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Walcheren Integrated Care Model (WICM): Geriatric Care-Chain in Walcheren

Submission date
01/03/2013

Recruitment status
No longer recruiting

Registration date
14/03/2013

Overall study status
Completed

Last Edited
13/02/2019

Condition category
Other

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
With an aging population, caring for the increasing number of the frail elderly has become a challenge in many countries. The frail elderly are elderly with a disease or infirmity associated with advanced age, which is manifested by demonstrable mental, psychological, emotional or physical dysfunction to the extent that the person is incapable of adequately providing for his or her own health and personal care presently or in the near future. The frail elderly need a wide range of services over a long period of time. However, their reluctance to report their growing impairments to their doctors delays treatment at a stage when preventive care could diminish further mental, psychological or physical deterioration. And if care is given, it lacks the quality and continuity required for their multiple and changing problems. The integration of health services and social services for the frail elderly has gained tremendous attention as a means to deliver quality of care, timely recognize unmet needs, avoid crisis situations or the overburdening of the caregiver. It can also improve social wellbeing. Though widely acknowledged and pursued, the implementation and evaluation of integrated services for the frail elderly has not yet reached its full potential. Much is still unknown regarding how services can be integrated and the effects of integration. The aim of this study is to improve the quality and efficacy of care given to frail elderly persons living independently by implementing and evaluating a preventive integrated care model for the frail elderly: the Walcheren Integrated Care Model (WICM). The WICM is a comprehensive integrated model for the detection and assessment of needs and the assignment and evaluation of care for independently living frail elderly.

Who can participate?
Elderly people aged 75 or older who live independently, score a 4 or higher on the Groningen Frailty Indicator (GFI) and are able to make the decision themselves to participate.

What does the study involve?
The experimental group will consist of 220 elderly of 8 GPs (General Practitioners) who will receive care according to the Walcheren Integrated Care Model. The control group will consist of 220 elderly of 6 GPs who will receive care as usual. Their caregivers and health professionals are also part of the study population. The study will include an evaluation of the following process and outcome measures for the frail elderly persons, their caregivers and health professionals as

well as a cost-effectiveness analysis: elderly: quality of life (primary), ability to cope, satisfaction, physical and social functioning, mental well-being, perceived health, and use of care; informal caregivers: quality of life and burden; care-providers: burden, knowledge, satisfaction with their job and continuity of care; society: cost-effectiveness. Data will be collected at three points in time: start of study, 3 months after inclusion and 12 months after inclusion.

What are the possible benefits and risks of participating?
No risks are associated with participation. The study does not comprise any treatment with a medical product or device. The burden for elderly and their caregivers comprises the filling in of questionnaires three times during one year, which will take up to 30-45 minutes every time. All elderly will be visited at home by trained interviewers recruited from the region of Walcheren to ensure a cultural fit with the elder. Interviewers will have a background in the care for the elderly to ensure a high-quality interview and compassion for the elderly interviewed. Elderly in the experimental group will be visited by a case manager who will fill in the diagnostic instrument EASYcare with them (burden: 1-1,5 hours). If wanted by the frail elder additional diagnostics tests will be taken and the elder will be visited again by the case manager. Frail elderly in the control group get care as usual (no extra burden). An important benefit for the experimental group is that problems are detected at a stage where further deterioration, pain and burden can be prevented.

Where is the study run from?
The implementation of the model is coordinated by the Zorggroep Walcheren, a steering group with representatives from all involved organizations. The study will be conducted from the institute of Health Policy and Management from the Erasmus University in Rotterdam.

When is the study starting and how long is it expected to run for?
The study has started in April 2010 and will finish by the end of 2013.

Who is funding the study?
The study is funded by the Netherlands Organization for Health Research and Development (ZonMW; project number 313030201) as part of the National Care for the Elderly Program in the Netherlands (NPO).

Who is the main contact?
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Type(s)
Scientific

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Protocol serial number
ZonMW 313030201

Study information

Scientific Title
Geriatric Care-Chain in Walcheren

Acronym
WICM

Study objectives
The quality and efficacy of care given to frail elderly persons living independently is better when given with the preventive integrated care model for the frail elderly (Walcheren Integrated Care Model) than with care as usual.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Medical Ethical Committee of the Erasmus Medical Centre in Rotterdam

Study design
Quasi-experimental design. Effects will be measured in a before and after the study with a control group. Qualitative and quantitative research methods will be used.

Primary study design
Interventional

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Care for frail elderly

Interventions
Control group: Usual care

Intervention: Walcheren Integrated Care Model

The Walcheren Integrated Care Model (WICM) is a comprehensive integrated model for the detection and assessment of needs and the assignment and evaluation of care for independently living frail elderly. The model comprises ten elements: a screening tool for the detection of frailty in the elderly, a single entry point, an evidence-based comprehensive need

assessment tool, a multidisciplinary individualized service plan, case management, multidisciplinary team consultation and meetings, protocol-led care assignment, a steering group, task specialization and delegation, and a chain computerization system.

The frail elderly aged 75+ years are identified by their general practitioner (GP) by the Groningen Frailty Indicator (GFI), a tool for the detection of frailty. The GFI is a 15-item questionnaire that measures decreases in physical, cognitive, social, and psychological functioning. Scores can range from 0 to 15 [39,40]. A geriatric nurse practitioner that works at the GP practice sends the GFI questionnaire to the homes of the elderly and then contacts them by telephone if they do not respond. When necessary, elderly are helped at home to complete the questionnaire. A geriatric nurse practitioner and GP calculate the GFI score. Elderly with a GFI ≥4 are identified as frail and assigned to a case manager. The geriatric nurse practitioner is the case manager for elderly with single needs. A secondary line geriatric nursing specialist is assigned as case manager if the needs are multiple or of a complex nature.

The case manager then sets up a meeting with the elderly to assess their needs with the EASYcare instrument. EASYcare is an evidence-based comprehensive need assessment instrument that assesses (instrumental) activities of daily life, cognition, and mood. It also contains a module for converting care requirements relating to welfare, residence, and care into treatment goals. The goals are drawn up in consultation with the elderly and their caregivers. Explicit attention is paid to the necessary support and guidance of the caregivers. The results of the assessment are described by the case manager in an individualized care plan. The case manager also creates a proposal for required care and care objectives.

The proposed plan is then discussed in a multidisciplinary meeting led by the GP. Depending on treatment goals, the meeting is also attended by other health professionals who may be needed. During the meeting, a multidisciplinary care plan will be approved, actions and care paths will be discussed, and agreements will be made about the care to be deployed and the activities of all persons involved. The treatment plans of each professional are included in the care plan. The GP harmonizes the care plan with the elderly and their caregiver and obtains permission for its implementation. A chain computerization system accessible by the health professionals involved will be used for the multidisciplinary care plan. The professionals will automatically receive an email in the event of changes in use of care or a transfer.

The case manager is responsible for admittance to the required services, the planning and coordination of care delivery, and periodical evaluation of the care plan. Thus, the case manager arranges obligatory need assessment, monitors the elderly at least every six months for one year, and supports the multidisciplinary team by arranging meetings and streamlining the necessary exchange of information. The responsibilities and activities of the involved professionals and case manager are formalized in agreed protocols with predefined modes of referral and collaboration. During the process, the GP practice functions as a single entry point. It is the gate through which elderly and professionals can access the expertise and services of all health and social care professionals and organizations. The GP and case manager work in close collaboration to ensure timely and correct care assessment and provision. To be able to fulfill their tasks, the GPs must have completed an executive training in geriatric care, a course in GP consults and EASYcare training. The case managers must have successfully attended the EASYcare training and a course in case management.

Intervention Type
Other

Phase

Not Applicable

Primary outcome(s)
Elderly: Quality of life

Data will be collected prospectively at three points in time: T0, T1 (3 months after inclusion), and T2 (12 months after inclusion). Data from the health professionals will be collected at T0 and T1 (18 months after full implementation of the model).

For the cost-effectiveness study the outcome parameter used is cost per QALY (quality-adjusted life-year). For this, the EuroQol (EQ-6D) will be used to measure the quality of life of the elderly persons and will subsequently be converted into disability-adjusted life-years (DALYs). For the cost calculation, the volume of care will be linked to the actual, integral cost per medical service. This will be used to make the instructions for cost research in economic evaluations. Thus, the total care consumption of the elderly will be determined. The above-mentioned patient files, questionnaire, and time tracking form will provide insight into which care was received per elder, how much and from whom.

Key secondary outcome(s))
Elderly:
1. Ability to cope
2. Satisfaction, physical and social functioning
3. Mental well-being
4. Perceived health
5. Use of care

Informal caregivers: Quality of life and burden

Care-providers: Burden, knowledge, satisfaction with their job and continuity of care

Society: Cost-effectiveness

Completion date
01/10/2013

Eligibility

Key inclusion criteria
Elderly 75+ years old will be included:
1. If they score ≥4 on the Groningen Frailty Indicator (GFI)
2. If they have signed the consent form, or
3. If they are able to make that decision themselves
4. Included elderly will be asked to provide contact information for their informal caregiver

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group

Senior

Sex
All

Key exclusion criteria
1. Elderly on a waiting list for a nursing home
2. Elderly who are not able to decide themselves if they want to participate (e.g., in case of dementia)
3. Elderly with a life expectancy of <6 months due to a terminal illness

Date of first enrolment
01/04/2010

Date of final enrolment
01/10/2013

Locations

Countries of recruitment
Netherlands

Study participating centre
PO Box 1738
Rotterdam
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Sponsor information

Organisation
Netherlands Organisation for Health Research and Development (ZonMw) (Netherlands)

ROR
https://ror.org/01yaj9a77

Funder(s)

Funder type
Research organisation

Funder Name

Netherlands Organisation for Health Research and Development (ZonMw) (Netherlands) ref: 313030201

Alternative Name(s)
Netherlands Organisation for Health Research and Development

Funding Body Type
Private sector organisation

Funding Body Subtype
Other non-profit organizations

Location
Netherlands

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	29/03/2014		Yes	No
Results article	results	01/05/2014		Yes	No
Results article	results	15/02/2016		Yes	No
Results article	results	17/08/2016		Yes	No
Results article	results	01/03/2018		Yes	No
Protocol article	protocol	12/04/2013		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes