines and data collection tools which were used to monitor and assess the programme's implementation.

These tools were also employed by the follow-up local developments.

**Evidence of
SUCCESS** (outcomes,
quality, satisfaction,
awareness)

Presently, 290 families per year are involved as beneficiaries. The objectives were achieved.

The impact was empirically evaluated by means of a third questionnaire administered at the end of August/beginning of September, 2014.

In order to examine the effect of the case management on the caregiver-AD patient dyad, the caregiving burden, the anxiety, depression and quality of life of the caregiver have been measured using validated assessment instruments, as were the healthcare resource consumption of the dyads.

The project has also enabled the creation of a public partnership network that includes:

- the government of the Marche region, as funder and strongly endorsing body of the project, seen as a tool to restructure
- the existing provision of care services;
- the Regional Health Authority, as the organization directly managing health care services, via its professionals participating in the project by directly providing services to AD patients and their caregivers;
- the different municipalities, in charge of the provision of social services to citizens;
- the Regional Centre of Volunteering (an NGO), as coordinator, providing technical support to the volunteer associations directly engaged in the project and providing help to the families of patients with Alzheimer's disease.

**Transferability/un
iqueness**

The scheme is transferable to other contexts, provided its unique design is replicated via the involvement of a large number of key stakeholders. I

**s this an
emergent
practice?**

Degree of innovation

Only in principle, not in its specific way of implementation. There is a high degree of innovation, because it supports a real revolution in the local system of care.

Sustainability

Sustainability will depend on the choices made by the health and social service authorities of the Marche region.

**Critical
assessment**

n/a

Academic literature on this action

Chiatti C., Furneri G., Rimland J. M, Demma F, Bonfranceschi, F. (2015) The economic impact of moderate stage Alzheimer's disease in Italy: evidence from the Up-Tech randomized trial. *International Psychogeriatrics*, 1563–1572.

Raffaelli L. et al. (2017) Improved solution to monitor people with dementia and support care providers. In: Cavallo F., Marletta V., Monteriù A., Siciliano P. (eds) *Ambient Assisted Living. ForItAAL 2016*. Lecture Notes in Electrical Engineering, vol 426. Springer, Cham.

Chiatti C, Masera F, Rimland JM, Cherubini A, Scarpino O, Spazzafumo L and Lattanzio F. (2013) The UP-TECH project, an intervention to support caregivers of Alzheimer's disease patients in Italy: study protocol for a randomized controlled trial. *Trials*, 14, 155.

Chiatti C, Rimland JM, Bonfranceschi F, Masera F, Bustacchini S, Cassetta L, Lattanzio F. (2015) The UP-TECH project, an intervention to support caregivers of Alzheimer's disease patients in Italy: preliminary findings on recruitment and caregiving burden in the baseline population. *Aging & Mental Health*, 19, 6, 517–25.

Documents

In Italian

<http://up-tech.regione.marche.it/IIProgettoUpTech.aspx>
