Prevention and Reactivation Care Program (PReCaP)

institute of Health Policy & Management

An integrated approach to prevent functional decline in hospitalized elderly

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This presentation…

- Background
- State of play in the Netherlands
- Description of the program – PReCaP key elements
  - Identification and screening procedure
  - Multi-disciplinary approach
  - Goal Attainment Scaling (GAS)
  - Follow-up treatment at Prevention and Reactivation Centre (PRC) (and other routes)
  - Case management
- Process and outcome evaluation

Background

- Patients of 70 years and older experience functional decline during hospital admission
  - ≥ 70 years → 35% lower functional level after hospital discharge of which 15% is irreversible
  - ≥ 85 years → 50% lower functional level after hospital discharge
- Not necessarily related to medical condition
  - Iatrogenic effects of treatment
  - Effects of hospitalization
- Predictors of hospital related functional decline
  - Age, lower functional status before hospital admission, impaired cognitive status, depression, prolonged length of hospital stay
- Paucity of detailed descriptions of geriatric interventions
- http://www.biomedcentral.com/1471-2318/12/7

Functional decline

- New loss of independence in self-care activities or as deterioration in self-care skills
  - Activities of daily living (ADL) scale:
    - bathing, dressing, transferring from bed to chair, using the toilet
  - Instrumental activities of daily living (IADL) scale:
    - shopping, housekeeping, preparing meals
- Physical and psychosocial problems, such as dehydration, malnutrition, falls, depression, and delirium
- 47% of the group of elderly patients (> 60 years) at risk for functional decline during hospitalization

Several approaches

- Comprehensive Geriatric Assessment (CGA)
  - Reduction in cognitive and functional decline in patients at risk
  - Retaining quality of life and independence in activities of daily living
  - Lower mortality rates in the elderly after six months
- Multidisciplinary tailored interventions
  - Reduction in functional decline, reduced length of hospital stay, lower (re)admissions to hospital and nursing homes, reductions in fall incidence, higher perceived health and life satisfaction among patients
- Specialized geriatric units
  - In combination with multidisciplinary follow up-treatment including case management after hospital discharge with rehabilitation service

State of play in the Netherlands

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	Prevention and Reactivation Care Program	Hospital care with follow-up care	Hospital care without follow-up care
Hospital care	Identification of vulnerable elderly patient within 48 h Assessment of risk factors for functional decline Start reactivation treatment within 48 h Clinical geriatrician Geriatric nurses	Start reactivation treatment after discharge No specific identification instrument	Start reactivation path after discharge
Hospital replacement care	Prevention and Reactivation Centre Part of treatment plan Continuation of (in hospital started) treatment focused on six domains of functional status Availability of (para)medical disciplines	Hospital replacement care Admission is patient's choice Care facility with option for treatment No structured treatment plan, but separate elements Limited number of (para)medical disciplines	Hospital replacement care not available
Home care	Geriatric care chain agreements with general practitioner and home care Case management with geriatric expertise	Follow-up care by home care organizations (not specialized in geriatrics)	Follow-up care by home care organizations (not specialized in geriatrics)
Multidisciplinary approach	Weekly multidisciplinary team meeting Treatment and care focused on medical condition and functioning in six domains (i.e. physical, mental, social, financial, home, and care) Goal-oriented approach	Key professional is responsible for treatment and interdisciplinary consults Discussion and collaboration focused on medical condition	Key professional is responsible for treatment and consults Discussion and collaboration focused on medical condition
Patient	Patient oriented integrated treatment plan Discussion treatment with patient during entire treatment path Problem solving	Separate treatment plans Treatment coherence determined by patient	Separate treatment plans Treatment coherence determined by patient
Informal caregiver	Part of treatment plan	Individual choice	Individual choice

PReCaP key elements

- Early identification of elderly patients with a high risk of functional decline, and if necessary followed by the start of the reactivation treatment within 48 h after hospital admission
- Availability of multidisciplinary geriatric expertise
- Provision of support and consultation of relevant professionals to informal caregivers
- Intensive follow-up treatment for a selected patient group at the Prevention and Reactivation Centre (PRC)
- Intensive follow-up throughout the entire chain of care by a case manager with geriatric expertise

Identification and screening procedure

1. Identification of Seniors at Risk - Hospitalized Patients (ISAR-HP) → To predict functional decline
   - Inclusion cut-off score ≥ 1
   - Exclusion criteria: inability to answer questions or to follow instructions, due to cognitive problems, inability to understand Dutch, or life expectancy of less than three months
2. The NeuroPsychiatric Index (NPI-Q) and the Mini Mental State Examination (MMSE) → Cognitive functioning
   - PRC admission criteria: ISAR-HP score ≥ 2, NPI-Q score ≥ 3, or MMSE score > 12 and ≤ 27

Multidisciplinary approach

- Integrated program combining different elements of care → offered by a multidisciplinary team with geriatric expertise, including geriatrician, geriatric nurse, nurse practitioner, social worker, transfer nurse, and case manager
- Working agreements between and within the first line
  - Referrals between primary and secondary health care
  - Paramedic consultations during hospital and PRC phase
  - Consultations between general practitioner, home care, social work, paramedics
- Alignment between hospital, PRC, general practitioner, and home care in the implementation of above agreements
- Biweekly Multidisciplinary Team Meetings

Goal Attainment Scaling

- Evaluation of complex interventions in frail elderly patients by means of facilitating the individualization of patients' goals according to their needs
- Application of a summary formula that calculates the extent to which the patients' goals are met
- Within 48 h after admission → patient's functional state, varying from totally functional dependent to independent, is scored for the six domains of functional decline: somatic, cognition, personality, emotional and rational experiences, social environment, and life history and/or trauma
- Determination goal GAS-score of 1 or 2 points higher for each domain of functional decline

Follow-up treatment at Prevention and Reactivation Centre (PRC)

- Aim: to improve the patients' ability to live independently in the home environment
- Specialized nursing home care in combination with intensive theme oriented reactivation treatment, paramedical treatment, psychiatric treatment
- Support and psychotherapy sessions for informal caregivers
- Case management
- Weekly multidisciplinary team meetings
- Goal Attainment Scaling
- Five additional follow-up treatment routes

Case management

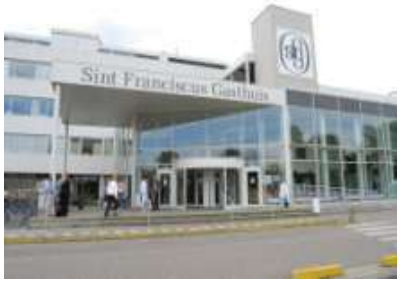
- Throughout entire chain of care until six months after hospital admission
- Case manager's tasks:
  - Ensure follow-through of treatment plan
  - Establish follow-up multidisciplinary primary care team in consultation with general practitioner
  - Include home care in the multidisciplinary team
  - Maintain contact with representatives of social support system and welfare organizations
  - Visit patient and informal caregiver at home
  - Motivate and provide support to patient and informal caregiver in adhering to treatment plan
  - Monitor presence of risk factors for functional decline
  - Liaise with general practitioner, multidisciplinary team, hospital, PRC

Evaluation

- Determination of validity of PReCaP screening instruments
- Identification of extent to which the PReCaP leads to the prevention of functional decline in elderly patients and improved quality of life for informal caregivers
- Determination of contribution of PRC treatment to overall PReCaP effectiveness
- Determination of extent to which PReCaP leads to improved structure and process of care in comparison to current geriatric care in the Netherlands
- Quantification of PReCaP cost-effectiveness in comparison to current geriatric care

Evaluation setting

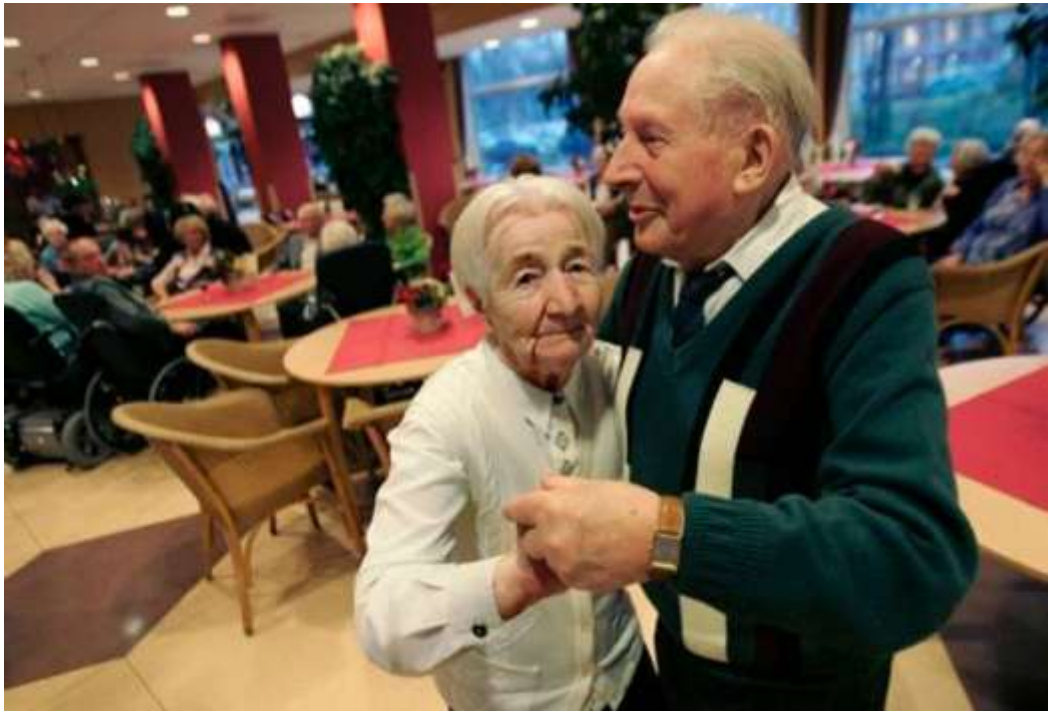
1. Vlietland Ziekenhuis, Schiedam, 450-bed regional hospital
   - geriatric department
   - hospital replacement care (PRC)
   - provisions for follow-up in primary care
2. Sint Franciscus Gasthuis Rotterdam, 613-bed teaching hospital
   - without geriatric department
   - hospital replacement care (Care Hotel)
   - without provisions for follow-up in primary care
3. Ruwaard van Putten Ziekenhuis, Spijkenisse, 288-bed regional teaching hospital
   - without geriatric department
   - without hospital replacement care
   - without provisions for follow-up in primary care



Evaluation (cont'd)

- Effect evaluation: repeated measurements of primary outcomes, e.g. physical functioning, functional decline risk factors, quality of life, and experienced informal caregiver burden
- Process evaluation: extent to which PReCaP leads to a better structure and process of care, in comparison with current forms of geriatric care in The Netherlands → set of process indicators to assess PReCaP impact
- Intervention fidelity: adherence to PReCaP protocol
- Expected evaluation period: March 2010 – October 2013

Thanks for your attention



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