

Report on meeting with experts for designing multimorbidity case management training programmes

Second work package 6 expert meeting
4th November 2016, Treviso, Italy



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Specific contributions are available inside this report

Executive summary

The main objective of this report is to describe the activities performed by work package 6 (WP6) team in order to complete its TASK 4 and achieve the goal of D07-03: to report on meeting with experts for designing multimorbidity case management training programmes.

This document is composed by three chapters that temporally correspond to the three consecutive and distinct work phases that contributed to perform Task 4 of WP6: to define case management training programmes for care personnel, partners have designed a questionnaire to provide a structured overview about training programmes for case managers.

In the first chapter of this document we report the results of the survey developed by WP6 to provide a structured overview about programmes that focus on case management at the European level.

In the second chapter we provide the results of the literature review on training programmes for case managers. The systematic review of the literature was conducted with two aims: 1) to describe existing training programs for care managers and 2) to assess how effective current training programmes for care managers are.

In the third and last chapter the results of WP6 consensus meeting, held on 4th November 2016 in Treviso -Italy, with a group of European experts, are reported.

The objective of this consensus meeting was to discuss a training program for Multimorbidity Case Managers. The aims of this meeting were to 1) to define a minimum set of skills, knowledge, and competencies for a person working as a Case Manager for multimorbidity patients in Europe and 2) to discuss how to train Case Managers in these skills, defining type of training, length of training, minimum qualification requirements, possible curriculum, and other elements.

The results of the survey (Chapter 1) and the results of the literature review on training programmes for case managers (Chapter 2) formed the basis of discussion during the consensus meeting.

CHAPTER 1

FINAL DRAFT

Results of the survey of WP6 on case management training programmes available in Europe

FINAL DRAFT

Authors

Federica Mammarella, Katie Palmer, Graziano Onder (AIFA)

FINAL DRAFT

Introduction

The European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (CHRODIS-JA) aims to promote and facilitate a process of exchange and transfer of good practices between European countries and regions, addressing chronic conditions, with a specific focus on health promotion and prevention of chronic conditions, multimorbidity and diabetes.

This survey is part of the WP6 activities that aim to design innovative, cost-effective and patient-centred approaches for multimorbid patients including case management training programmes for care personnel. It aims to provide a structured overview about programmes that focus on case management at the European level. The responses to the questionnaire were not be used to examine the performance of policies or programs in any given country, to rank countries according to their policies and programs or as a benchmarking tool. The answers were intended to be used to map existing multimorbidity care models at the European level.

The graphical representation of this questionnaire, together with the scientific literature review on training programmes for case managers, were performed in the context of WP6's TASK 4 activities and shared with experts to stimulate the discussion during the second expert meeting of WP6. The 2nd WP6 expert meeting aimed to identify the essential professional competencies of a multimorbidity case manager and develop a training programme for healthcare providers.

Methods

This questionnaire was developed based on the joint work of all WP6 partners. The questionnaire was designed to ask as many questions about the content, length and type of training programmes currently being used to train case managers in Europe. In detail, the preparation of the questionnaire started in January 2016. The 1st draft of the questionnaire was prepared by the WP leader team and finalized in February 2016. In March 2016 this version was sent to all partners (associate and collaborative ones) asking for their opinion and suggestions; the collection of preliminary feedback started in the same period. After that, a new version of the questionnaire on multimorbidity case management training programmes were also submitted to Advisory Board members for their revision and input. After that the final version was issued and sent. WP6 partners and WP leaders of Joint Action Chrodis were asked to identify and invite experts working in the area of case management training programmes (e.g. experts from national, regional and local health institutes or public authorities, associations of persons with diabetes, professionals involved in the care of persons with diabetes) to contribute to filling in the questionnaire. Received responses are shown only in aggregate form. The complete form of the questionnaire can be accessed by following link: https://drive.google.com/file/d/0B8Xu4R_n0-nzWmZwc3otVGNwVjA/view.

The large part of the questions could be answered by ticking one box or all boxes that applied. To keep the questionnaire as simple as possible, the answers did not include a "do not know/no" option; then when the boxes were not ticked we will assume that response was "no". There were, in fact, only a small number of descriptive questions (e.g. name of the programme, name of the expert, etc).

Findings

There were a total of 11 responses received by the end of August 2016. Countries with the respective number of questionnaires provided are as follows: Austria (n.1), Bulgaria (n.1), Croatia (n.1), Italy (n.2), Netherlands (n.2), Slovenia (n.1) and Spain (n.3). The geographical distribution of received questionnaires is reported in figure 1, where stars indicate countries that filled out the questionnaires, while the detailed list of programmes is available in table 1. Detailed responses from all the mentioned countries are represented in tables at the end of this chapter.

Figure 1. Geographical distribution of received questionnaires

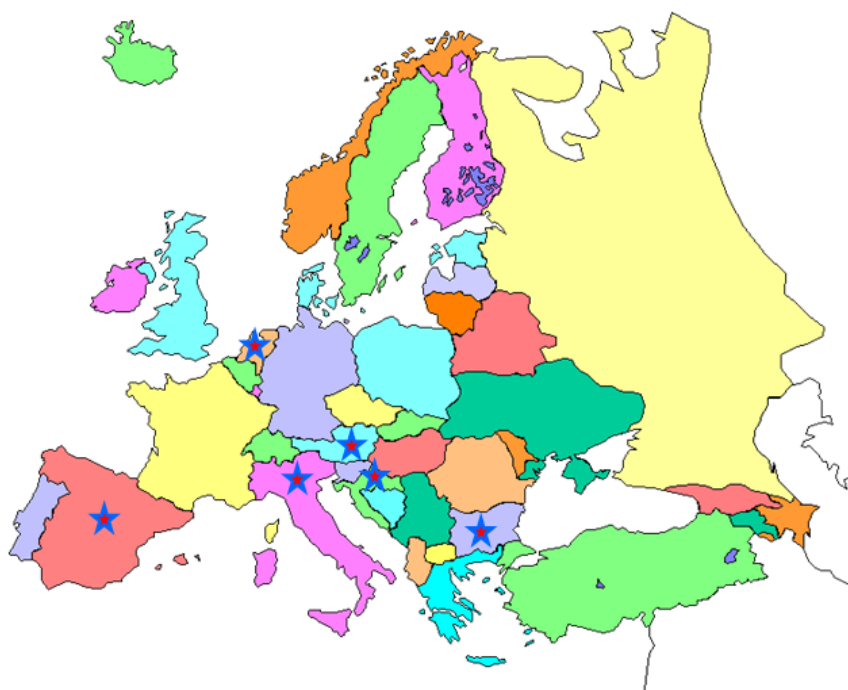


Table 1. List of received training programmes

<i>Country</i>	<i>Name of the programme</i>	<i>Available at</i>
AT	Integrated health case management	www.fh-burgenland.at/gesundheit/
ES (Cantabria)	Case management for pluripathologic patients	Not Available
ES	Programa de Educaci3n para Graduados, AEQ (Asociaci3n Espa3ola de Quiropr3ctica)	http://www.chiropractic-ecu.org/wp-content/uploads/2014/05/EAC-Criteria-for-GEP-updated-March-2015-1.pdf
IT	AIC (Associazione Italiana chiropratici) graduate education	http://www.chiropractic-ecu.org/wp-content/uploads/2014/05/EAC-Criteria-for-GEP-updated-March-2015-1.pdf
BG	“Health mediator” training programme	http://www.zdravenmediator.net
NL	Case management	www.han.nl/werken-en-leren/studiekeuze/opleiding/case-management/ (https://www.han.nl/international/english/)
NL	Training case manager – Dementia	www.gerion.nl/ http://www.gerion.nl/casemanagement-dementie
ES (Valencia)	Case Management of complex cases for nurses	Not Available
SI	Specialist training in family medicine, training for nurse practitioners	http://www.mf.uni-lj.si/kdm/3261-kronicni-bolnic http://www.referencna-ambulanta.si/?cat=10
HR	Croatian Centre for Rehabilitation in Community – programme	www.bolnica-vrapce.hr
IT	1 st level master in “Case management nella rete integrata dei servizi a favore del’anziano (Il case manager geriatrico) - “Geriatric case manager”	http://www.uniroma1.it/sites/default/files/14360_0.pdf

Most of questionnaires received describe programmes as part of curricula of future health care professionals and in almost all cases training programmes can be consulted online, although, in some, programmes are available only in the local language. Only a few are implemented at the local level, while 50% and 42%, respectively, are implemented at a wider level (regional and national). About 60% were launched after 2010, and the three most recent programmes started in 2016, while the oldest one dates back to 2002. Actually 75% of submitted programmes are ongoing, while 25% have concluded. Changes in vision and opinion represent the leading causes of concluding the training programme. The principal source of funding is the statutory system of health financing, but beside this there are also other sources such as employers of case managers, health care organization and organization involved in the care. In less than 50% of cases a continuing education programme for case management is available. A high level of education, usually a degree, is required to attend these types of programmes, that are often intended for nurses, but also for GPs, MDs other than GP and social workers. Moreover, these types of programmes, that are almost never implemented in the context of a research programme, can be intended also for system managers and health care managers. Usually payment is not required to attend the training programme and attendance to the training programme is required to become a case manager in only 50% of cases. In almost 40% of cases the submitted programmes focus on all typology of patients as listed in the questionnaire (primary care patients; complex patients; multimorbid patients; long term care institutionalized or home care patients; older adults; psychiatric patients) and in almost 20% the programme is focused on a cluster of patients composed by primary care, complex and multimorbid individuals. Almost all programmes share common criteria such as: presence of certified educators with specific competencies, scheduled training sessions, as well the presence of a monitoring system. All available programmes consider the implementation of evidence based practices as a core component, while other components are reported with different prevalence rates. In particular, those less reported are the use of electronic records and clinical charts and appropriate coding of patients' health problems. Finally, most of submitted programmes are monitored both via process indicators and intermediate outcomes indicators. To The questions of the WP6 survey with related answers are reported in aggregated form below.

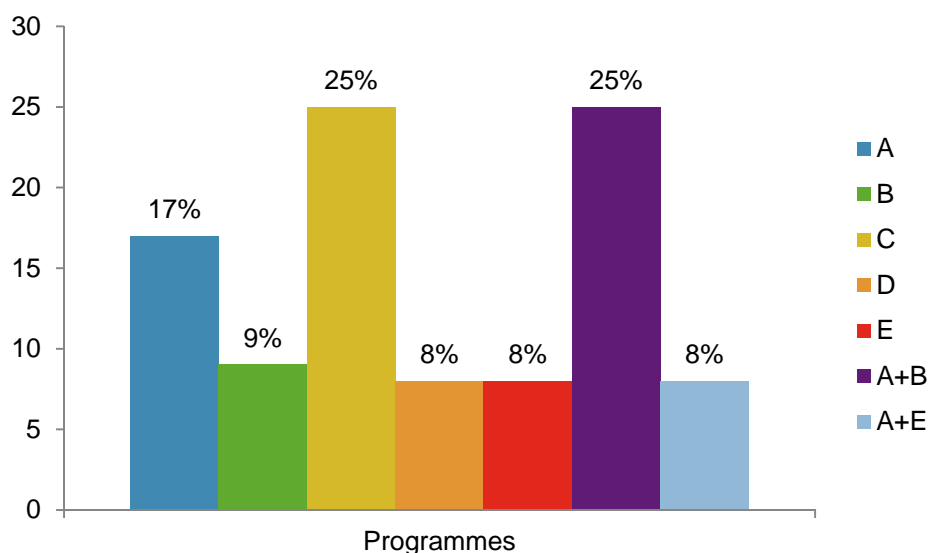
Graphical representation of results

INTRODUCTIVE QUESTION

ARE THERE ANY PROGRAMMES IN YOUR COUNTRY THAT AIM TO TRAIN (FUTURE) HEALTH CARE PROFESSIONALS IN CASE MANAGEMENT (AS DEFINED ABOVE)? (multiple answers possible)

ANSWER OPTIONS

- A. Part of curricula for future health care professionals
- B. Stand-alone national programme for current health care professionals
- C. Stand-alone local or regional programme for current health care professionals
- D. Part of a more comprehensive national care plan or programme
- E. Part of a more comprehensive local or regional care plan or programme

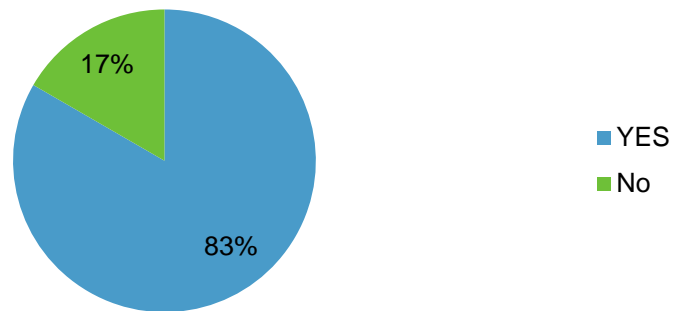


QUESTION 2

INFORMATION ON THE TRAINING
PROGRAMME IS AVAILABLE

ANSWER OPTIONS

Yes
No

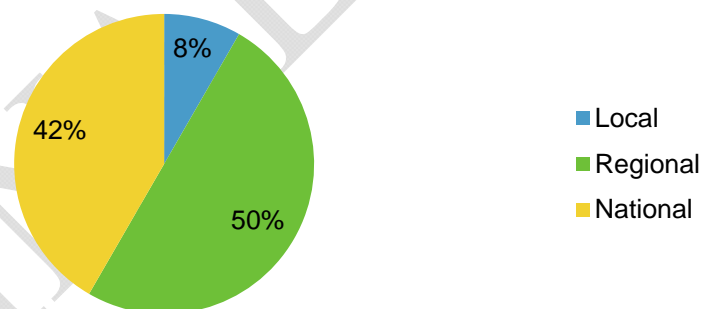


QUESTION 4

AT WHAT LEVEL IS THE TRAINING
PROGRAMME IMPLEMENTED?

ANSWER OPTIONS

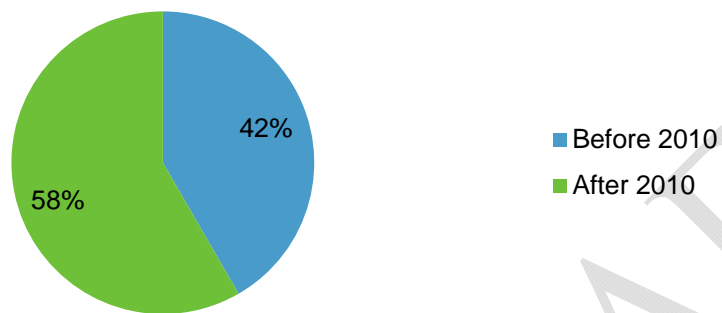
A. Local
B. Regional
C. National



QUESTION 5

YEAR OF IMPLEMENTATION

(the training programme has started)

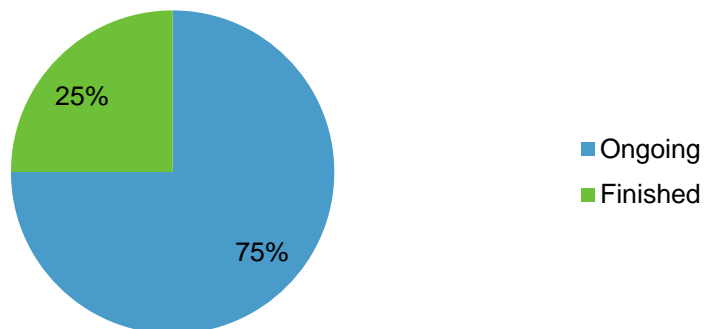


QUESTION 6

THE TRAINING PROGRAMME IS CURRENTLY RUNNING

ANSWER OPTIONS

Yes
No

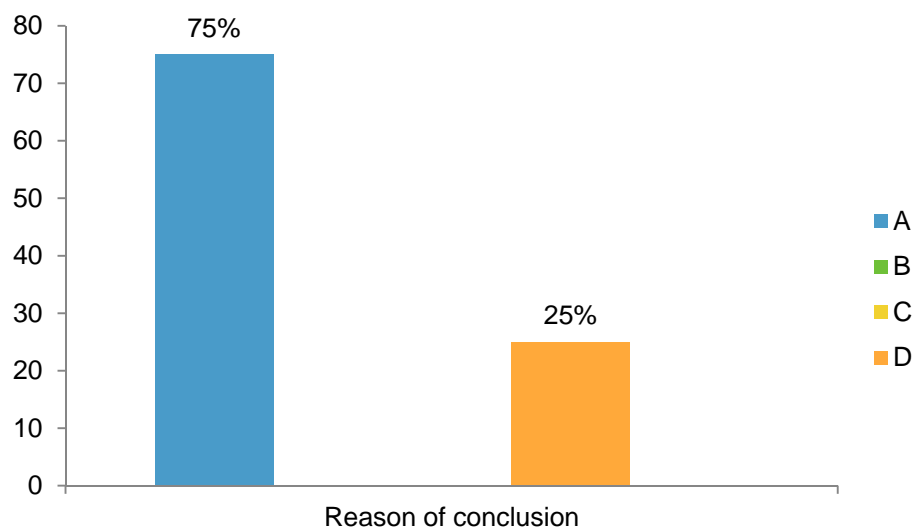


QUESTION 7

THE TRAINING PROGRAMME HAS FINISHED
since (multiple answers possible)

ANSWER OPTIONS

- A. Visions or opinions on the relevance of training case management have changed
- B. Not enough participation of healthcare professionals
- C. Financial reasons
- D. Other, please specify



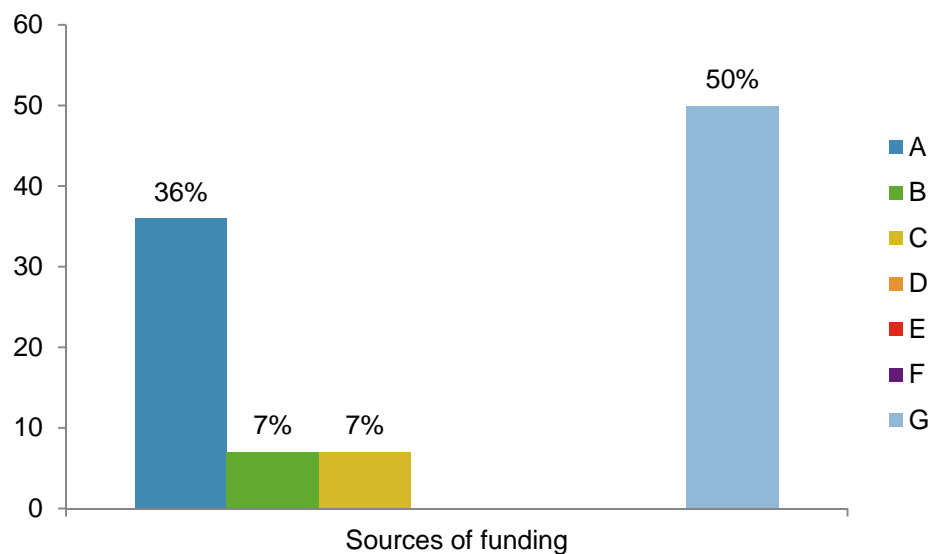
Answers given for option D: finished as initial planning (for the natural conclusion of the project).

QUESTION 8

THE SOURCES OF FUNDING FOR THE TRAINING PROGRAMME ARE/WERE (multiple answers possible)

ANSWER OPTIONS

- A. The statutory system for health financing
- B. Public health care insurers
- C. Private health care insurers
- D. Co-payment by the patients
- E. Trade unions
- F. Ministry of Education
- G. Other, please specify



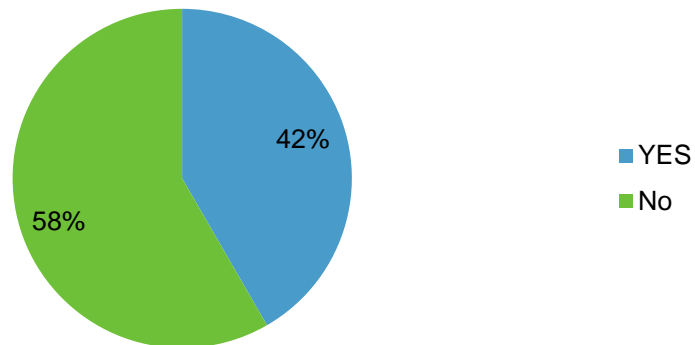
Answers given for option G: Federal State in addition to the ministry of education; Professional association and trainers; Organization involved in the care; Health care organization; Employers of case manager.

QUESTION 9

A CONTINUING EDUCATION PROGRAMME FOR
CASE MANAGEMENT IS AVAILABLE?

ANSWER OPTIONS

Yes
No

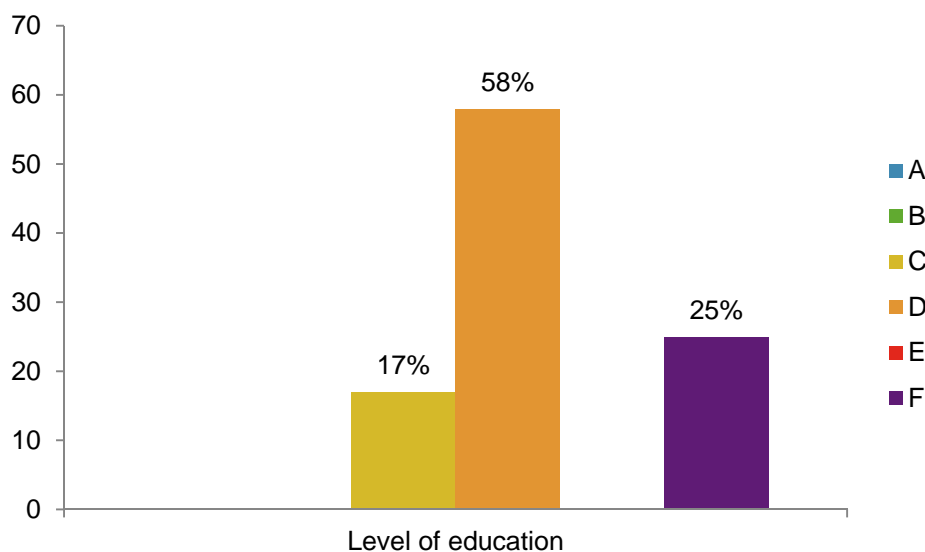


QUESTION 10

LEVEL OF EDUCATION REQUIRED TO PARTICIPATE IN THE PROGRAMME

ANSWER OPTIONS

- A. No specific requirement
- B. Junior high school
- C. Secondary school/High school
- D. Degree, please specify (multiple answers can be applicable)
- E. PhD
- F. Other, please specify



Answers given for option F: 5 years length course of Chiropractic; master of science in health studies; the programme is intended for Basque Health Service staff in general.

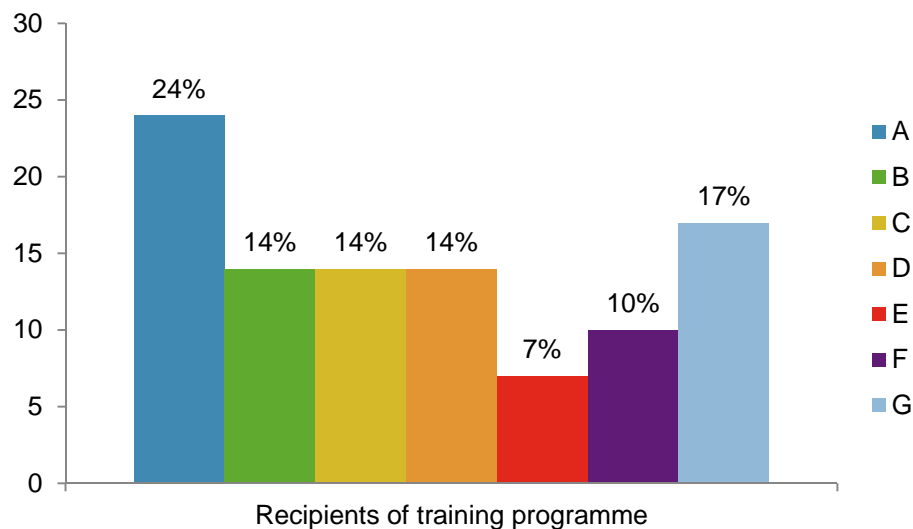
Note : In Spain there is a chiropractic degree program, while in Italy it will be activated in 2017. Currently it is a Master of 5 years length (5500 hours).

QUESTION 11

THE TRAINING PROGRAMME IS INTENDED FOR

ANSWER OPTIONS

- A. Nurses
- B. GPs
- C. MDs, other than GP
- D. Social workers
- E. Psychologists
- F. Therapists
- G. Others, please specify



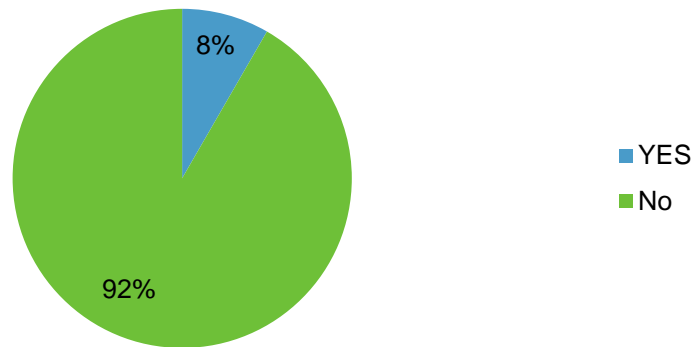
Answers given for option G: Health care managers; doctors of chiropractic; secondary education, a motivational essay, recommendation of a previous employer and/or NGO and signed document for commitment that the individual will participate during the whole training, interview with the three members of the Evaluation Commission; System manager.

QUESTION 12

THE TRAINING PROGRAMME IS IMPLEMENTED
IN A RESEARCH PROGRAMME

ANSWER OPTIONS

Yes
No

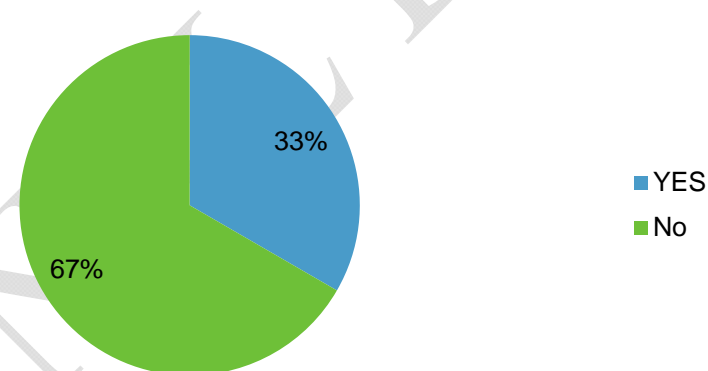


QUESTION 13

A PAYMENT TO ATTEND THE TRAINING
PROGRAMME IS REQUIRED

ANSWER OPTIONS

Yes
No



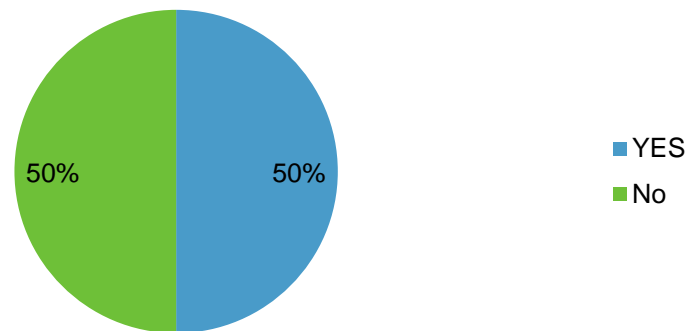
QUESTION 14

PARTICIPATION IN THE TRAINING
PROGRAMME IS REQUIRED TO BECOME A
CASE MANAGER

ANSWER OPTIONS

Yes

No

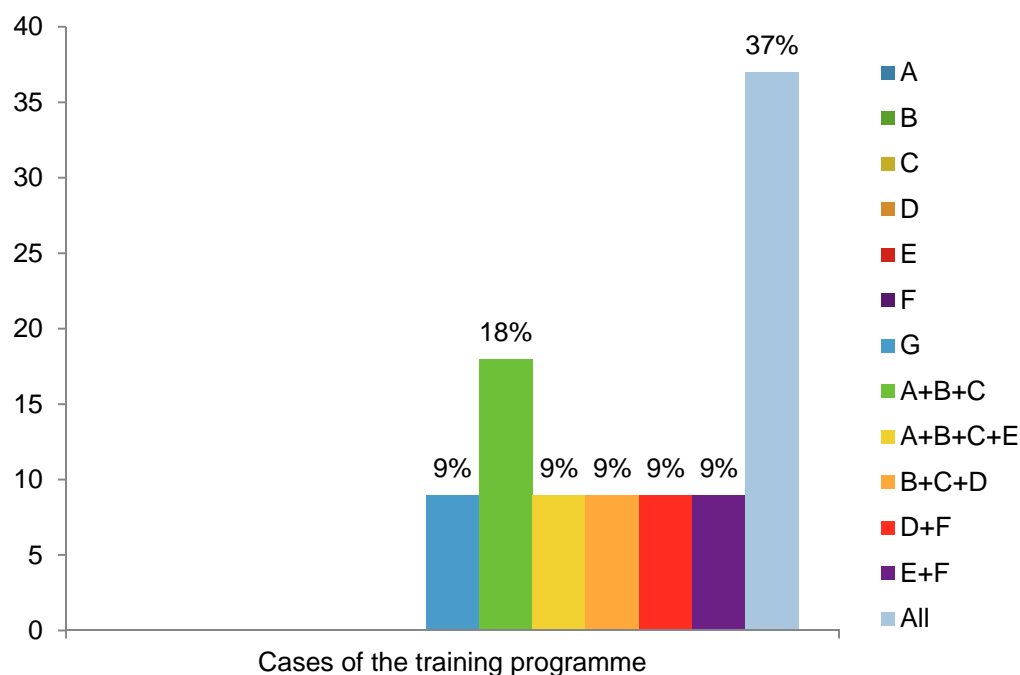


QUESTION 15

SPECIFY THE TYPE OF “CASE” ON WHICH
THE TRAINING PROGRAMME IS FOCUSING
(multiple answers possible)

ANSWER OPTIONS

- A. Primary care patients
- B. Complex patients
- C. Multimorbid patients
- D. Long term care (institutionalized or home care) patients
- E. Older adults
- F. Psychiatric patients
- G. Others, please specify



Answers given for option G: social care clients; minorities and disadvantaged individuals.

Note₁: The answer option “G” was not initially contemplated, was added by respondents.

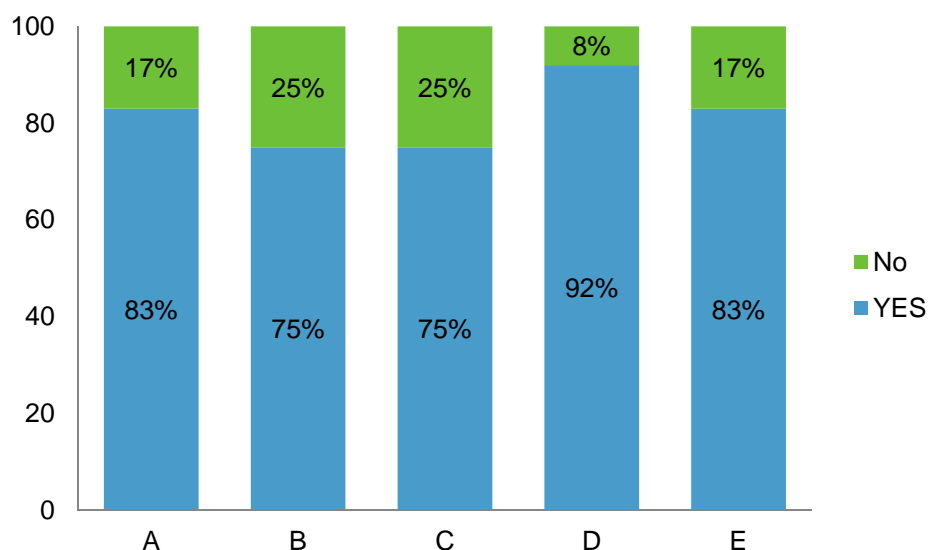
Note₂: The answer G: “minorities and disadvantaged individuals”, was intended as if ALL answers were ticked, since this type of patient is potentially present in all listed settings.

QUESTION 16

THE FOLLOWING CRITERIA FOR THE TRAINING PROGRAMME ARE DEFINED (multiple answers possible)

ANSWER OPTIONS

- A. Scheduling of the training sessions
- B. Environmental requirements (e.g., an appropriate and accessible facility)
- C. Qualification of the trainers/educators (e.g., certified trainees regarding content and methodology)
- D. Core components of the educator/trainer's role: (e.g., clinical practice, health promotion, counseling and behavioral change techniques, ...)
- E. Monitoring of the effectiveness and quality of the training programme

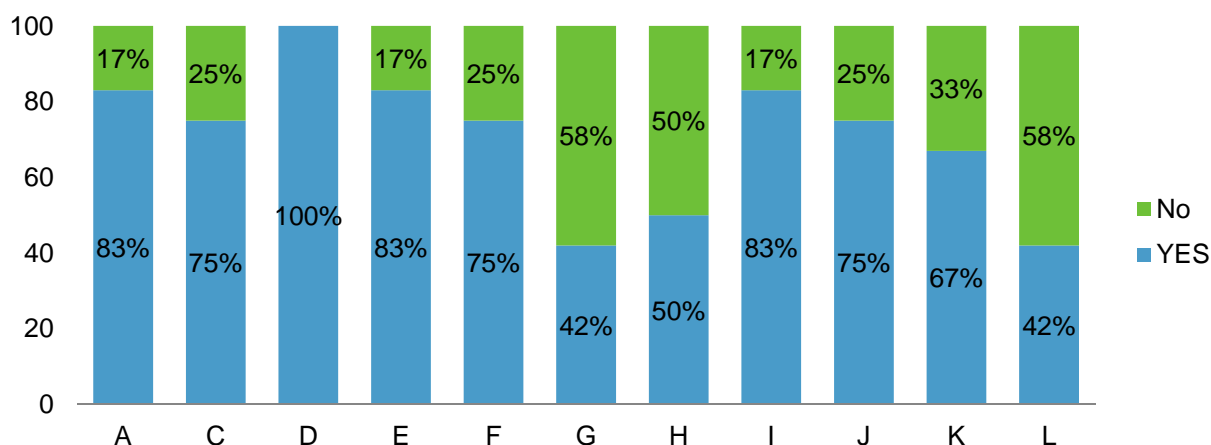


QUESTION 17

CORE COMPONENTS OF THE
TRAINING PROGRAMME
ARE/WERE
(multiple answers possible)

ANSWER OPTIONS

- A. Regular comprehensive needs assessment of patients
- B. Working in multidisciplinary teams and/or care coordination
- C. Development of Individualized Care Plans – including planning ahead for expected crises
- D. Implementation of evidence based practice
- E. Strategies to support self-management based on patient competencies including use of technology to enable care and self-management, management of polypharmacy and adherence
- F. Strategies to support shared decision making (together with patients)
- G. Use of electronic health records and computerized clinical charts
- H. Appropriate coding of patients' health problems
- I. Knowledge of community- and social-resources and strategies to support access to community and social resources
- J. Strategies to improve the involvement of members of a patient's social network (informal), including family members, friends, patient associations, neighbours
- K. Current legislative framework for health, social care and welfare services
- L. Other, please specify



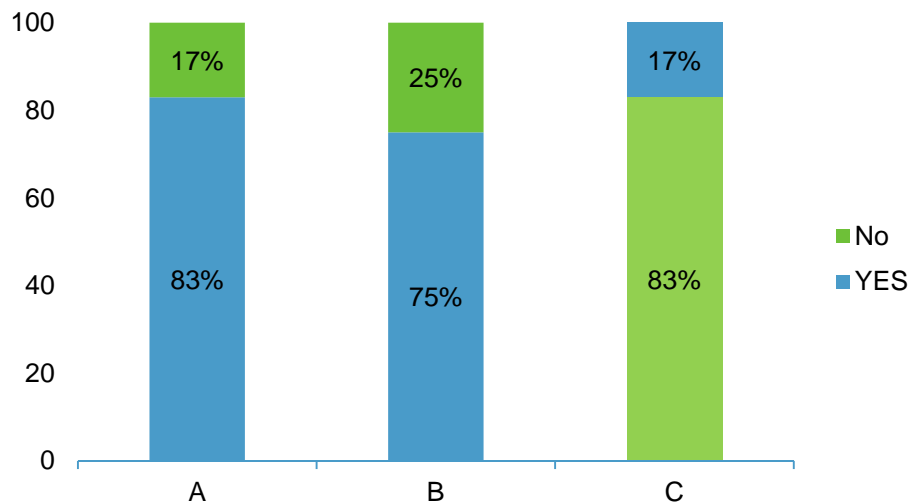
Answers given for option L: Problems of complex cases, transition care, roles of nurse case managers, discharge planning; non-technical skills, palliative care and severe mental disorders, nurse methodology, caregivers care and support; appropriate chiropractic diagnosis and referral team and techniques; multidisciplinary work, evidence-based practice, patient centered; network architecture.

QUESTION 18

THE TRAINING PROGRAMME IS/WAS
MONITORED USING SPECIFIC INDICATORS
(multiple answers possible)

ANSWER OPTIONS

- A. Process indicators (e.g. n. of interventions, n. professionals trained, ...)
- B. Intermediate outcome indicators (e.g. knowledge, attitudes, proactive,)
- C. Other, please specify



Answers given for option C: long term quality control indicator; secretary's office secretarial currency teaching faculty on specific questions at student and decides programs.

Discussion

Although the number of collected questionnaires is limited, it allowed the identification of some of the principal features of this type of programmes at the European level.

The fact that only some of the submitted programs are implemented within the framework of research projects could also justify the lack of information about them through a scientific literature review process. It is interesting to note how many features are shared among the different programs such as, for example, to be designed for professionals holding a degree, or even to not be specific for only one care setting, but rather to be intended for complex patients regardless of the care setting. In particular, an important finding is the high level of agreement in answers given to the two questions aiming to investigate the presence of pre-established criteria for the realization of such type of programmes and the type of core components that characterize them, respectively.

Results of this questionnaire, together with the scientific literature review on training programmes for case managers, performed in the context of WP6's TASK 4 activities were shared with experts to stimulate the discussion during the second expert meeting of WP6. This expert meeting aimed to identify the essential professional competencies, for being a multimorbidity case manager. More specifically the expert meeting was focused on the achievement of two aims: 1) to define a minimum set of skills, knowledge, and competencies for a person working as a Case Manager for multimorbid patients in Europe; 2) to discuss how to train Case Managers in these skills, defining type of training, length of training, minimum qualification requirements.

Conclusions

The findings could suggest that in spite of the differences in implementation, type of funding, and other organizational/implemental aspects, there is a shared sound knowledge base, leading these programmes to be very similar in their main constituent and clinical elements. This aspect is very encouraging with respect to the possibility to identify a common model to be implemented across European countries and regions.

CHAPTER 2

FINAL DRAFT

Literature review on training programmes for case managers

FINAL DRAFT

Authors

Katie Palmer, Federica Mammarella, Graziano Onder

FINAL DRAFT

Executive Summary/Abstract

This document provides a description of the JA-Chrodis Task 4 activity to conduct a systematic review of the literature describing case management training programmes.

A systematic review of the literature was conducted with two aims: 1) to describe existing training programs for care managers and 2) to assess how effective current training programmes for care managers are. Of 647 English language articles identified via a PubMed Search, 35 articles were deemed potentially relevant after reading all abstracts. After reading the full text of the articles, 27 were rejected because they did not fulfill the study aims, and 5 were considered old (conducted more than 15 years ago). Three studies were therefore included in the review, and the results of these studies are described here.

Introduction

The European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS) aims to promote and facilitate a process of exchange and transfer of good practices between European countries and regions, addressing chronic conditions, with a specific focus on health promotion and prevention of chronic conditions, multi-morbidity and diabetes.

This systematic review is part of the activity of WP 6 that aims to design innovative, cost-effective and patient-centred approaches for multimorbid patients, including case management training programmes for care personnel.

The systematic review aims to identify and describe existing or past training programmes for case managers. A case manager is defined as a coordinator of care, actively linking the patient to providers and medical services, as well as residential, social, behavioural and other support services, where needed, in the most effective way. The case manager monitors continuity of care, follow-ups and documentation, and acts as a single access point to the care system.

A training programme is defined as the process by which health care professionals are taught skills that are needed to become a case manager.

Objectives

1. To describe existing training programs for case managers
2. To assess how effective current training programs for case managers are in terms, for example, of improvement in patient adherence, increase of their effectiveness in helping patients to reach their goals, and in terms of improvement in a collaborative case management

Methods

Search terms and information sources

A PubMed search was conducted using the following search terms: (training OR education) AND ("case manager" OR "care manager").

Eligibility criteria

Inclusion criteria: articles written in the English Language and published in the last 15 years that describe an existing case management training programme. Exclusion criteria were: articles published before 2001 or articles not written in English, and articles only describing the knowledge and skills required to be a case manager. 647 English language articles were identified.

Study selection

- 647 English Language articles were identified
- 647 abstracts were read
- 35 were selected on the basis of their abstract as being deemed potentially relevant for the review and full text of the articles was sought. After reading the full text:
- 19 were rejected as they did not fulfill the study aim
- 8 were rejected because they described the knowledge and skills required to be case managers, rather than describing an existing case management training programme
- 5 studies fitted the research aims, but were conducted >15 years ago
- 3 studies were included

Data collection process

Data was collected independently by two reviewers (KP and FM) and reviewed by a third (GO). A data extraction sheet was created to extract the following data: Year of study, country, setting (e.g, specific healthcare ward?), type of professional undergoing training (e.g. nurses, social workers?), topics taught on the programme, length of training, method of training, type of assessment used to assess efficacy of the training programme.

Findings

There are few case management training programmes described in the scientific literature in the past 15 years. The future activities related to this task will be to consider including five scientific articles describing case management programmes conducted more than fifteen years ago.

STUDY 1

Author, date, country

Johnson, 2016, USA [1] Registered nurses.

Type of Professional

Training to become a newly hired “Solid Tumor Disease Program nurse care coordinator”
Educational needs were identified using the Oncology Assessment Tool (Brixey and Mahon).

Topics taught in the programme

Core curriculum was developed from internal and external sources.

- 1) Internal courses: New Hospital Employee orientation; Patient Care Services orientation (includes professional and practical education about the hospital’s professional practice model, electronic workflow management tools, electronic medical records etc).
- 2) Knowledge focused training (online and in person training) including: End-of-Life Nursing Education Consortium; CARES Model; COMFORT Communication Model; Pain Resource Nurse (prc.coh.org); Cancer Center Collaborative Course- Essentials of Chemotherapy for the Oncology Nurse 2015; Hematopoietic Cell Transplantation Core Course; Collaborative Institutional Training Initiative Human Subjects Research Training.
- 3) Observational experience with clinical research nurses; case managers; and patient, family, and community education specialists.
- 4) Reading materials are given.
- 5) Other content includes: the cancer care trajectory from diagnosis through survivorship and end-of-life care; community benefit; evidence-based practice; programs of research and clinical trials nursing; the role of case management and utilization review; diversity and inclusion; cultural competence and health care literacy; geriatric oncology considerations; rehabilitation services; clinical nutrition services; and social services.

6) On-site instruction with the Clinical Trials Research management staff and disease management–focused intensives

Length and method of training

Online and in-person training.

Onsite instruction. Observational experience.

Reading.

Assessment of efficacy of training

None reported

STUDY 2

Author, date, country

Liu, 2010, Taiwan [2]

Type of Professional

Public health nurses (female)

Topics taught in the programme

-Learning outcomes: Knowledge and skills

-Case management process and related practical activities.

-Induction activities using games were designed to motivate the learners and explore their current understanding of case management and related concepts.

-Interactive sessions using lectures, visual aids and written handouts together with case examples, a story, demonstration and role-plays were used to interpret and update participants' knowledge and skills in relation to case management.

-Critical reflection activities were undertaken in small groups using guided discussions, practical experience-sharing, brainstorming, and debates.

-The final delivery strategy involved an integrative activity designed to enable participants to integrate new learning into their daily practice.

Length and method of training

16 hours: 4 half day sessions conducted every 2 weeks

Reading and lectures. Activities and games, role playing, critical reflection and group discussions.

Assessment of efficacy of training?

Cluster randomized controlled trial to determine the effectiveness of a collaborative case management educational intervention for public health nurses.

STUDY 3

Author, date, country

Alliota, 2007, USA [3]

Type of Professional

Case managers

Topics taught in the programme

Trained in the 2004 “Case Management Adherence Guidelines” (CMAG)[4]: evidence based set of tools designed to help case managers employ evidence-based practices to improve adherence to medical regimens. This includes instruction on how to apply motivational interviewing (a patient-centered method of communication which builds on the patient’s internal self-motivation to change[5]) as a strategy to improve knowledge and motivation in 5 key domains:

- 1) Health literacy (assessed using the Rapid Estimate of Adult Literacy in Medicine Revised (REALM-R))[6]
- 2) Medication knowledge (Medication Knowledge Survey Tool)
- 3) Willingness to change (Readiness to Change Ruler)
- 4) Social support (assessment of patient’s perception of, and need for, a social support network using the Duke-UNC Functional Social Support Questionnaire)[7]
- 5) Predicting adherence (modified Morisky scale[8] to assess initial adherence and persistence of medication taking)

Case managers are educated on elements that affect adherence, and provided with tools to evaluate patients’ status along a continuum of readiness to adhere (quadrants reflecting knowledge base).

Objectives of the workshop training sessions:

1. Understand the factors related to nonadherence by defining adherence terminology and introducing the CMAG-1 Adherence Management Algorithm.
2. Define health literacy and the Realm-R tool.
3. Understand the Medication Knowledge Survey and the importance for the patient.?
4. Explain the willingness to change concept and the Readiness-to-Change Ruler.?
5. Illustrate the importance of a social support network while utilizing the Functional Social Support Questionnaire for assessment.?
6. Differentiate the Morisky scale and the Modified Morisky scale defining when to utilize this assessment.
- 7.Using Motivational Interviewing

Length and method of training

In-person training workshops and/or a web-enabled training session of 3-6 hours each.

Taught by 1-3 presenters who were experts in adherence management and the CMAG tools

Sessions included didactic training and practice sessions

Educational material included CMAG workbook, CD instructional material, and other literature.

Assessment of efficacy of training?

97% rated the workshops as either very worthwhile or fairly worthwhile.

1 year after training, 43% said the training was very valuable, 39% reported that it was fairly valuable .

26% currently use at least some of the information and skills very often, 49% use them fairly often.

Motivational interviewing was the tool most frequently used since the workshops (66%).

42% reported a very, or fairly, significant impact of using their new skills to increase their effectiveness in helping patients reach their outcome improvement goals.

43% reported that there has been a very, or fairly, big improvement in patient adherence since they took the training, 39% did not see a major impact.

Discussion

The results of this literature review contribute to the Task 4 objectives to define multimorbidity case management training programmes. The three papers described in the review were used in the Wp6 Expert Meeting on 4 November 2016 for Designing Case Management Training Programmes. First, the three papers and the results of the literature review were sent to all experts prior to the meeting. The Experts used this material to understand what current training programmes are available, and to study the type of content, curricula, and modes of training are used in such programmes. This information formed the basis of some of the discussion during the meeting, where the experts designed an optimum training programme for multimorbidity case management in Europe.

Conclusions

There are very few published studies in the scientific literature that describe case management training programmes, and none are based in Europe. The available publications highlight that a range of curricula and modes of training can be used for the training of case managers, including a combination of conventional teaching techniques such as lectures and reading material, alongside practical experience, critical thinking exercises, role-playing and other hands-on training methods.

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CHAPTER 3

FINAL DRAFT

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Attendees

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Executive Summary/Abstract

A consensus meeting was held on 4th November 2016 with a group of European experts to discuss a training program for Multimorbidity Case Managers. The aims of this meeting were to i) to define a minimum set of skills, knowledge, and competencies for a person working as a Case Manager for multimorbidity patients in Europe and ii) to discuss how to train Case Managers in these skills, defining type of training, length of training, minimum qualification requirements, possible curriculum, and other elements. Eleven skill components were identified as being essential for being a Case Manager for multimorbidity patients in Europe, with an extra add-on training required for people without a clinical healthcare qualification. It was agreed that training for these Case Managers should consist of two parts: 1) workshops and training sessions and 2) supervised, on-the-job practical sessions. The training should combine different methods, including group classes/workshops, one-on one training, self-study, role playing, lectures, reading literature, case studies, onsite instruction, observational experience, critical reflection activities, brainstorming and debates, online learning where relevant, practical experience sharing, mentoring, with a heavy focus on “progressive inquiry” techniques using real-life examples from the trainees themselves.

Introduction

Multimorbidity is defined as the co-occurrence of multiple chronic diseases or conditions in a single individual. Over sixty percent of older persons have multimorbidity, and the prevalence increases with age (1-4). Multimorbid patients have an increased risk of death, disability, pain and cognitive problems and lower quality of life (5, 6) as well as a high risk of inappropriate drug prescriptions, adverse drug reactions, drug-drug interactions, and poor drug adherence (7). These factors, in addition to the high prevalence (8) and associated high healthcare costs (6), make it one of the growing challenges of health care systems worldwide today. Patients often have multifaceted and complex care needs. Multimorbidity cases can be complex, not just from a clinical point of view but also in terms of social and environmental aspects, as described in the example in Figure 1. The Joint Action CHRODIS recently proposed a Care Model for multimorbid patients that described the multiple components needed for the treatment and care of these individuals, including an emphasis not only on pharmaceutical treatment of diseases and symptoms, but also social care and support for physical dependency. One important component identified by the Model was the need for a multidisciplinary care team, and another was the need for a Case Manager within that team to coordinate the patient's care plan, manage care, arrange social support, facilitate the integrated care from the multidisciplinary team and also act as an essential contact point for the patient. More information on the Care Model for multimorbid patients can be found at the following webpage: https://drive.google.com/file/d/0B8Xu4R_n0-nzOEtfNFBrdF9OLXc/view.

Figure 1. An example of the multiple dimensions of case complexity: patient, disease/disorder, environment

A 78-year-old woman has mild Alzheimer's disease and diabetes complicated with sensory-motor neuropathy of the lower limbs making it difficult for her to walk up stairs. She lives in a third floor apartment with her husband who acts as her primary caregiver. She cannot bathe herself independently and needs help to eat. The complexity of the case could change due to changes in:

- i) the disease (such as worsening cognitive impairment and subsequent decrease in physical functioning).
- ii) the environment (for example, the lift in the building might break, making it difficult for her to leave the house).
- iii) the social environment/caregiver (for example, the husband might break his leg and be unable to provide her with assistance in bathing or feeding).

Case Manager The role has been increasingly used in many health care settings, including public, private, community, and home environments, mostly in the USA and more recently in other parts of the world including Europe. The general purpose of Case Management is to

coordinate, facilitate and follow over time the utilization of health and social services by patients. Although there are examples of formal training for Case Managers, particularly in the USA (such as the Case Management Society of America), there are only three published articles in the scientific literature in the last 15 years describing curricula for Case Management training (9-11). Moreover, there are no training programs specifically aimed at developing the skills needed to be a Case Manager for multimorbidity patients.

To address this gap of knowledge, we conducted a consensus meeting with a group of European experts to discuss a training program for Multimorbidity Case Managers. More specifically the expert meeting was focused on the achievement of two aims:

1. to define a minimum set of skills, knowledge, and competencies for a person working as a Case Manager for multimorbidity patients in Europe;
2. to discuss how to train Case Managers in these skills, defining type of training, length of training, minimum qualification requirements, possible curriculum, and other elements.

Methods

This work is part of the activities of a project funded by the European Commission; the Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS), which focuses on the development of common guidance and methodologies for care pathways for multimorbid patients (6, 12), and includes over 70 European partners, including national and regional departments of health, and research institutions from 23 European Member States as well as Norway and Iceland.

A consensus meeting with a group of European experts working in the field of Case Management and related training was held on 4th November, 2016 in Treviso, Italy. The group members were selected to include a range of professions and specialties, including General Practitioners, neurologists, geriatricians, clinical pharmacologists, cardiologists, endocrinologists, diabetologists, epidemiologists, and psychologists, as well as a representative from a patient organization (the European Patient Forum). Prior to the meeting, two sources of information were prepared for the discussion to stimulate debate. First, as part of the JA-CHRODIS project, a survey was sent out to organizations running specific training programs for Case Managers. The questionnaire included extensive questions concerning the length and type of training, types of professionals included etc with a specific question to define and describe all the components included in the training. Twelve surveys were returned and included in the report. The information from the surveys was summarized and sent to all the experts prior to the meeting. The training components described in the survey responses formed the basis of discussion during the consensus meeting.

Second, a systematic review of the scientific literature was conducted to identify and describe existing or past training programs for case managers. A PubMed search was conducted using the following search terms: (training OR education) AND ("case manager" OR "care manager"). Articles were limited to those in English Language published in the last 15 years. 647 English language articles were identified. Of these, 35 were selected on the basis of their abstract as being deemed potentially relevant for the review and full text of the articles was sought. After reading the full text 19 were rejected as they did not fulfill the study aim, 8 were rejected because they described the knowledge and skills required to be Case Managers, rather than describing an existing case management training program, and 5 studies were conducted more than 15 years ago. Three studies remained and were included in the review (9-11). The results of the studies were summarized and presented to the experts before the meeting.

The following experts attended the meeting: Katie Palmer, Federica Mammarella, Josip Čulig, Juan Gallud, Elena Jurevičienė, Milivoj Piletič, Flavia Pricci, Reinhard Schulte, Valentina Strammiello, Theodore Vontetsianos, Igor Zabala Rementeria, and Jelka Zaletel. During the meeting, the experts were asked to i) define a multimorbidity Case Manager, ii) identify the

ideal candidate for multimorbidity Case Management training, iii) define and discuss the optimum methods for such training, iv) identify skills, components and knowledge required to be a multimorbidity Case Manager in Europe, underlying their relevance to multimorbidity patients and best methods for training. A qualitative discussion was used, and continued until consensus was reached. In the final part of this document we also describe which elements, further information, or further research is needed before recommendations can be made.

FINAL DRAFT

Results

i) Definition of a Multimorbidity Case Manager

The Case Manager is a professional healthcare provider who is the facilitator of care for complex cases of multimorbidity (the co-occurrence of multiple chronic diseases or conditions in a single individual). The Case Manager facilitates and coordinates treatment and care, actively linking the patient to providers and medical services, as well as residential, social, behavioral and other support services in the most efficient way. They may support the patient's needs, wishes, and rights. They monitor the continuity of care, follow-ups and documentation of the case. They are a reference point for the patient, who should be able to access any aspect of their care and treatment via their Case Manager.

ii) Selection of candidates for Multimorbidity Case Management training

Case Managers should have a license to practice in the relevant healthcare field, as well as a healthcare qualification, such as a graduate degree from an accredited higher education institution in a relevant subject, such as medicine or nursing. Work experience with multimorbidity patients, or similar, is also a preferred prerequisite. Due to differences in educational and qualifications in European countries, no specific recommendation can be given.

The ideal Multimorbidity Case Manager candidate should have a basic level of qualification in medical care such as nursing or a medical degree (according to the national standards). The minimum level qualification should be a Bachelor degree or higher.

In cases where the candidate does not have a qualification in medical care, such as a social worker, they should undergo the additional training (see point 12) in Basic Clinical Principles. Depending on country-specific and regional requirements, candidates for multimorbidity Case Manager training should ideally already have a minimum level of practical clinical experience as a Case Manager, and be actively working in such a role during training. In some existing training programs Case Manager candidates are chosen according to specific sets of qualities, see the example in Figure 2.

Figure 2. An example of the personal qualities required for being a good Case Manager

In an existing Case Management program in Valencia, Spain, Case Managers (Community Nurses) are selected as being suitable for Case Management roles, and subsequent training, according to a number of qualities. These qualities have been identified through the experience of members of the program, who feel that they are critical for the program's success. These include that the candidate:

- Shares the vision and goals of the project and believes they are attainable.
- Is motivated to participate and does so voluntarily, not appointed by their superiors.
- Is a known person, and is selected from the same team with which the Case Manager will work.
- Has certain prestige, recognition, or moral authority in such teams.
- Is open, tolerant, empathic, easy-going person, pacifier, calm, non-aggressive person.
- Is a flexible, adaptive person and not a perfectionist.
- No great clinical expertise is needed, but rather good human relationships skills.

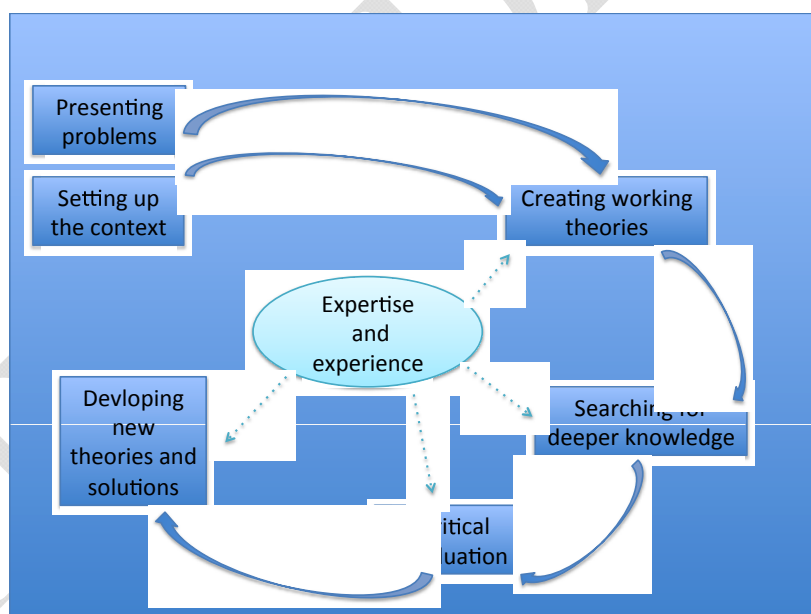
iii) Method of training

It is essential that the training consists of two parts: 1) workshops and training sessions and 2) supervised, on-the-job practical sessions. The training should combine different methods, including group classes/workshops, one-on one training, self-study, role playing, lectures, reading literature, case studies, onsite instruction, observational experience, critical reflection activities, brainstorming and debates, online learning where relevant, practical experience sharing, mentoring etc.

There should be a heavy focus on “progressive inquiry” using real-life examples from the trainees themselves. Progressive inquiry is a model that aims to facilitate collaborative work for knowledge building. The trainer creates a context for inquiry by presenting either a theoretical or real-life situation, after which the trainees start to define their own questions and working theories about it, which they share and evaluate together. The trainees are encouraged and supported to find solutions and answers to the problems posed, and must actively seek and research solutions using any resources available. An example of progressive inquiry for multimorbidity Case Manager training is shown in Figure 3.

Figure 3. Example of a progressive inquiry workshop from the Case Management training program at the University of Applied Sciences, Nijmegen (The Netherlands), Reinhard Schulte

The main concept of the Case Management training program at the University of Applied Sciences, Nijmegen is to combine Case Management practice with a taught training program. In addition to their original profession, Case Managers have to be able to deal with complex and diverse situations, explore what is possible and adaptable in a patient's situation, and be inventive and resourceful to create possibilities in restricted situations. The goal of the whole curriculum is to let the Case Manager grow into the role of researching, connecting, co-directing and co-creating professional networks. The didactic model 'Progressive inquiry', which was developed by Kai Hakkarainen and colleagues at the University of Helsinki has been found to work effectively to train these competencies. In this model trainees investigate situations step-by-step, assessing relevant aspects and criteria, before collecting, exploring and comparing possible approaches and solutions. In a series of workshops the trainees learn to explore and handle different cases at the patient and organizational level, as well as within professional networks, as depicted in the figure below.



Length of training will depend on the country and setting, and resources available. Ideally, training should be conducted alongside working practice, where the trainees are actively working as Case Managers the majority of the time so the training workshops are given part time, occurring once or twice a week, for example, or in a series of biweekly training days. The trainees can then bring real-life examples from their experience to the training, and can

implement and practice techniques taught on the program in their active cases.

Training for multimorbidity Case Managers should focus on the development of specific areas of knowledge, skills and competencies, as described for each skill below.

iv) Skills, components and knowledge required to be a multimorbidity Case Manager in Europe, underlying their relevance to multimorbidity patients and best methods for training

1. Ethical principles

Necessary Knowledge, Skills and Competencies

Case Managers should have knowledge of relevant confidentiality, privacy, and consent issues. They should be able to identify any ethical issues that arise during the care and treatment of a patient, and take steps to address any unethical treatment. This includes ethical consideration that takes into account specific cultural beliefs or value systems of individual patients, as well as differences in socioeconomic background or education (i.e., aiming to reduce differences in access to care and treatment that may occur due to race, gender, religion, cognitive ability etc).

Knowledge of ethical principles also relates to respecting patient preferences and their decisions (for example if they are not willing to change a “problem behavior” such as smoking), as well as ethic considerations on the initiation and termination of case management services.

An Ethical Codex should be signed by Case Managers (depending on national and regional requirements).

The skills of the Case Manager include to be able to:

- Encourage ethical discussion within the team/caregivers patients.
- Encourage patient-centeredness among team members.
- Facilitate solutions to problems that may arise in communicating with the patient (such as language problems, understanding medical information in lay terms etc) so that the patient can understand and participate in care planning and decisions.
- Present the needs, personal beliefs, wishes and preferences of the patients in their absence or when they are unable to do so (for example, in end-life stage / palliative care).

Relevance to Multimorbidity

As multimorbidity patients are often treated by a number of different specialist physicians and in some cases receive care and support from a range of sources, the issue of privacy is of great relevance, particularly concerning the sharing of information about the patient between these sources. In very complex cases of multimorbidity, such as those needing palliative care, ethical issues relating to end-of-life choices are also of importance. Further, ethical issues concerning the right of the patient to accept or refuse treatment, or whether or not to engage in lifestyle changes or self-monitoring behaviors for their conditions is also relevant, as these are common in diseases that are often associated with multimorbidity such as diabetes or coronary diseases. Similarly, research has shown that multimorbidity patients characterized by multiple co-existing psychiatric disorders are particularly complex, and the care and treatment of such patients, both young and old, needs to be addressed in an ethical manner that also respects the rights and privacy of the patient. Polypharmacy is common in multimorbidity patients, and issues relating to adherence and complex drug regimes, drug-drug interactions, and costs of pharmacological treatments to the patient are also ethical issues that are relevant to multimorbidity.

Training/Curriculum

Training on Ethical principles skills and knowledge should include:

- Code of conduct and ethical principles either through lectures by ethicists and/or reading material, including issues regarding consent, confidentiality/privacy.
- Group discussion workshops with examples and case studies to stimulate critical reflection (where possible, examples from the trainees' own working experience should be encouraged), preferably using the progressive inquiry model.
- Role playing, for example leading a dialogue with different people connected to the case.
- Training of methods in ethical consideration in a multiprofessional context.
- Ethics of teamwork.
- Ethics of end-of-life/palliative care choices.
- Ethics relating to the termination of case management activities.

2. Legislative and organizational frameworks

Necessary Knowledge, Skills and Competencies

Case Managers should have knowledge of issues relating to European-, or country-specific laws, as well as policies within a specific organization (e.g. a hospital), particularly concerning three aspects: confidentiality, privacy, and consent. They should have the skill to search for such information when relevant to a specific case, and the ability to monitor any changes in legislation over time. Case Managers should be competent in identifying whether a patient's care and treatment, as well as the Case Management itself, comply with relevant laws and regulations. Confidentiality and privacy laws include issues relating to the sharing of information between different care services, or medical settings/clinicians, as well as sharing of information with caregivers/families or community services. Patient consent to information sharing, as well as certain decisions about care and treatment is paramount, so Case Managers need a solid understanding of the laws, organization rules and regulations (e.g. policies of a specific hospital).

Case Managers should be knowledgeable about informed consent, and should be able to identify which patients need an evaluation to examine whether they are capable of providing consent, and if not, who can provide consent on their behalf (e.g., in the case of severe cognitive impairment). Case Managers should know who to approach for an informed consent evaluation, and should support the process, also evaluating whether there are any changes in ability to consent over time (for example, due to decreasing cognitive functioning in a person suffering from a degenerative dementia disorder). Case Managers should support patients by facilitating the process of consenting to treatments/care, i.e. helping to increase comprehension in cases of people who do not have high levels of health literacy. Case Managers should have knowledge of legislation relating to equality of care services, aiming to minimize disparities between availability of treatment and access to care services between patients according to sex, ethnicity, age religion etc, and have the problem solving skills to deal with such cases.

Case Managers should preferably also be able to suggest possible changes and solutions at the organizational level in order to enhance the management of patients. They have knowledge and skills to highlight situations and procedures that need to be improved in order to initiate change within their organizations and in the cooperation between the organizations involved, and develop additional offers of care that are needed or desired by patients. Two examples of this can be found in Figure 4.

Figure 4. Two examples of how a Case Manager can initiate change at the organizational level.

1. In an institution that offers outpatient care to patients with Parkinson disease a broad range of expertise is available. Patient experience, however, shows that the most of that the patients and their caregivers are not adequately informed about what is possible and available. The Case Manager could initiate change by developing and suggesting a new information system that is easily acceptable and understandable for patients and their caregivers.
2. A Case Manager observes that dementia patients are frequently experiencing a rigid transition when moving from their own homes to a 24-hour care institution. Research has shown that transition can be improved to a certain degree by sharing all relevant information between caregivers at home, the patient, and the professionals in the new institution. The Case Manager could write a guide for home-to-institution transfer that could be used for all future patients transferring to that institution.

Relevance to Multimorbidity

Multimorbidity patients often have complex care needs, and legislation relating to their patient rights includes consent, privacy, and right to treatment and care services.

Training/Curriculum

Training in legislative frameworks should include a combination of learning about specific laws and regulations, as well as improving skills to find such information depending on specific cases, including:

- Basic knowledge of legislation (through lectures or reading material), at the national level, regional level, and organizational-level (e.g. policies of a specific hospital).
- Knowledge of the function of health care systems.
- Progressive enquiry methods, where trainees learn to explore situations from different points of view, encouraging them to look for the answers, supporting them in where to look, and what resources are available. Real case examples should be used, preferably from the trainees themselves.

- Lecture and workshop with instructions how to develop constructive proposals and how to write well-substantiated policy advice for making changes at the organizational level.

3. Comprehensive Assessment

Necessary Knowledge, Skills and Competencies

Case Managers should have the skill to facilitate a comprehensive assessment of patients conducted by a multidisciplinary team, which evaluates i) type, complexity, severity, and clustering of disorders and medical treatment, ii) treatment burden and drug interactions, and iii) patients' preferences, personal resources and capabilities (e.g. compensatory and coping skills, health literacy, financial issues), and social resources (e.g., available social network and potential caregivers, living conditions). Please see Figure 1 for an example demonstrating the importance of different aspects of complexity in multimorbidity patients. Depending on the structure and policies of the organization, Case Managers might also need the skills to help identify appropriate patients for Case Management after they have been screened or referred as potential candidates using appropriate tools, in order to develop a more efficient care plan and to better allocate resources.

In some cases the Case Manager might perform all or parts of the comprehensive assessment themselves, depending on their professional background and skill levels, but in most cases they would be responsible for supporting the multidisciplinary team, facilitating the assessment, and collating the information from all sources (e.g., GP, specialized physicians, social services as well as information from the patient and their families/caregiver) establishing what is relevant. This skill requires critical thinking, such as the abilities of reasoning, organizing and analyzing information so that problems are accurately understood and solutions are outcome-oriented and purposeful.

The Case Manager also needs to be competent in evaluating the willingness of the patient to receive Case Management, and any potential barriers (for example, problems with caregivers). An accurate understanding of problems allows to define achievable goals with the patient and to evaluate results of the action.

Training/Curriculum

- This skill should be trained via practical exercises on-the-job. Trainees should be responsible for facilitating comprehensive assessment of a multimorbidity patient within a multidisciplinary team, monitored by a supervisor.
- Workshops should be conducted for learning available assessment tools, how to access them and how to use them.

- Workshops with other trainees should then be conducted to discuss their cases, with self-evaluation, discussing problems and sharing experiences.
- Please see point 7 concerning training on communication skills, as these are relevant for selecting patients for Case Management. As Case Managers are initiating a new relationship with patients, and may need to get them to disclose sensitive information, communication skills are an important element of the training.

4. Care planning (Individualized Care Plans)

Necessary Knowledge, Skills and Competencies

Case Managers should have the skill to facilitate the process of making the patient's individualized care plan with the multidisciplinary team. The Case Manager should be able to collect and analyze in-depth information to recognize the patient's physical, psychological, psychosocial, cognitive, functional, economic, cultural, spiritual, and lifestyle needs, to allow an appropriate distribution and allocation of health, social and economic resources. Case Managers must be competent in facilitating the process in a way that does not take away any direct contact and discussion that the patient has with their various physicians.

Case Managers should be able to accurately understand potential problems in order to define an appropriate individualized care plan with team members, patients, and/or caregivers, with clear achievable goals. They also need to monitor the plan (with team members) to evaluate responses to the individualized care plan, eventually revise it and then evaluate the result of such actions.

Case Managers also need to involve the patient him/herself in dialogue about care planning, and, where possible, present the patient's needs and wishes to ensure that care providers look at the patient as a case rather than a disease (e.g. patient-centered versus disease-specific approach), see point 6. The communication skills described later in point 7 are also relevant here, in order to achieve good communication and collaboration between the members of the multidisciplinary team, and the patient themselves (and caregivers).

Case Managers should be able to facilitate a comprehensive assessment and recognize explicit and not explicit questions, actual needs, potential problems, and also to predict their possible evolution. Starting from the identifications of needs the Case Manager should be able to:

- Define a care plan with specific goals that consider patient's needs and desires as well as available resources, preferably together with (or after dialogue with) the patient.

- Define and involve all professional figures necessary to the definition and implementation of the care plan.
- Define milestones and timing of evaluations in order to define the organization of the care process.
- Identify clear indicators to measure and monitoring the efficacy of the plan of care.
- Contemplate the possibility of adjusting goals, or defining new goals or to adapt the ongoing care plan as needs or resources change, or in case of poor efficacy of the care plan itself.

Training/Curriculum

Training should include a mixture of workshops and on-site practical experience:

- Workshops on project management skills training.
- Workshops with videos of negotiation situations.
- Workshops exploring real-life case examples.
- Lecture and workshops on tools available for making assessments and individualized care plans.
- On-the-job supervised experience of facilitating an Individualized Care Plan with the care team.
- Critical reflection: trainees would be shown a video of themselves where they are responsible for a negotiation process between the multidisciplinary team and/or patient. They would critically reflect on their performance, and receive feedback from the group.

5. Team work principles

Necessary Knowledge, Skills and Competencies

Case Managers should have the skill to be able to work collaboratively with the multidisciplinary team, and to facilitate team work within the group, including cooperation, using their individual skills and providing constructive contribution and feedback. In facilitating team work Case Managers need the ability to negotiate, problem solve, merge differing points of view, facilitate communication, encourage trust building, collaborate, and manage potential conflicts among the team, in order to achieve the set goals and maximize the patient's positive outcomes.

From a wider perspective Case Managers should work to enable collaboration among all team members to ensure that all parties contribute, according their expertise, and are aware of the treatment plan, taking in consideration the personal preferences of the patient.

In addition to teamwork, Case Managers also need to be able to manage the patient's "Network", e.g., potential available recourses outside the core care team, such as access to home-help services, patient support groups etc.

Relevance to Multimorbidity

This skill is absolutely essential to multimorbidity where, by definition, patients are characterized by multiple health problems, often requiring treatment from numerous different medical specialists and needing care from different sources. Therefore, the ability of Case Managers to facilitate both teamwork and manage patients' networks is critical for designing and delivering good case management plans.

Training/Curriculum

- Workshops on project management skills.
- Role playing with actors on teamwork, team building, multidisciplinary negotiations, conflict resolution, motivation etc.
- Video examples: videoing trainees in teamwork negotiations, and playing back for self-reflection and feedback from the group.
- Progressive enquiry techniques for how to manage and expand patient's networks for care services.

6. Supporting patient-centered care

Necessary Knowledge, Skills and Competencies

Case Managers should present the patient's personal needs, desires, and wishes concerning care and treatment to members of the care team and other organizations involved, according to the patient-centered model.

Relevance to Multimorbidity

When initiating a multimorbidity case program for a complex patient, a multidisciplinary need is needed, and there may be numerous occasions where the whole team, or members of the team, discuss the patient's care and treatment when the patient is not present. When focusing on a patient-centered model, it is important that the desires and wishes of the patient are presented.

Training/Curriculum

- Workshops where trainees must present the patient's story and preferences, and discuss their quality of life etc.
- Coaching on related principles, e.g., focusing on differentiating from what the trainee as a Case Manager believes is important for the patient from what the patient actually wants.
- Observational techniques: either video or watching on-site live examples of Case Managers presenting patient's personal wishes in clinical care meetings for example.
- Role-playing.
- Personal reflection on own attitudes in cases of conflicting interests or different personal opinions between Case Manager and patient.
- Simulations to encourage empathy, for example using technology so that the trainee can experience what the patient is feeling, such as arthritis simulation gloves, glasses to simulate cataracts etc.

7. Listening and communication skills

Necessary Knowledge, Skills and Competencies

Case Managers need to have excellent listening and communication skills, to be able to communicate with patients and their families or caregivers, and other member of the multidisciplinary team. Case Managers must be skilled in active listening, and should be able to assess patients' linguistic abilities and cognitive functioning in order to maximize communication and understanding, as well as communicating medical information into a format that a lay-person can understand. This skill also includes the ability to deal with, and respect, people of differing cultural beliefs, value systems, socioeconomic backgrounds etc.

Case Managers should be able to communicate effectively with the patient and their families, and explain medical information as well as choices and risks of care and treatment available to the patient (after it has been explained by the physician). They should also encourage good communication skills within members of the care team. Case Managers should be able to actively listen to patients, and adapt their communication skills to deal with any barriers to communication, such as sensory or cognitive impairment. It is essential that Case Manager have the ability to know when they are qualified to communicate certain information, or when they need to refer to the treating physician to do it (for example, a Case Manager should not be responsible for interpreting blood test data, but should refer the patient back to the examining physician for appropriate consultation). Case Managers should have the necessary knowledge on legislative policies (see point 2) in order to distinguish what information they can be responsible for communicating to the patient or when, for example, it is the responsibility of a physician.

When necessary, Case Managers should be able to act as a communicator between patients and various members of the multidisciplinary team, to ensure that the wishes of the patient are considered (for example, when discussing drug adherence).

Relevance to Multimorbidity

Complex multimorbidity cases often require complex care and treatment regimes that might be difficult for patients to fully understand. Further, due to potential side-effects of pharmacological treatments, and potential drug-drug interactions, it is essential that complex patients understand how to adhere to treatment plans, and that Case Managers can communicate with them about any barriers. Further, as some disorders that are common in multimorbidity such as dementia disorders (or even side-effects of certain drugs) can cause cognitive impairment, it is essential that any barriers to communication are reduced in these cases. Finally, due to the involvement of multiple parties in the care of complex multimorbidity patients, communication between all member of the team, as well as the patient and their families, is essential for optimizing individualized care plans.

Training/Curriculum

- Workshops on dealing with conflicts and negotiation skills.
- Workshops on communication skills, teamwork etc.
- Workshops on active listening techniques.
- Body language workshops.
- Role playing with actors, using real case examples from the trainer or from trainee's themselves.
- Video trainees communicating with patients and families, play back to the trainees from self-reflection and feedback from the group.
- Training for assessing level of health literacy (e.g., general or specific tools /instruments to assess health literacy depending on country and setting).
- Training in motivational interviewing (focused on all levels, e.g., motivational interviewing of patients as well as physicians and other care team members).

8. Strategies to improve and support patient self-management

Necessary Knowledge, Skills and Competencies

Case Managers should be able to encourage and support self-management activities in the patient, which includes activities that a patient can engage in to manage their diseases, disability, or symptoms, depending on the specific case (for example, dietary changes, monitoring glucose levels, exercise, etc), as well as activities that the patient can use to stimulate their capabilities (e.g., compensatory and coping skills). This skill relates to knowledge on how to support and guide a patient in managing (or modifying) a behavior or adhering to treatment, including adherence to complex drug regimes. This is an essential skill for increasing patient empowerment.

Case Managers should be able to assess a patient's readiness to change and have the skill to educate patients to consider options and changes. Motivational interviewing is also an essential skill for Case Managers as is the ability to identify barriers to change, and to encourage patients to adhere to self-management in the long-term (e.g., such as long-term dietary changes or smoking cessation). It is also essential that Case Managers ensure that the patient/caregiver does not become too dependent on the Case Manager for help with self-management, and to have appropriate limits. Preferably, Case Managers should also be trained in any techniques used for self-management (such as glucose monitoring instruments etc) so that they can fully support the patient in learning to use them (to compliment any education the patient has already received from the treating physician etc).

Using communication techniques described in point 7, Case Managers need to ensure that patients understand what are the implications of self-management, why it is important, and how it can change their prognosis, as well as what it means in their personal context. Any barriers to self-management should be identified by the Case Manager.

When discussing self-management Case Managers have to respect patient preferences and cultural beliefs. They must also understand ethical implications in the case of patients who do not wish to engage in (or continue) self-management activities (see points 1 and 2).

Relevance to Multimorbidity

Multimorbidity patients have complex care needs, constantly changing severity of diseases, a higher need for self-management, and a greater risk of polypharmacy and outcomes related to polypharmacy such as adverse drug reactions, drug-drug interactions etc. Compared to those with one chronic disease, multimorbidity patients more often have problems related to self-care, and have more cognitive problems (5). Many conditions that are common in multimorbidity often need to be managed outside the clinical setting, such as non-pharmaceutical interventions (e.g., lifestyle changes, diet, and exercise).

Training/Curriculum

- Training in active listening and other communication techniques (see point 7).
- Theory workshops on behavior change.
- Motivational interviewing training.
- Workshops aimed to increase Case Manager's skill to support the educational process of patients so that they can be more self-managed.
- Workshops and role-playing with real life cases for Case Managers to practice facilitating self-management techniques.
- Specific training in technologies needed for self-management (e.g., glucose management, telemedicine technology) and supportive aids for patients (e.g., wheelchairs, walkers, medical beds etc).
- Progressive inquiry techniques for Case Managers to learn where to find supportive services for patient's wishes to engage in self-management behaviors (e.g., smoking cessation groups, weight loss support groups etc).

- Workshops to learn how to assess health literacy and motivation/willingness to change (e.g., general or specific tools /instruments to assess health literacy depending on country and setting).
- Training in basic pharmacological knowledge, including polypharmacy, adverse drug reactions, drug interactions, and adherence to prescribed medication.)

9. Social and community framework

Necessary Knowledge, Skills and Competencies

Case Managers should have knowledge of social and community frameworks and be able to assess the availability of such resources, including social support and (if relevant) available potential caregivers. Case Managers should be able to create a network of necessary community and care resources for the patient, for example, transport services, home-help services, patient support groups etc (depending on type and severity of disease/symptoms/disability), and be able to connect patients to these services and maximize availability.

In assessing the social network of the patient, Case Managers should be skilled in assessing the scope and quality of the network, including identifying potential caregivers and evaluating whether they are suitable and capable of providing the necessary level of care. They should also be able to identify any suitable, available community-based resources that will help their care and treatment, and connect the patient to these services. This is an ongoing skill that should be continually used, from the initial assessment of the patient and monitored continuously, to identify any changes in needs or resources over time (for example, searching for new services if a patient's level of dependency increases, or identifying new caregivers if one is unable to cope or the situation changes, see Figure 1).

Relevance to Multimorbidity

Compared to persons with one chronic disease, multimorbidity patients more often have problems related to mobility and self-care, and are more likely to have functional dependency and cognitive dysfunction (5). Therefore, care for multimorbidity patients does not involve only clinical treatment, but also involves a large number of healthcare providers and resources, and may often require a caregiver to assist with daily functional or instrumental activities.

Training/Curriculum

- Progressive enquiry technique workshops, using real-life case examples. Trainees would be given a hypothetical patient case and encouraged to use available resources to search for appropriate information and resources for the patient.
- Workshops and techniques for caregiver assessment (according to the regional and organization standards, for an example, see Figure 5).
- Group workshops with real caregivers, to practice assessment and evaluation.

Figure 5. An example of Caregiver training from the Valencia School for Health Training, Regional Ministry of Health Valencia, Spain. JL Zabala Rementeria

Community Nurse Case Managers hold workshops for caregivers (8 sessions of approximately 2 hours each). In 2015, 45 workshops were held and 394 caregivers participated. At the end of each workshop, the Case Managers themselves distributed the contact details of all participants so that they could contact each other autonomously. The Case Managers encourage caregivers to form mutual aid groups outside the health system. This process usually occurs in a natural way after each workshop, according to what caregivers communicate to the Case Managers. Unfortunately, the Case Managers do not currently have time to organize this process and coordinate these groups. They also encourage participants to join any available existing caregiver organizations.

10. Knowledge and ability to use technology

Necessary Knowledge, Skills and Competencies

Case Managers should have both the knowledge and skill to use available technology to assist with Case Management from two perspectives: 1) patient-operated technology, such as for recording/reporting symptoms or managing self-care and 2) technology used by the multidisciplinary care team to document and share information, and track changes.

Specific examples of technology depend on the country, organization, case and available resources, but could include technological devices (such as laptop computers, tablets, and smart phones) and software to support the development of care plans, production of reports, and information sharing between the multidisciplinary team. Case Managers should have the skill to use electronic clinical records and any relevant Case Management software that can be used to help them to facilitate comprehensive assessments, capture their interventions, document care processes, as well as produce reports that are able to track every type of information (for example, at-risk patients, expected and achieved outcomes

for specific interventions, type of contact with patients). Examples of patient-operated technology can include Telemedicine (telemonitoring) technology, or use of technology for self-monitoring (blood pressure or glucose monitors etc), as well as the increasing use of video-based healthcare (for example, “KRY” system in Sweden).

Case Managers should be able to properly use the minimum level of technology necessary for the task (e.g., essential skills such as documentation of patient information) but should also seek information about what technologies are available. For example, they should know and learn about new types of technology in order to be able to suggest their implementation or use promptly when new ones become available, to increase efficiency and effectiveness.

Relevance to Multimorbidity

Multimorbidity patients often have multiple care providers, and have comprehensive care plans that include detailed information from numerous sources, and thus electronic patient records and software for case management are essential tools. Due to high risk of polypharmacy and potential drug-drug interactions in multimorbidity patients, technology that can automatically assess risk or screen patients for risk are becoming increasingly used.

Training/Curriculum

- Workshops in patient-operated technology (such glucose monitoring, telemedicine technology, electronic reminders and supportive aids (such as medical beds, walkers, wheelchairs).
- On-site training with relevant technology for patient self-monitoring.
- Workshops in case management tools and software.
- Progressive enquiry technique for searching for new available technologies.

11. Case Management theory and concepts

Necessary Knowledge, Skills and Competencies

Case Managers should have knowledge of the basic concepts of case management theory. For example, what is complexity and multimorbidity, who is the target population for case management, what are case management models, and what are the roles and responsibilities of a Case Manager?

Training/Curriculum

- Reading material and lecture on case management theory, and existing worldwide examples of case management designs and services.
- Workshops with other Case Managers and senior/experienced Case Managers.

12. Add-on training: Basic Clinical Principles

Case Managers who do not have a medical qualification or clinical background, such as social workers, should undergo additional training to develop basic medical knowledge and clinical skills.

Necessary Knowledge, Skills and Competencies

Multimorbidity Case Managers should have a minimum level of knowledge of clinical and psychological concepts relating to multimorbidity. This includes basic clinical and epidemiological knowledge of the most common clinical conditions that affect multimorbidity patients at various ages, and how co-morbidities can impose additional functional limitations to patients. They should have basic knowledge on the clinical disorders and disease clusters that are commonly seen in multimorbidity (e.g., diabetes, coronary and cerebrovascular diseases, psychiatric disorders, neurological conditions etc), as well as common consequences of multimorbidity (such as functional decline, palliative care, severe mental disorders) and health conditions that do not fit into distinct organ-based disease categories and often have multifactorial causes, such as cognitive impairment, delirium, incontinence, malnutrition, falls, gait disorders, pressure ulcers, sleep disorders, sensory deficits, fatigue, and dizziness.

Relevance to Multimorbidity

Basic knowledge of clinical principles is a necessity for any Case Manager working with complex multimorbidity patients. As mentioned in the section on minimum qualifications, the ideal candidate for a multimorbidity Case Manager would be someone with a clinical qualification such as a nurse, but it is likely that other professions such as social workers might be used as Case Managers in certain countries or settings. As multimorbidity is a complex syndrome, which by definition includes a combination of different clinical disorders, a basic level of medical knowledge is essential to be able to plan and provide adequate care and treatment of these patients.

Training/Curriculum

- Possibly attend specific courses with an already established curriculum, for example modules with a nursing course.
- Lectures, reading material, and workshops on basic clinical principles, and specifically on multimorbidity.

Discussion

In this consensus meeting of European Experts, eleven skill components were identified as being essential for being a Case Manager for multimorbidity patients in Europe, with an extra add-on skill required for persons without a clinical healthcare qualification. Several future aims were also identified. First, an instrument should be developed to help organizations choose the profile of potential multimorbidity Case Managers. Second, research is needed to better define the role of multimorbidity Case Managers in different settings, in terms of the amount of responsibilities they have, their role within the multidisciplinary care team and to what extent they are empowered to initiate change and apply care plans for the patients. A further question remains as to whether persons who have undergone training and are employed as multimorbidity Case Managers should receive a formal qualification, and whether this should be recognized as a specific new role with a specific salary scale etc. Finally, an essential aim for future research is to assess the quality of both multimorbidity Case Management services and the training using a standard methodology.

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