# The Chinese University of Hong Kong
# The Nethersole School of Nursing
# CADENZA Training Programme

## CTP 004 – Dementia: Preventive and Supportive Care

## Web-based Course for
## Professional Social and Health Care Workers



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust

# Chapter 6
## An update of empirical evidence on effective care models/practices from dementia

# Course Outline

1. Introduction to the concept of case management
2. Approaches of case management in dementia
    - Integrated model of comprehensive care in primary care in US
    - Lewisham Intensive care management for old adults with Alzheimer Disease in UK
    - Nurse led case management in Netherlands
    - Dementia care management program for families of persons in Hong Kong with dementia

# Introduction to the concept of case management (CM)

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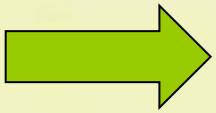
# Introduction to the concept of case management

Why is CM adopted as an approach of dementia care in primary care settings?

1. Increased incidence of dementia that fosters a need for active screening and early detection
2. Increase prevalence of dementia that imposes a greater demand for community and residential care
3. Increase in complexity of needs of persons with dementia (PWD) and their caregivers
4. Limited accessibility of Alzheimer's specialist clinic



Gap between the service and needs

# Introduction to the concept of case management

## Benefits of case management

- ***Single point of contact:*** client was provided a point of contact for client, carer and other service providers.
- ***Optimal use of available resources:*** identifies the most appropriate type and level of service and/or support; organizes a tailored package of care to meet an individual's special needs and then monitors to ensure the services are well delivered.
- ***Supporting independence and providing confidence:*** offers a package of care plus the security of having one person the care-recipient can contact if he/she has any difficulty. It provides a sense of security for them to continue living at home.

# Introduction to the concept of case management

## Benefits of case management

- ***An alternative to residential care:*** provides an alternative to residential care and reduces or delays inappropriate admission to residential care alternatives.
- ***Innovating service:*** considers a driver for service innovation when service tailors outside the realm of what is generally available in community care.
- ***Reduced use of health service:*** reduces the length of stay in hospital and the total cost of care in each recipient.

(Aged & Community Services & Case Management Society for Australia, 2006)

# Introduction to the concept of case management

## Backgrounds of case management

- Existed since the early 1900s
- Emerged from the increased emphasis on long-term care coordination in 1970s and 1980s
- Expanded in many types of human and social service settings as well as private practice,

  including community care for the aged, and people with disability and mental health issues; acute health settings; injury management and insurance related areas; correctional services; court system; in the management of chronic health condition; child and youth welfare; at risk population at school; managed care and employment program

  (White, 2005)

# Introduction to the concept of case management

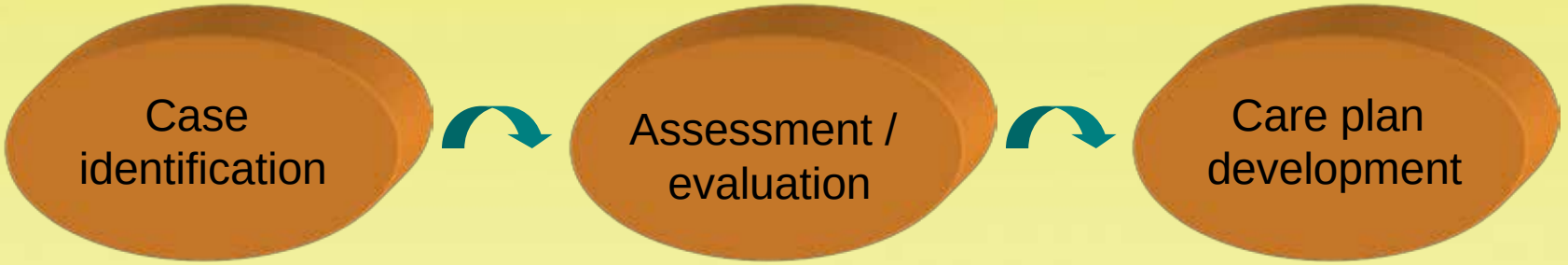
## What is case management?

- "A collaborative process that assesses, plans, implements coordinates, monitors, and evaluates the options and services required to meet an individual's health needs, using communication and available resources to promote quality and cost-effective outcomes" (Powell & Ignatavicius, 2001, p.3)

- The approach assumes that clients with complex and multiple needs that need to access services from a range of service providers and the goal is to achieve seamless service delivery
- Terms use interchangeably, including care management, care coordination, service coordination, and managed care (White, 2005)

# Introduction to the concept of case management

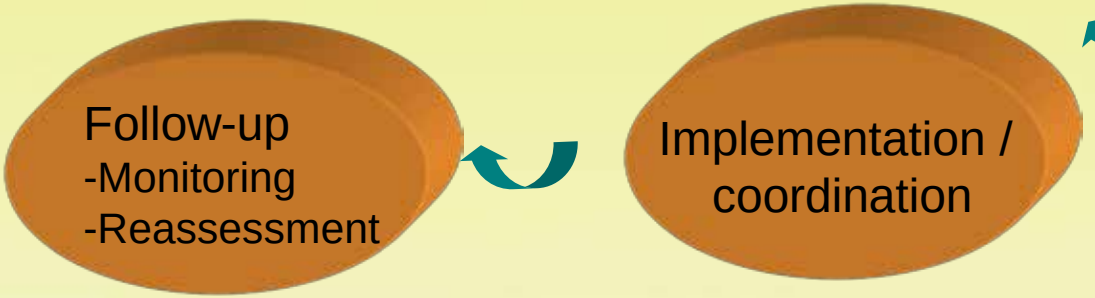
## Components of Case Management




- Define and target the desire population
- Outreach activities for publicizing and identifying referral

- Conduct assessment to determine the needs and his/her circumstance
- May include family members, physicians friends, service providers and attorneys

- Formulate a care plan to address the needs and problems
- Includes agreement with individual and involved family members on goals and priorities




- Ensure continuity; respond to change in the individual's condition; address any problems in care delivery
- Help determine the continued effectiveness and appropriateness of services and cost monitoring

- Implement care plan by arranging and coordinating service delivery
- Coordinate informal assistance and arrange formal service

(White, 2005)

# Introduction to the concept of case management

## Principles of case management

- ***A single point of contact:*** Working in partnership with the individual and their family or carer; also a single point of contact for other service providers
- ***Life strengths approach:*** Achieves the optimal level of independence for the individual and assists in their participation in the community commensurate with their capacity and choice
- ***Collaboration:*** Works collaboratively with other service providers and professionals to ensure the best possible outcome
- ***Individualized:*** Ensures each person to receive the appropriate level and type of support according to their needs, culture and budget constraints
- ***Continuity of care:*** Clients have a right to expect continuity of service across time and service boundaries in order to meet individual needs

# Introduction to the concept of case management

## Principles of case management

- ***Flexibility:*** support should be suited individuals' need and varied according to their changing needs
- ***Boundary-spanning:*** Draws upon all available resources, both formal and informal to provide support in the most cost effective manner
- ***Culturally-appropriate:*** ensures diversity to be respected and catered for
- ***Creative:*** Finds innovative ways to meet needs of individuals
- ***Empowerment:*** Clients are supported to manage their own affairs as far as possible
- ***Confidentiality:*** Maintains at all times in accordance with legislative requirements and program standards

(National Community Care Management Network, 2005)

# Introduction to the concept of case management

## Characteristics of a case manager

- Remains controversial
- Not define by nature of the discipline
- Able to take up a locus of responsibilities, including professional, paraprofessionals, volunteers, family members and sometimes clients themselves
- Varies across different settings
- Typically: nurse → acute care
  social workers → long-term care
  physicians → primary care

but overlapping and ongoing change

(White, 2005)

# Introduction to the concept of case management

## "Key success factors" of CM

- Cudney (2002) described several "key success factors" of case management although a variety of case management models and structures are used in health care system.
  1. The successful case management program is strongly supported and encouraged by both executive and physician leadership.
  2. The work processes and professionals commonly associated with case management contribute to a common workflow for managing care
  3. Staff members involved in this care management process understand that the physician is the healthcare professional ultimately accountable for the management of patient care.

# Introduction to the concept of case management

## “Key success factors” of CM

4. The successful care management program provides explicit coordination with evidence-based protocols and the health system performance improvement process.
5. The successful case management program will have clear accountabilities through a defined set of metrics, which are collaboratively developed with executive and physician input.

# *Approaches of CM in dementia care:* Integrated model of comprehensive care in primary care in US

# Integrated model of comprehensive care in primary care

## Backgrounds of the integrated model

- Most people with the Alzheimer's Disease receive their care in primary care settings
- Primary care settings do not have enough resource to provide a wide array of medical and psychosocial service to patients with AD and their family caregivers, such as appropriate diagnosis, evaluation, education, treatment or long term management
- The US National Institutes of Health (NIF) funded PREVENT study (Providing Resources Early to Vulnerable Elders Needing Treatment for Memory Loss) in primary care settings



(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Key characteristics of the integrated model

1. Care provided by a multi-disciplinary team, including geriatric advanced practice nurse (GAPN), a social psychologist, a geriatrician, and a geriatric psychiatrist
2. Multi-disciplinary team approach is coordinated by GAPN
3. Case identification as guided by comprehensive screening and diagnosis protocol
4. Dementia specific pharmacological and non-pharmacological psychosocial interventions are prescribed according to standard guidelines
5. Continuity of care is facilitated by a proactive longitudinal tracking system



(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Roles of social psychologist and physicians

- Social psychologist[1]: designs and implements the caregiver-directed intervention
- Geriatrician and geriatric psychiatrist: prescribe AD-specific drugs that guided by the treatment recommendation based on published best practice guideline

Click the following link to read the detail of the role of social psychologist:
http://en.wikipedia.org/wiki/Social_psychology



(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Roles of GAPN

- Coordinates the care between patients, family members, and the physicians
- Monitors the care needs of each patient and their family members
- Conducts regular telephone/face to face follow-up; reviews the care progress
- Organizes monthly support group meeting by providing further support and education about the disease of caregivers and reinforcing the caregiver-directed interventions and offering a moderate exercise program for people with dementia



(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Programs of the integrated model (Austrom, et al., 2005; 2006)

Screen by regular primary care visit using a 6 items assessment guide

↓ Score below threshold

A more comprehensive screen using the Community Screening Instrument for Dementia (18 items)

↓ Score below threshold

Comprehensive clinical assessment
- -Informant interview
- -Neuropsychological testing
- -Neurological and physical evaluations
- -Chart review for laboratory testing and brain image

↓

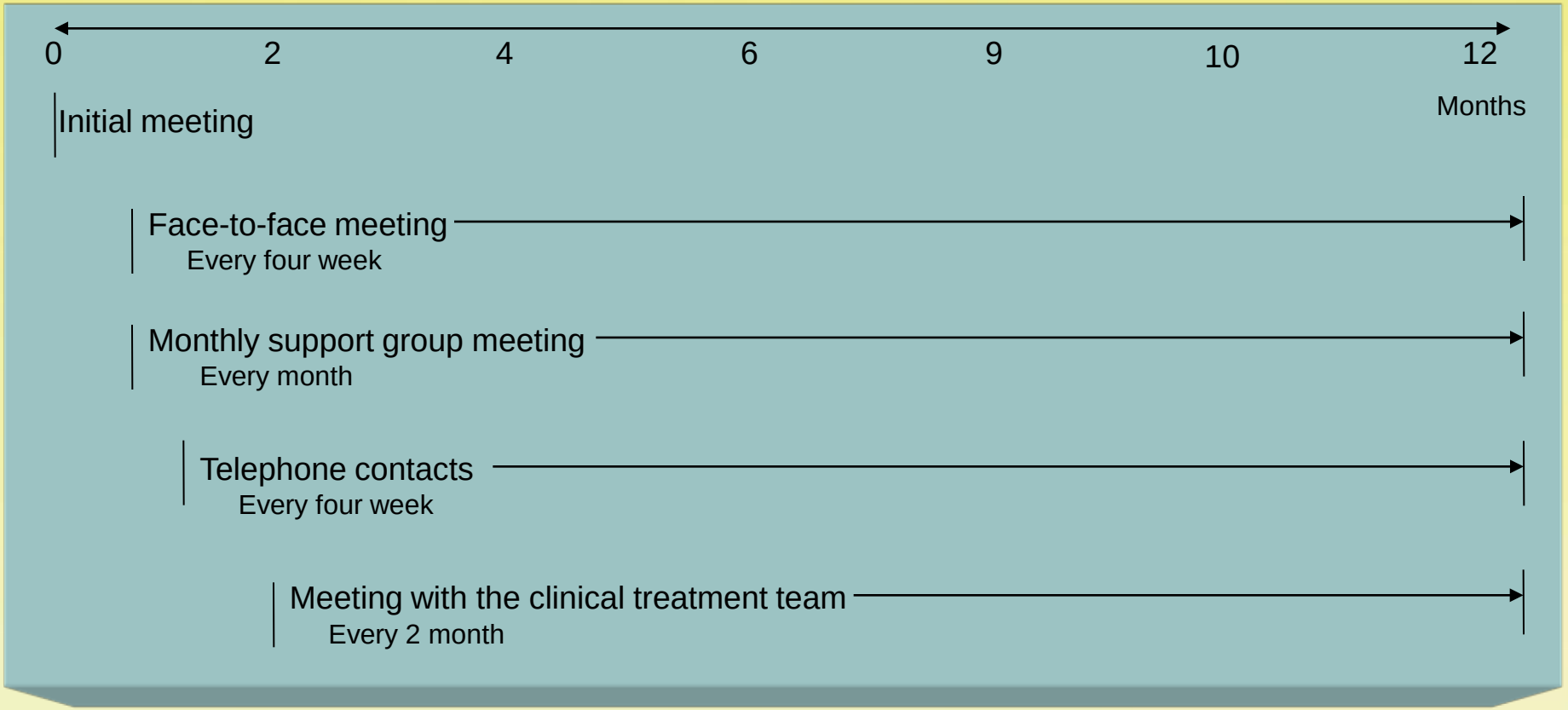
Dementia-specific pharmacological Interventions
- -Cholinesterase inhibitors
- -Vitamin E
- -Aspirin
- -Modification of the existing drug regimen

↓

Non-pharmacological psychosocial intervention
- -Educational protocols for the caregiver-directed interventions (for management of problem behavior)
- -Education (advice on communication skills, caregiving coping skills, exercise guidelines & Caregiver Guide)
- -Supports

# Integrated model of comprehensive care in primary care

## Mode of delivery of the integrated model






(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Benefits of integrated model of comprehensive care

- A collaborative approach among physician, GAPN and other disciplines
- Improves efficiency in managing vulnerable groups with co-morbid illness and complex psychosocial issues
- Provides psychosocial assistance to patients and families in primary care settings



(Austrom, et al., 2005; 2006)

# Integrated model of comprehensive care in primary care

## Empirical evidence of the integrated model

- ***Method:***
  - Controlled clinical trial of 153 older adults with AD
  - Randomized older adults with dementia and their caregivers into IM (n=84) and usual care (n=69)
  - 1 year intervention period
  - Neuropsychiatric inventory (NPI), Cornell Scale for Depression in Dementia, Patient Health Questionnaire, MMSE, caregiver's satisfaction were implemented

(Callahan, et al., 2006)

# Integrated model of comprehensive care in primary care

## Empirical evidence of the integrated model

- ***Key findings:***
  - 89% of patients triggered at least 1 protocol for behavioral and psychological symptoms of dementia

**Demented older people receiving the IM**

  - More likely to receive cholinesterase inhibitors (79.8% vs 55.1%; p=.002) & antidepressants (45.2% vs 27.5%; p=.03)
  - Few behavioral and psychological symptoms as measured by the total NPI at 12 months and 18 months

**Caregivers received the IM**

  - Less distress as measured by NPI at 12 months
  - Improvement in depression as measured by the Patient Health Questionnaire



(Callahan, et al., 2006)

# Activity

Click on the following link to see more about the roles of primary setting in dementia care
http://www.sciencedaily.com/releases/2007/11/071127161810.htm

# *Approaches of CM in dementia care:* Lewisham intensive care management for old adults with Alzheimer Disease in UK

# Lewisham intensive care management

## Backgrounds of Lewisham intensive CM

- Two factors have prompted the changes of secondary health for older people in UK:
  1. Reduction in long term care provided by the National Health Service
  2. Reduction in the average hospital length of stay (imply that people may be discharged with continuing treatment and rehabilitation requirements which would have previously been met by hospital care)
- The concept of the Lewisham intensive CM highlighted the importance of links between secondary healthcare in the community and intensive care management.

(Challis et al., 2002)

# Lewisham intensive care management

## Descriptions of the Lewisham intensive CM

- Aims at providing community-based long term care with breaking divide of health and social service for demented older people and their family members by using a case management approach
- Integrates the specialist domiciliary care for people with dementia, specialist mental health care, and intensive case management
- Targets to individuals with a diagnosis of dementia that identified as having unmet needs and likely to be at risk of entry to institutional care, despite input from statutory services
- Focuses to maintain people with dementia in community as long as possible

(Challis et al., 1997)

# Lewisham intensive care management

## Descriptions of the Lewisham intensive CM

- Social worker as a case manager
  - Being located in a secondary health care setting (a community mental health team for older people) with a special target population of older people
  - Being free from the initial screening and assessment work
  - Has a caseload of 20-25 cases and controls over a devolved budgets so as to provide appropriate service
  - Being integrated into the mental health team and also social services employee, they had accessed to all the relevant health and social service resources for the care of older people with dementia

(Challis et al., 1997)

# Lewisham intensive care management

## Settings and roles of CM in the Lewisham intensive CM

**Community Team in Social Care (Short term)**

- The community-based multi-disciplinary teams included psychiatrist, nurses, occupational therapist, social workers, and psychologists
- Home-based assessment was undertaken by one of team members
- Case conference was held by the team to discuss the assessment results and drew the expertise from other members. A key worker approach was adopted for subsequent management.

+

**Mental Health Team (Long term)**

- A case manager located within a mental health team focused on providing long-term support for people with dementia

(Challis et al., 1997)

# Lewisham intensive care management

## Case managers' roles in the care management process

**Intensive Case Management**

Assessment: Assessment for specific community support packages; involves others in contribution to holistic assessment

Care planning: Responsible for designing overall care plan

Arranging services: Provide and negotiate services; offer direct support and indirect support through paid helpers

Monitoring and review: Responsible for monitoring and reviewing cases both directly themselves and also, particularly, regarding the clients' physical health, through the paid helpers; conduct review as and when appropriate, involving other team members as necessary

Closure: Placement in residential/nursing home by case manager

(Challis et al., 1997)

# Lewisham intensive care management

## Other duties of case managers

- Budgets upon purchase of home support through a range of helpers recruited by them and also upon services from external providers
- Spends time in the recruitment, selection, training and support of local helpers to work with older people so as to be able to respond with sufficient flexibility to the needs identified

(Challis et al., 1997)

# Lewisham intensive care management

## Empirical evidence

***Method:***

- Quasi-experimental design: Comparison of people with dementia receiving either the intensive CM (experimental group; n=43) or usual care (control group; n=43) in 12 months

***Key findings:***

**Demented older people receiving the CM:**

- 51% of the experimental group remained at home compared with 33% of the control group
- Reduction of ADL needs, overall needs, and level of risk

(Challis et al., 2002)

# Lewisham intensive care management

## Empirical evidence

***Key findings:***

**Caregivers receiving the CM:**

- Improvement of social contact of caregivers
- Reduction in stress of caregivers, and their input to the care of client

- Lack of difference in costs between experimental and control group may attribute to lack of impact of the case management service on institutionalization in the first year

(Challis et al., 2002)

# *Approaches of CM in dementia care:*
# Nurse led case management

# Nurse led case management

Background of nurse led CM in Netherlands

- Timely detection of dementia is important for patients and their caregivers
- There is evidence of under detection and diagnostic delay
- One of patients related barrier to timely recognition is the absence of a request for help
- May attribute to (1) denial; (2) labeling cognitive impairment as an accepted aspect of normal aging; (2) lack of awareness of the disease process; (4) the idea that nothing can be done

# Nurse led case management

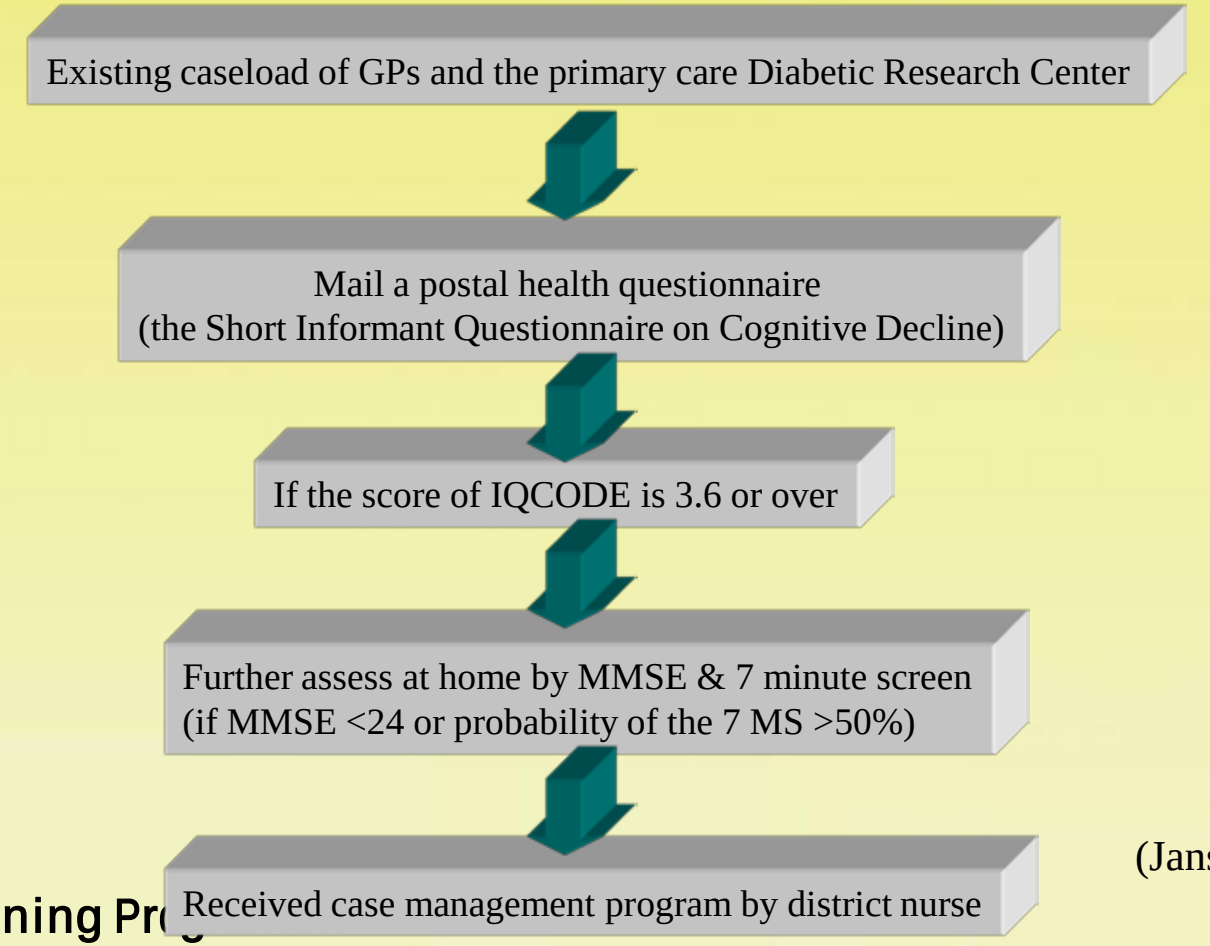
## Descriptions of nurse led CM

- Emphasizes a proactive care with timely detection & structured care by case manager (district nurses)
- Timely detection involves:
  1. the caseload of co-operating GPs and the primary care Diabetic Research Centre
  2. Sent them a postal health questionnaire to identify older adults with cognitive decline by using a self-report version of the short Informant Questionnaire on Cognitive Decline
  3. Patients of suspect of dementia were assessed at their home by the 7-minute screen and the Mini-mental State Examination

(Jansen, et al., 2005)

# Nurse led case management

## Process of case identification




(Jansen, et al., 2005)

# Nurse led case management

## Descriptions of nurse led CM

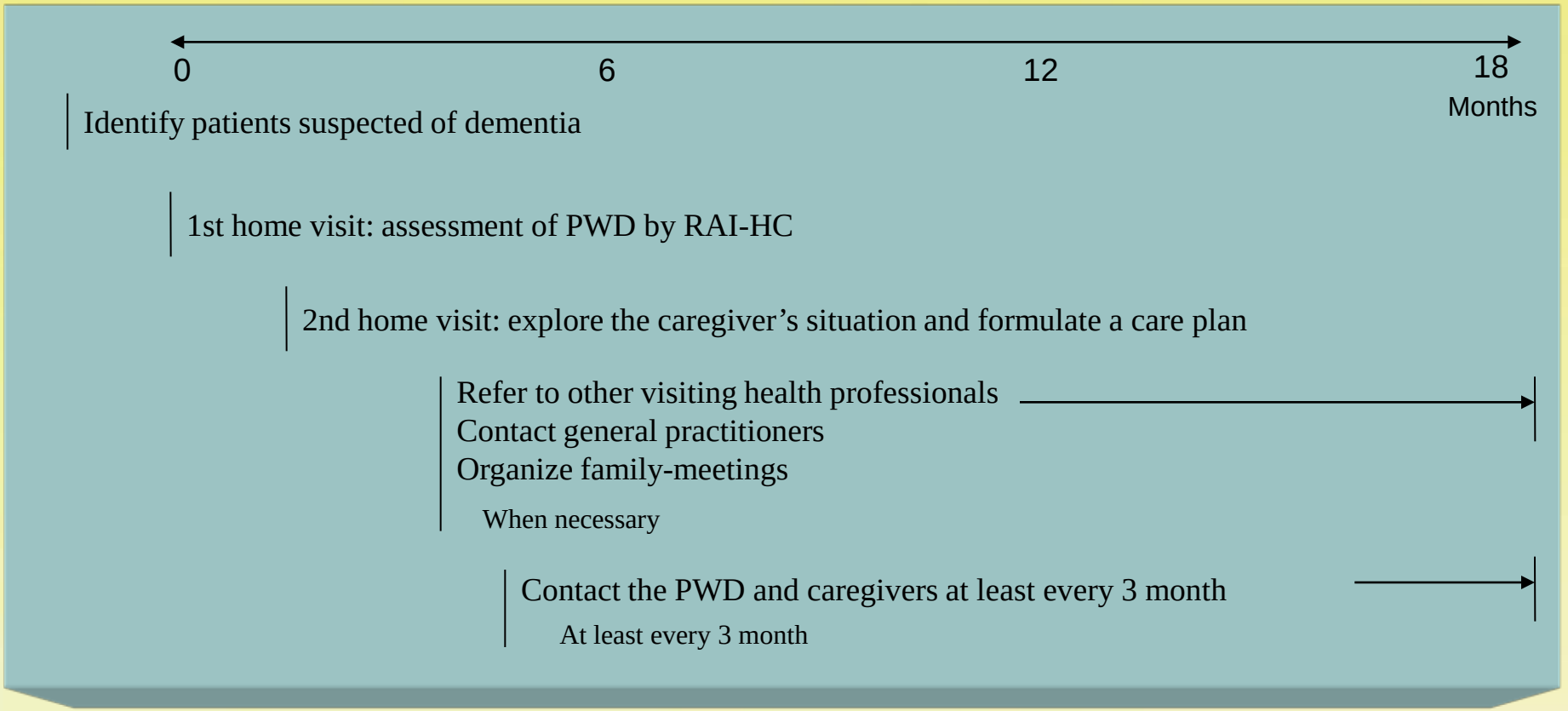
- Structure of care includes:
  - Case management (assessment, planning, coordinating, collaboration, and monitoring of care)
  - Practical, informational, and socio-emotional support
  - Multiple support strategies: support group and respite care to informal caregivers and patients
  - Care planning through the use of Resident Assessment Instrument Home Care (RAI-HC): provides protocols for the management of 30 potential and actual problem areas

(Jansen, et al., 2005)

You can click on the following link to see more information on the RAI-HC
http://www.interrai.org/section/view/?fnode=15

# Nurse led case management

## Mode of delivery of case management by district nurse






(Jansen, et al., 2005)

# Nurse led case management

Qualities of district nurse:

- Being trained in the following areas
  - The use of the computerized RAI-HC
  - Organized support meeting for care-recipient and their family members
  - The physical and psychosocial needs of dementia patient and their caregivers
  - Use of the National Guideline on Dementia for District Nurse to plan for care



(Jansen, et al., 2005)

# Dementia care management program for families of persons in Hong Kong with dementia

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# Dementia care management program

## Introduction

- Mainly designed for families of persons with older people receiving day care service in Hong Kong
- Last for six months
- Consists two components:

  (1) implementation of 12 sessions of education and support programme;

  (2) training and assignment of case manager (Nurse)

(Chien & Lee, 2008)

# Dementia care management program

## Education and support program

- Design of education and support program was based on the recommended dementia guidelines established in US and a local family program by the first author. Topics includes:
  1. Orientation to dementia care (1 session)
  2. Educational workshop about dementia care (3 sessions)
  3. Community support resources (1 session)
  4. Family role and strength building (6 sessions)
  5. Review of program and evaluation (1 session)
- Held every other week and lasted for 2 hours each

(Chien & Lee, 2008)

# Dementia care management program

Training and assignment of case managers

- Conducted 32 hours of formal training by the authors
- Coordinated all levels of family care according to the results of a structured needs assessment
- Roles of case manager: summarized the assessment data with another nurse in the day care centres, and in collaboration with the caregivers, prioritized problem areas and formulated a multidisciplinary education program for each family on effective dementia care

(Chien & Lee, 2008)

# Dementia care management program

## Empirical evidence

***Method***

- A controlled trial with 88 primary caregivers of persons with dementia in two dementia care centres in Hong Kong
- Randomly assigned to either the dementia care program or standard care
- Compared for patients' symptoms and institutionalization rates, and caregivers' quality of life, burden, and social support at 6 and 12 months

(Chien & Lee, 2008)

# Dementia care management program

## Empirical evidence

***Findings***

- There was a significant improvement in the symptoms and institutionalization rate among demented persons in the dementia care porgram over 12-months follow up.
- Family members in the program reported significantly greater improvement in quality of life and burden compared with the control group at 12-month follow-up

(Chien & Lee, 2008)

# Conclusive remarks

- Emphasizes on early detention & interventions of PWD in primary care settings
- Offers extensive supports to PWD and their family caregivers in primary care settings or in community level
- Integration of pharmacological and non-pharmacological interventions (multi-components) to people with dementia and their family caregivers
- Partnerships among physicians, CM, multi-disciplinary teams, and even family members
- Requires a more intensive case management
- Standard protocols of care

# Conclusive remarks

- Standardized assessment and ongoing monitoring or review
- Interfaces between professional intervention and care work
- Specialization in dementia care

# Summary of chapter

- Key concepts of case management are introduced
- Characteristics and empirical evidence of three case management approaches in dementia care are described in details
- A conclusion that emphasizes on the similarities and differences of three approaches is included

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# The End of Chapter 6