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Published in:
Gerontology

DOI:
[10.5772/intechopen.69934](https://doi.org/10.5772/intechopen.69934)

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Document Version
Publisher's PDF, also known as Version of record

Publication date:
2018

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

de Jong, B., Wynia, K., & Geluk-Bleumink, A. (2018). Ageing Better in the Netherlands. In C. Sancarlo, & A. Greco (Eds.), *Gerontology* (pp. 101-111). IntechOpen.
<https://doi.org/10.5772/intechopen.69934>

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Ageing Better in the Netherlands

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<http://dx.doi.org/10.5772/intechopen.74748>

Abstract

The Dutch National Care for the Elderly Programme was an initiative organized by the Netherlands Organisation for Health Research and Development (ZonMw) between 2008 and 2016. The aim of the programme was to collect knowledge about frail elderly, to assess their needs and to provide person-centred and integrated care better suited to their needs. The budget of EUR 88 million was provided by the Dutch Ministry of Health, Welfare and Sports. Putting the needs of elderly people at the heart of the programme and ensuring their active participation were key to the programme's success. The programme outcomes included the establishment of eight geriatric networks around the medical universities with 650 organisations and the completion of 218 projects. These projects, involving 43,000 elderly people and 8500 central caregivers, resulted in the completion of 45 PhD theses and the publication of more than 400 articles and the development of 300 practice toolkits, one database and a website, www.beteroud.nl. The Dutch National Care for the Elderly Programme has since developed into a movement and continues under the consortium Ageing Better, made up of eight organisations. Through the use of ambassadors, Ageing Better promotes the message that ageing is not a disease but a new phase of life.

Keywords: ageing, elderly, healthy ageing, frailty, integrated care

1. Introduction

The European population is ageing as a result of lower birth rates and a higher life expectancy. The Netherlands is a relatively young country with 15% of the population aged 65 years and over (8% is aged 80 and over) compared to Germany, where 20% of the population is aged 65 years and over. Life expectancy in the Netherlands is still rising: average life expectancy is 79.9 years for men and 83.3 years for women. By 2050 the number of elderly people will

have increased to 4.6 million, a quarter of the Dutch population [1]. Due to improved education and better lifestyles, the increase in the number of frail elderly people will be relatively smaller. However, large health differences do still exist. Poverty causes illness, and illness causes poverty. The life expectancy of people at the lower end of the social economic scale is 7 years lower than it is for those at the higher end of the scale, as measured by education and income. The difference in healthy life expectancy between people with a low and a high socioeconomic status (SES) is 16 years. People with a lower SES experience more and earlier disabilities and chronic diseases.

Fifty percent of elderly people suffer from one or more chronic diseases, but two-thirds experience no physical disabilities, and more than half report feeling healthy [1].

Elderly people prefer to live at home as long as possible. Currently, six out of seven people aged 80 and older live at home, and the remainder (14%) lives in a nursing home. Of the total 80+ population, about one-third suffers from frailty through loss of function and reduced self-reliance. Frailty results from a combination of advanced age, chronic diseases, welfare problems, poor living situations, weak social networks and low income. The desire of most people to live at home as long as possible is supported by government policy. Cost containment plays an important role in this policy. Care, support and welfare for (elderly) people in the Netherlands are financed according to three Acts (Appendix A).

Care for the elderly is facing its greatest ever period of change. This is not only because of concerns about the quality, accessibility and affordability of care but also because our view of ageing is gradually changing. That view ultimately determines what we expect of care and support for the elderly. In this respect, the National Care for the Elderly Programme (NPO) was well ahead of its time.

2. Dutch National Care for the Elderly Programme

The Dutch National Care for the Elderly Programme began in 2008 and was run by the Netherlands Organisation for Health Research and Development (ZonMw) until 2016 [2, 3].

The aim of the programme was to collect knowledge about frail elderly people, to examine their needs and wants and to provide models for person-centred and integrated care better suited to their needs. The programme had a budget of EUR 88 million provided by the Dutch Ministry of Health, Welfare and Sports and was supported by a committee and 15 staff members. The programme was organized into three steps: the formation of regional geriatric networks with executive commitment, the delivery of innovative and transition projects and nationwide dissemination and implementation of the effective projects.

The responsible ZonMw committee worked to ensure that elderly people were not only the object of inquiry and research in the programme but were also included as subjects and participants. The principle for this approach and the slogan used by the elderly themselves was 'nothing about us without us'. As a result, the focus of empirical research on care innovation shifted over time from medical care to care and welfare, based on what elderly people

themselves considered being important. This in turn led to an increasing emphasis on welfare and support of the elderly in the continuum of well-being and care. In addition, funding was provided for the design and use of a database and for the improvement of education. A vision for the future and a proactive agenda were also established.

For the programme, 8 geriatric networks were developed with a panel of elderly at 8 medical universities. These networks were open to organisations and professionals in the care of the elderly, for example, hospitals, nursing homes, GPs, municipalities and healthcare insurance companies. A total of 650 organisations joined these geriatric networks. The networks allowed innovative experiments and research projects for improving care and support to be developed with the participation of the target groups. The programme led to many important outcomes. A total of 218 projects were developed and financed, involving 43,000 elderly and 8500 caregivers. Forty-five PhD theses were completed, and more than four hundred Dutch and English articles were published. A unique database (TOPICS-MDS) and 300 practice tools were developed, and a website was launched, www.beteroud.nl. The website acts as a central resource for information, tips and tools [3]. The TOPICS-MDS database contains information on the well-being of the frail elderly, covering health experiences, quality of life, illness and ailments, daily functioning, mental well-being, social functioning, use of care and caregiver burden [4–9].

The 218 projects carried out as part of the National Care for the Elderly Programme were focused on themes such as early signalling, care plans, recovery care, ICT and eHealth, district-oriented work, welfare and education. Some projects specifically focused on care for elderly immigrants with different ethnic backgrounds [10, 11]. The group of older migrants is growing fast. They are among the frailest people in the society. They have often done a lot of heavy work and have language problems and little education, and they live in deprived neighbourhoods of minimal income. All these factors have an unfavourable effect on their health. Key figures from their own community with the same background play a central role in the project ‘voice of the older migrant’ (*De stem van de oudere migrant* in Dutch). Through their relationship based on mutual trust, the key figures are able to provide the elderly with information and advice. Besides they form the bridge between the elderly on one hand and care and welfare professionals and organisations on the other hand. After the project, the older migrants experienced improved quality of life and self-reliance; less social isolation; better access to and familiarity with care, welfare and housing; better communication with healthcare professionals; and more knowledge about health. The professionals experienced better coordination of care and welfare tailored to the wishes and needs of the older migrant and knowledge about caring for this group. For society, the result was that older migrants are healthier and more self-reliant and caused less burden on informal caregivers.

3. Three exemplary projects on integrated care

3.1. Integrated Neighbourhood Approach (*Even Buurten* in Dutch)

This project aimed to develop integrated support for vulnerable elderly people, using both informal and formal networks [12–14].

A central coordinator, or pivot, worked with key figures to provide appropriate support for elderly people. At first she inventorised on one hand the needs and wants of frail elderly and on the other hand the offer of the volunteers. And then she matched the needs and the offer to organize tailor made support for the elderly. This improves the self-reliance and quality of life of elderly people aged 70 and over who are living at home.

Research: The project was investigated with a mixed method design. The participants were 372 vulnerable elderly people (and their caregivers), half of whom were in the intervention group and the other half in the control group.

Results: This project led to a great deal of new knowledge, experience and insights. After 1 year, there was no change in self-reliance (health-related), quality of life and well-being among the elderly, and there were no effects on outcomes for caregivers. However, the elderly, the pivots and the volunteers reported that they were very satisfied with their work. The cooperation of the pivots with informal caregivers was better than it was with other professionals. It also became apparent that conducting the project for different neighbourhoods requires a specific approach that fits with the 'culture' of each neighbourhood.

Implementation: The 'Integrated Neighbourhood Approach' has already been implemented in other neighbourhoods of Rotterdam and in other regions such as Groningen and Zeeland.

3.2. Embrace service for person-centred and integrated primary care (*SamenOud* in Dutch)

Embrace is based on the Chronic Care Model and the Kaiser Permanente Triangle [15–17]. It provides person-centred and integrated care and support to older adults living in communities. People, 75 years and older, are invited by their GP to participate. Participants receive an annual questionnaire and based on their answers are classified into one of three risk profiles: robust, frail and complex care needs. A multidisciplinary elderly care team provides care and support, with a suitable care intensity level, to each risk profile. Each team consists of a GP, a nursing home physician and two case managers: a district nurse and a social worker.

The programme includes regular Embrace community meetings in which self-management abilities are encouraged. Local healthcare and welfare organisations provide information on health maintenance, physical and social activities and dietary recommendations. In addition, frail people and those with complex care needs receive individual support from a case manager. They jointly develop an individual care and support plan targeting all health-related problems. Before being implemented, the plan is agreed upon by the elderly care team. The case managers monitor changes in medical, psychosocial or living conditions and navigate the plan's delivery.

A web-based personal electronic record system supports the elderly care team and provides data for monitoring and evaluation.

Research: The original project was evaluated with a randomized controlled trial with about 1500 participating older adults and with several qualitative and longitudinal studies.

Results: The prevalence and severity of health-related problems were significantly decreased among older adults who received case management, while their general health remained

stable and their well-being increased. Participants also experienced a greater sense of security and more control over their lives. Thanks to Embrace, older adults were less affected by the effects of ageing and were confident they could live at home longer.

Participants also experienced improved quality of care, while case managers reported that they were better able to proactively match the needs of participants due to having developed long-term relationships with these older adults. The costs remained the same.

Embrace is an effective way to provide care for the elderly, in other words, more quality at the same cost. Currently, this new integrated care service has been implemented in several communities and is being financed by healthcare insurance companies and municipalities.

3.3. Transitional Care Bridge (*Transmurale Zorgbrug* in Dutch)

The 'Transitional Care Bridge' project focuses on the interface between primary care and hospital care [18–19]. Today, elderly people are discharged from hospitals sooner than they would have been in the past. After discharge from hospital, many older people experience physical decline. A quarter die within the first 3 months after being discharged from hospital, and about a third suffer further deterioration in their ability to perform basic activities such as walking, eating or dressing. The transitional care bridge aims to provide better care and support at home after elderly patients leave hospital with a so-called warm transfer. This begins with a visit from the home-care nurse while the patient is still in hospital, allowing the home-care nurse to become acquainted with the patient and to obtain information from the geriatric nurse. Within 2 days after leaving the hospital, the elderly person is visited at home again by the home-care nurse. Another four visits follow.

Research: Using a randomized controlled trial, the Transitional Care Bridge was investigated with 674 elderly people (337 in the intervention group and 337 in the control group) from 350 GPs, in three hospitals and home-care organisations. Care was comparable across the three hospitals and determined by screening on admission and a comprehensive geriatric assessment.

Results: 30 days after discharge, there were 37% fewer deaths among the elderly people in the intervention group than among those in the control group. The decrease in mortality was mainly a result of the 'warm' transfer from hospital, the prompt home visit after discharge and a better transfer of medication. Eighty percent of elderly people leave hospital with new medication; about half of these do not cope well with the new medication by themselves. The home-care nurse helped with the proper administration of new medication.

Implementation: The transitional care bridge has already been implemented in half of the hospitals in the Netherlands. It is one of the criteria for becoming a 'senior-friendly hospital', a quality hallmark created to improve hospital care for the elderly.

As home-care nurses are already familiar with 80% of elderly people in their area, a visit to the hospital is not always necessary, provided that the transfer of data and the follow-up visit are conducted within 2 days of discharge. Tools and activities important for successful delivery of the project include a patient letter with information concerning medication and

rehabilitation policy, a user-friendly questionnaire to detect vulnerable elderly people and 10 days of training for district nurses. For the purpose of allowing greater freedom for elderly people, elderly associations have developed a form which elderly patients can use to request a geriatric assessment upon admission to hospital and medical information at discharge.

During 'Ageing Better Workshops', elderly people offered their evaluation of the project from the perspective of an elderly person. This has led to changes in the available information for elderly people and their caregivers to use before hospitalization, whenever possible. Suggestions were also made to pay greater attention to welfare aspects.

4. Participation of the elderly

From the outset of the programme, the ZonMw committee worked to ensure that elderly people were not only the object of inquiry and research in the programme but were also included as subjects and participants. The elderly people were encouraged to participate in the geriatric networks and in working groups. As a result, the focus of empirical research on medical care innovation shifted over time, based partly on what elderly people themselves considered being important. This in turn led to an increasing emphasis on welfare and support of the elderly in the continuum of well-being and care.

Initially, elderly people had to become accustomed to participating in a professional setting. Collaboration between volunteers (the elderly people) and professionals cannot be taken for granted and requires commitment from everyone involved. Elderly people were trained to discuss project proposals, procedures and outcomes with professionals. Frail elderly people were not involved in these procedures. However, as the active elderly people had regular contact with the frail elderly people, the voices of the frail elderly people could be included in the working groups. Embedding elderly people in the organisation of the networks and involving them in projects and research meant that all networks had a strong core group of active elderly people. The project outputs were better suited to elderly people's needs because elderly participants were included in target group panels and advisory boards. For example, participants proposed improved integration of medical care and welfare and more preventive activities.

A new phenomenon is the involvement of elderly people in education, not just occasionally but as a structural part of the curriculum. This occurs especially where colleges and universities train students to work as professionals—nurses, doctors, physiotherapists, and psychologists, for example—with elderly people. Elderly people participate as teachers in various roles, for example, as patient, guest lecturer, mentor or co-supervisor of theses. They also participate in research, in focus groups and in training groups. The combination of elderly and young people has proved to be valuable to everyone concerned. Elderly people have also been asked to participate in technical and vocational training programmes. The Organization of Elderly (*DenkTank 60+ Noord* in Dutch) has five research and development education groups. The demand for elderly is now greater than the offer.

5. Continuation

The Dutch National Care for the Elderly Programme, which began as a research project, has since become a movement. The results will be implemented further by the consortium Ageing Better (BeterOud in Dutch), a cooperation of 11 organisations including knowledge institutes for long-term care and welfare, elderly associations, regional support networks and housing corporations [3]. The movement's many ambassadors work to advocate the message that old age is a new phase, the logical continuation of your life, in which you still manage your own life and in which you still play the main role. Ageing Better aims to support and inspire everyone, in person and online, so that we can succeed to assign value to this new phase.

In 2015, Deltaplan Dementia was launched by the Netherlands Organisation for Health Research and Development (ZonMw), a large national programme for fundamental research on dementia and a programme of initiatives to improve care for patients suffering from dementia.

In 2018 a new programme on long-term care for frail elderly people and people with physical and mental disabilities will be launched by ZonMw, a programme for the next 4 years.

The Dutch College of General Practitioners has renewed their Vision on General Practice Care for the elderly and developed a National Primary Care Agreement for communication between different care providers and a handbook for elderly care.

A national guideline for person-centred and integrated care for elderly patients will be developed in the coming years.

The Advisory Board for Health and Welfare of the Ministry of Health, Welfare and Sport has recommended introducing a personal care plan to be used for all elderly patients to help them cope with their multiple problems.

The Dutch government will set aside EUR 435 million in 2018 for the nursing homes and suggests that in the long term, some 2.1 billion euros can be added to the nursing homes per year. The extra money is intended to improve the quality of nursing home care by appointing more well-trained staff. For district nursing, ambulance care, intensive care and emergency services, the government is putting additional effort into making available 350 million euros for the period from 2017 to 2022.

6. Lessons learned

We learned a number of valuable lessons during the programme that was meant to provide care, support and welfare for frail elderly that should fit the elderly as a warm and cosy jacket:

- Participation of the target group in the execution of the programme is the key to success.
- The main priority of frail elderly people is quality of life and well-being, not living longer.

- Welfare and medical care must become integrated by taking into account living and housing conditions.
- Well-being is dependent on good quality of integrated care in the neighbourhood, in primary care and with a good integration of hospital and primary care.
- It is worthwhile encouraging a healthy lifestyle to postpone physical, mental and social limitations for as long as possible.
- Elderly people advocate cherishing social contacts, counting your blessings and doing your best to help other people.
- Implementation should be a consideration from the start of the project regarding planning, budget and participating partners.

7. Conclusions

The increasing ageing populations request innovative policies and initiatives, dedicated professionals, participating elderly and evidence-based procedures. The Dutch National Care for the Elderly Programme focused on frail elderly, who form about one-third of the group of 80 years and are overrepresented among elderly from low social economic status and of those with a migrant background.

In this programme, the elderly themselves played a key role in the geriatric networks, in the research projects and in interpreting the outcomes. As a result, the focus of the programme shifted from medical care to care and welfare, and the outcomes were more suited to the needs and wants of the elderly. In schools, colleges and universities where professionals for elderly care and welfare are educated, elderly participated and play a role as patient, guest lecturer and supervisor.

Integration of communication and activities of informal caregivers, volunteers and formal caregivers in the neighbourhood, of medical and welfare professionals in primary care, and integration of primary care and hospital care by direct communication between the home-care nurse and the geriatric nurse in the hospital had positive results.

The implementation of the effective projects is not finished yet. It requests adaptation in new regions of the professionals and organisations involved.

The continuation of the national programme is realized by the consortium Ageing Better, an organisation of eight organisations. The organisation and its ambassadors are active in spreading the message that ageing is a new phase of life with new possibilities and challenges that request anticipation and preparation, a healthy lifestyle and cherishing social contacts.

The enduring outcomes of the initiatives described above deserve the continuous attention of elderly people, professionals, researchers and directors and also of municipalities, healthcare organisations and the government.

A. Dutch System of Care and Welfare Acts

The Dutch system of care and welfare consists of four acts important for elderly: the Health Insurance Act, the Social Act, the Long Term Care Act and the Youth Act.

The Health Insurance Act (Zvw) is obliged to provide health insurance to all Dutchmen. Children up to 18 years old are automatically insured with their parents. The healthcare providers are obliged to accept everyone. Funding takes place through a nominal premium and an income-dependent contribution. The basic insurance covers a large number of health risks, including:

- Medical care (primary care) in hospitals, general practitioners and other recognized health-care providers
- Hospital transport
- Dental care (for young people)
- Pharmaceutical care (medication)
- Certain tools, such as a denture or hearing aid
- Personal care and nursing through the district nurse
- Maternity and obstetric care
- Paramedic care

Except for a consultation to the general practitioner, an additional contribution is requested for the remaining tasks, the so-called own risk with a maximum of €350 per year.

The Social Support Act (Wmo) is implemented by municipalities in the Netherlands and aims to allow citizens to live at home for as long as possible (self-reliance) and to participate in society (participation). The municipalities also have to promote social contacts for people with disabilities: chronic sick, frail elderly and mentally handicapped persons. For certain tasks such as home help, an income-dependent contribution is requested. Each municipality is setting up a social district team where people can seek help.

Long Term Care Act (WLZ 2015) provides an integrated package of care and facilities for people who are seriously handicapped and limited, e.g. because of dementia.

Everything that the client needs is provided and arranged, namely:

- Permanent stay in an institution (or living at home)
- Guidance, nursing and care
- Medical care and treatment related to the disease
- In certain care areas: physiotherapy and dentistry
- Aids such as scoot mobiles and wheelchairs
- Transport to the place of guidance, treatment and care

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References

- [1] Zantinge EM, Wilk EA van der, Wieren S van, Schoemaker CG. Gezond ouder worden. Nederland, Bilthoven: RIVM Rapport; 2011. 270462001/2011
- [2] [www.ZonMw.nl/ageing better](http://www.ZonMw.nl/ageing_better)
- [3] www.BeterOud.nl
- [4] www.topics-mds.eu
- [5] van den Brink D, Lutomski JE, Qin L, den Elzen WPJ, Kempen GIJM, Krabbe PFM, Steyerberg EW, Muntinga M, ter Riet G, Blijenberg N, Olde Rikkert MGM, Melis RJF. On behalf of TOPICS-MDS Consortium. TOPICS-MDS: A versatile resource for generating scientific and social knowledge for elderly care. *Tijdschrift voor Gerontologie en Geriatrie*. 2015;**46**(2):78-91
- [6] Lutomski JE, van Exel NJA, Kempen GIJM, Moll van Charante EP, den Elzen WPJ, Jansen APD, Krabbe PFM, Steunenberg B, Steyerberg EW, Olde Rikkert MGM, Melis RJF. Validation of the care-related quality of life instrument in different study settings: Findings from the Older Persons and Informal Caregivers Minimum Data Set (TOPICS-MDS). *Quality of Life Research*. 2015;**24**(5):1281-1293
- [7] Lutomski JE, Baars MA, Boter H, Buurman BM, den Elzen WP, Jansen AP, Kempen GI, Steunenberg B, Steyerberg EW, Olde Rikkert MG, Melis RJ. Frailty, disability and multi morbidity: The relationship with quality of life and health care costs in elderly people. *Ned Tijdschr Geneesk*. 2014;**158**(0):A7297. PMID: 25204442
- [8] Hofman CS, Makai P, Boter H, Buurman BM, de Craen AJ, Olde Rikkert MG, Donders RA, Melis RJ. Establishing a composite endpoint of measuring the effectiveness of geriatric interventions based on older persons' and informal caregivers' preference weights: a vignette study. *BMC Geriatrics*. 2014 Apr 18;**14**(1):51. DOI: 10.1186/1471-2318-14-51. PMID: 18642579

- [9] Lutomski JE, Baars MAE, Schalk BWM, Boter H, Buurman BM, den Elzen WPJ, Jansen APD, Kempen GJIM, Steunenberg B, Steyerberg EW, Olde Rikkert MGM, Melis RJF. The development of the Older Persons and Informal Caregivers Survey Minimum Data Set (TOPICS-MDS): A large-scale data sharing initiative. *PLoS ONE*. 2013 Dec 4;**8**(12):e81673. DOI: 10.1371/journal.pone.0081673. PMID: 243247
- [10] Verhagen, Ros, Steunenberg, de Wit. Culturally sensitive care for elderly immigrants through ethnic community health workers: Design and development of a community based intervention programme in the Netherlands. *BMC Public Health*. 2013;**13**:227
- [11] Suurmond J, Rosenmöller DL, el Mesbahi H, Lamkaddem M, Essink-Bot ML (2015). Barriers in access to home care services among ethnic minority and Dutch elderly: A qualitative study. *International Journal of Nursing Studies*. 2016 Feb;**54**:23-35. DOI: 10.1016/j.ijnurstu.2015.02.014. Epub 2015 Feb 25
- [12] Cramm JM, Van Dijk HM, Nieboer AP. The importance of neighborhood social cohesion and social capital for the wellbeing of older adults in the community. *The Gerontologist*. 2013;**50**(1):1-9. DOI: <http://dx.doi.org/10.1093/geront/gns052>
- [13] Van Dijk HM, Cramm JM, Nieboer AP. The experiences of neighbor, volunteer, and professional support-givers in supporting community dwelling older people. *Health and Social Care in the Community*. 2012;**21**(2):150-158
- [14] Cramm JM, Nieboer AP. Social cohesion and belonging predict the well-being of community-dwelling older people. *BMC Geriatrics*. 2015;30. DOI: <http://dx.doi.org/10.1186/s12877-015-0027-y>
- [15] Spoorenberg SLW, Uittenbroek RJ, Middel B, Kremer HPH, Reijneveld SA, Wynia K. Embrace, model for integrated elderly care: Study protocol of a randomized controlled trial on the effectiveness regarding patient outcomes, service use, costs, and quality of care. *BMC Geriatrics*. 2013;**13**:62
- [16] Spoorenberg SLW, Reijneveld SA, Middel B, Uittenbroek RJ, Kremer HPH, Wynia K. The geriatric ICF core set reflecting health-related problems in community-living older adults aged 75 years and older without dementia: Development and validation. *Disability and Rehabilitation*. 2015;**18**:1-7
- [17] Uittenbroek RJ, Kremer HP, Spoorenberg SL, Reijneveld SA, Wynia K. Integrated care for older adults improves perceived quality of care: Results of a randomized controlled trial of Embrace. *Journal of General Internal Medicine*. 2017;**32**(5):516-523
- [18] Buurman BM, Parlevliet JL, van Deelen BA, de Haan RJ, de Rooij SE. A randomized clinical trial on a comprehensive geriatric assessment and intensive home follow-up after hospital discharge: The transitional care bridge. *BMC Health Services Research*. 2010;**10**:296. DOI: 10.1186/1472-6963-10-296
- [19] Parlevliet JL, MacNeil-Vroomen JL, Bosmans JE, de Rooij SE, Buurman BM. Determinants of health-related quality of life in older patients after acute hospitalization. *The Netherlands Journal of Medicine*. 2014;**72**(8):416-425