Executive summary of Work Package 1:

Conceptual framework to review Integrated Chronic Care (ICC) models for multi-morbidity and select the most promising programmes

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Table of Contents

1. Introduction

SELFIE (Sustainable IntEgrated Chronic Care ModeLs for Multi-morbidity: Delivery, FInancing, and PerformancE) is a Horizon2020 funded EU project. The aim is to contribute to the improvement of person-centered care for persons with multi-morbidity by describing and evaluating recent initiatives towards person-centred integrated care in multi-morbidity. The SELFIE project aims to propose evidence-based, economically sustainable, integrated chronic care programmes that stimulate cooperation across health and social care and are supported by appropriate financing and payment schemes. SELFIE will contribute to the current state of knowledge on integrated care (ICC) for persons with multi-morbidity and provide applicable policy advice. More specifically, SELFIE aims to:

- Develop a taxonomy of promising, patient-centred, prevention-oriented, cost-effective, economically sustainable integrated care models for individuals with multi-morbidity
- Give evidence-based advice to match financing/payment schemes that provide adequate financial incentives to support the implementation of integrated care
- Generate empirical evidence about the impact of promising integrated care models on a wide range of outcomes
- Develop a performance-monitoring tool based on Multi-Criteria Decision Analysis methods and new indicators particularly relevant for multi-morbidity
- Develop Implementation and transferability strategies tailored to different care setting in Europe (esp. Central- and Eastern Europe)

The eight partner countries and institutions in SELFIE are:

- **The Netherlands (Project coordinator)**
  Erasmus University Rotterdam, Institute of Health Policy and Management
- **Austria**
  Institute for Advanced Studies
- **Croatia**
  Agency for Quality and Accreditation in Health Care and Social Welfare
- **Germany**
  Berlin University of Technology, Department of Health Care Management
- **Hungary**
  Syreon Research Institute
- **Norway**
  University of Bergen, Department of Economics
- **Spain**
  Consorci Institut D'Investigacions Biomediques August Pi i Sunyer
- **United Kingdom**
  University of Manchester, Center of Health Economics

Below, the reader will find an executive summary of the first Work Package (WP). Two scientific publications that provide more details are underway, one on the conceptual framework of integrated care for multi-morbidity and one on the scoping review informing the development of this framework.

2. Methods for framework development

In SELFIE WP1, a conceptual framework of integrated care for multi-morbidity was developed that aims to guide:

- The selection of promising integrated care programmes for multi-morbidity (2 in each partner country)
- The systematic description of the selected programmes (WP2), including their funding and payment systems (WP3)
- The empirical evaluation of the programmes (WP4-WP5).

A scoping review of scientific and grey literature as well as discussions with experts in the field of health economics, medicine, public health, health sciences, health policy and systems, psychology, sociology, and anthropology were used to develop the framework by identifying, reviewing and structuring different concepts related to integrated care for people with multi-morbidity.

First, scientific literature was searched via eight electronic databases (PubMed, Scopus, Embase, PsycInfo, Cochrane, Web of Science, Sociological Abstracts, and Social Services Abstracts) to select articles related to 1) theories (e.g. concepts, frameworks, models), 2) integrated chronic care and related care forms (e.g. managed care), and 3) multi-morbidity (e.g. comorbidity). We included publications which met our operational definition of multi-morbidity and integrated care (see Box 1). Data from the selected studies was extracted by six reviewers working in pairs on: publication details, research methods, key features and elements of integrated care programmes, and type of integration.

Box 1: Operational definitions in SELFIE

Multi-morbidity in the context of SELFIE refers to multiple (i.e. at least two) chronic conditions, physical or mental, occurring in one person at the same time, where one is not just a known complication of the other.

Integrated care in the context of our project refers to structured efforts to provide coordinated, pro-active, person-centred, multidisciplinary care by two or more communicating and collaborating care providers that may work at the same organization or different organizations, either within the healthcare or across the health care, social care, or community care sector (including informal care).

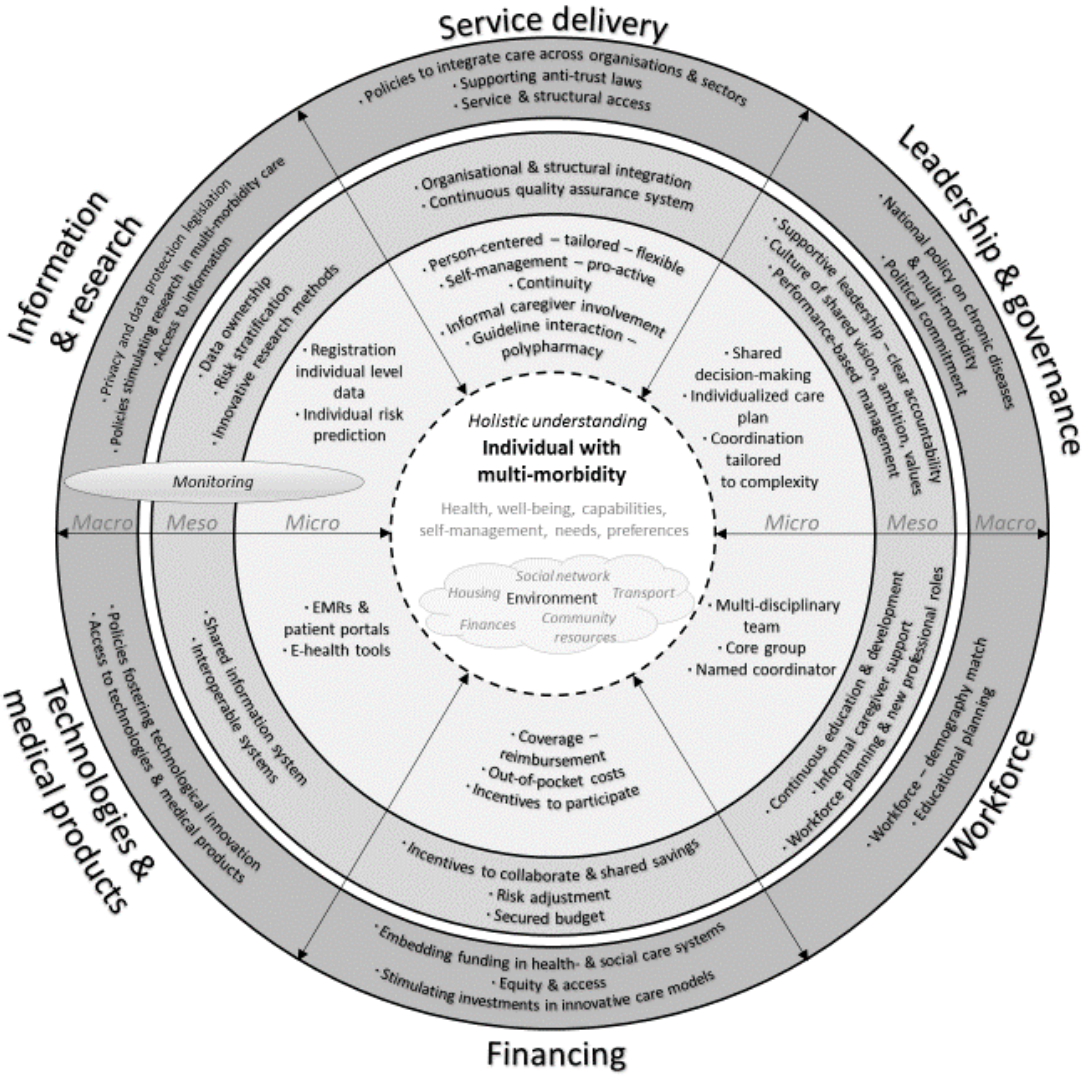
In addition to the search in scientific databases, a targeted search in the grey literature was conducted to identify key publications related to integrated chronic care in general (i.e. not targeting specifically people with multi-morbidity) in order to inform specific concepts of integrated care that were underrepresented in the results of the scoping review of scientific studies. Furthermore, specific multi-morbidity reports, and findings from relevant EU funded research projects (e.g. ICARE4EU, JA-Chrodis)

were included. While the scoping review was ongoing, multiple brainstorm sessions with the SELFIE researcher teams in Germany, the Netherlands, and Austria led to a draft conceptual framework structuring initial concepts identified in the scientific and grey literature. This draft framework was further refined in international and national stakeholder meetings with representatives of the five Ps, i.e. Patients, Partners (or informal caregivers), Professionals that provide care and/or are experts in this domain, Payers, and Policy makers. An international meeting was held with all SELFIE consortium-partners and the SELFIE international stakeholder advisory board. Representatives of the SELFIE consortium are from academic institutions in the eight SELFIE partner countries. The continuous development of the SELFIE framework was an iterative process that came forth from the scoping review and expert discussion meetings.

3. Conceptual Framework

Our scoping review highlights that moving from a care model that is centred around a disease to a person-centred integrated care model for multi-morbidity, requires a broad variety of interventions that change care organisation and delivery. These interventions may target many different stakeholders and processes at individual, organizational and system level. Taking this into account and aiming to develop a conceptual framework relevant and applicable to any health care system, we decided to adapt and structure the framework of integrated care for multi-morbidity according to the 6 World Health Organization (WHO) key components of health systems (WHO 2010). These include (1) Service delivery (2) Leadership and governance, (3) Workforce, (4) Financing, (5) Technologies and medical products (6) Information and research. The conceptual framework is presented in Figure 1.

Figure 1: The SELFIE Framework for Integrated Chronic Care for Multi-Morbidity



Each of the six components is described at the micro level, meso level and macro level. The micro level is where the individual with multi-morbidity interacts with care professionals and informal caregivers. The meso level relates to the organisational level and the institutional set up of providers. Lastly, the macro level includes legislations, governance, policies, and system-wide changes at the national level.

The central role in the SELFIE framework is given to the individual with multi-morbidity. A basis of person-centered integrated care for individuals with multi-morbidity is a holistic understanding of their individual health and well-being, capabilities, self-management abilities, needs, preferences, and their direct socio-economic environment. The health of an individual not only includes the whole spectrum of physical, mental, and social well-being, but also the ability to adapt and self-manage. The capacity

for resilience and the ability to cope and restore a balance are also part of this broader definition of health. Capabilities – the extent to which a person has the ability to achieve valuable functions – and self-management abilities play an important role in integrated care. Self-management abilities are especially relevant in multi-morbidity, as people deal simultaneously with multiple chronic conditions and providers that may work in different healthcare sectors. Additionally, an individual often needs to make choices and prioritize treatment options when it is too demanding to address multiple health problems simultaneously. Hence, professionals need to encourage people with multi-morbidity to clarify what their personal goals, preferences, and priorities are. Influencing factors, such as their personality, religion, culture, ethnicity, illness perceptions, and educational background, should also be understood and considered in personalized care planning.

A holistic understanding cannot be seen separately from the direct socio-economic environment of an individual. Environmental elements can also be found in the outer layers of the framework, but here they pertain to the direct relationship between the individual's situation and the process of integrated care. The social network is important to consider, such as the availability of family members, friends, and neighbors who can be involved as informal caregivers, as well as the burden of care that the informal caregiver may experience. Other key environmental factors to consider include: financial situation (e.g., is someone financially independent?), housing (e.g., does someone live alone?, are the bed- and bathroom on the ground floor?), the physical surroundings (e.g. is it safe?, are services in proximity?), the availability of community services (e.g., do self-help groups exist?), means of transport (e.g., is accessible public transport available?). Often a holistic understanding of an individual with multi-morbidity and his or her environment is aided by formal assessment. However, we have used the word understanding instead of assessment in the framework to signify that an individual's situation is dynamic, not static or momentary, and requires regular monitoring. An important element that relates to the six components and in particular to information and research, is monitoring of the triple aim of integrated care, i.e. improving population health, improving patient experience and reducing cost (increase). Monitoring can take place at the heart of the framework, and the micro, meso, and macro levels and can function as a means of providing feedback and stimulating constant improvement.

For each of the six WHO components, the conceptual framework further describes the key features that contribute to the success of a person-centred integrated care approach. It is important to note that the framework does not constitute a set of evidence-based guidelines on how to design the ideal integrated programmes for multi-morbidity, nor is it a recipe for reform. The framework can be used to create systematic descriptions of integrated care programmes for multi-morbidity *(micro-meso)* and

their respective target groups (*the heart*) within their respective contexts (*meso-macro*). Such structured descriptions can aid comparison across programmes within and between countries by making variations at all levels and components explicit. The framework can also provide input for designing evaluations of integrated care programmes for multi-morbidity and be used as a starting point for the development and optimization of integrated care for multi-morbidity. The framework is applied in the SELFIE project, and hopefully by others; as the experience accumulates amendments and additions are highly likely.

4. Methods for programme selection

A second goal in WP1 was to identify and select promising integrated care programmes for multi-morbidity on the basis of a pre-determined set of criteria. In order to identify promising integrated care programmes for multi-morbidity, findings from the scoping review were used, as well as findings from previous and current research projects. In addition, each partner country developed a national search strategy to identify integrated care programmes for multi-morbidity. This strategy included the consultation of national experts and networks.

Based on the literature reviewed, experiences from previous projects on integrated care in multi-morbidity and pragmatic considerations a set of criteria was developed that aided the selection of most promising programmes in the eight partner countries.

5. Selection of promising integrated care programmes for multi-morbidity

First, it was necessary to define which types of programmes were eligible for inclusion in the SELFIE project. The primary criteria focused on the care process itself; requiring that the programme addresses multi-morbidity and meets the operational definition of integrated care. All partner countries managed to identify a number of potentially promising programmes that met these primary criteria. Other criteria pertained to feasibility; for example, data availability and an ongoing status of the programme, as the aim of the SELFIE project is to evaluate the selected programmes. We also focussed on the implementation process and the transferability of the selected programmes. Moreover, we aimed to have a certain extent of variation of programmes across countries. Our aim was to include programmes with diverse aims, targets groups or (medical) professions and sectors involved. Thus programmes selected differ with respect to the inclusion of e.g. low socio economic group vs. high socio economic group, population based programmes vs indication based programmes.

The criteria for selecting two programmes per country are described below (Table 1 and Table 2).

Table 1 Essential and additional criteria

Essential
Multi-morbidity (broad definition incl. vulnerable groups)
Multidisciplinary integrated care
Innovative in country's context (e.g. intersectoral integration, population health management)
Outcome data available or collectable for each of the triple aims of population health, care experience and costs
Ongoing for at least the next 2 years
Additional
Does the patient have an active role?
Is the programme goal-oriented?
Does the programme ensure continuity of care?
Are informal caregivers actively involved?
Was the programme a bottom-up initiative?
Can the programme be scaled-up and is it transferable?
Variability across selected programmes

Using the methods described above, two programmes were selected per partner country. The preliminary list of programmes is given below (Table 2).

Table 2 Preliminary selection of programmes

AT	Health Network Tennengau (Gesundheitsnetzwerk Tennengau) Sociomedical Centre Liebenau (Sozialmedizinisches Zentrum Liebenau)
HR	GeroS System Palliative Care System
DE	Casaplus Gesundes Kinzigtal
HU	Onconetwork Palliative Care Consulting Service (Mobile) Team
NO	Learning network Medically Assisted Rehabilitation (MAR) Bergen
ES	Badalona Serveis Assistencials (BSA) Barcelona Esquerre (AISBE)
NL	Better together in Amsterdam North (BSiN) Proactive Primary Care Approach for Frail Elderly (U-PROFIT) Care Chain Frail Elderly (previously called KOMPLEET)*
UK	South Somerset Symphony Programme Salford – Salford Integrated Care Programme (SICP)/ Salford Together

* Due to additional internal funding, three projects are included in The Netherlands.

6. Short descriptions of the 17 selected programmes

Austria

- Health Network Tennengau (Gesundheitsnetzwerk Tennengau)

The Health Network Tennengau is a population-based integrated care programme with multiple different sub-programmes and aims at fostering cooperation between inpatient and outpatient healthcare as well as social services. Two sub-programmes with high relevance for persons with multimorbidity are (1) the case and care management programme and (2) the counselling service for senior citizens. The case and care management programme helps multi-morbid persons and their relatives organise post-discharge care and is aimed at reducing re-admission rates and length of stay. The free-of-charge counselling service for senior citizens is aimed at giving people confidential and comprehensive advice on questions regarding care, organisational procedures, prevention etc. Counselling services are offered via telephone as well as in the form of home visits. Participating providers include hospitals (incl. a hospital specialised in chronic care), nursing homes, pharmacies, mobile care services and physician practices. Professions involved in the programme include physicians (GPs, specialists), nurses, case managers, pharmacists and social consultants. A key feature of the network is that it provides its services in a rural area, which makes coordination of care particularly challenging.

- Sociomedical Centre Liebenau Sozialmedizinisches Zentrum Liebenau)

The Sociomedical Centre Liebenau in Graz, Styria, was founded in 1984 and provides a wide variety of integrated services in the fields of mental and physical health care as well as social care. Liebenau is a comparatively deprived district. The target group of the Sociomedical Centre is not restricted in terms of age or specific morbidities, but comprises the whole population of the area around the centre. Participating providers include physician group practices, a family counselling centre and two community centres. Professions involved in the programme include GPs, practice nurses, a physiotherapist, social workers, a sociologist, therapists and legal experts. The Sociomedical Centre Liebenau aims at fostering cooperation between providers of health care and social care in the fields of psychotherapy, medical care, physiotherapy, social work, counselling and health promotion. Services that are of specific relevance to patients with multi-morbidity include diagnosis and treatment of chronic conditions (e.g. medication, psychotherapy etc.), various counselling services; support with administrative and legal issues; mobile psychosocial assistance; cooperation with mobile long term care services to support home care and physiotherapy. The care model is based on a holistic view of the patient and characterised by a cooperative approach to care and is highly innovative in the Austrian context.

Croatia

- GeroS System

GeroS (System for detection and evaluation of health needs and functional capacity of geriatric patients, inextricably linked to Croatian Central Health Information System-CEZIH) is based on a combined top-down and bottom-up coordinated approach. This programme operates an electronic information system for geriatric patients over 65 years. It is aimed at detection and evaluation of health needs and functional capacity of geriatric patients. The main aim is vertical, horizontal and intersectoral cooperation, collaboration and care provision, specifically integration of primary, secondary and tertiary health care, palliative and social care to improve quality of health and social care, with rationalization of costs. Examples are integration of health care through general practice, homes for the aged and disabled people, centres for geriatric care and rehabilitation of the elderly, assessment of nutritional status and prevention of hospitalizations, revision of drug list in regular time periods for each geriatric patient by primary care physician, , and continuous medical education of interdisciplinary gerontologist team. The programme contains a step by step implementation of different modules, currently mainly on primary care level.

- Palliative Care System

The Palliative Care System is an integrated care programme specifically designed for palliative care patients; it is based on the Strategic Plan for Palliative Care 2014–2016. It is estimated that a minimum of 20% of cancer patients and 5% of non-oncological patients need palliative care in the last year of their life. The goal is to organize palliative care on three levels: home care (provided by family medicine physicians, community nurses and home care); extended palliative care (provided by social services); and hospital care. A special centre, so called Coordination Centre for Palliative care, coordinates care between hospitals, ambulatory palliative care, specialized palliative care team, mobile palliative care team at primary care level and social care, providing vertical, horizontal and intersectoral cooperation and collaboration. Informal care givers and volunteers are included as well. Currently the Palliative Care System is not yet fully integrated in the national health care system; it is based on pilot projects in different parts of Croatia. Changes in the legal framework are awaited to fully implement the programme on the national level.

Germany

Gesundes Kinzigtal

The Gesundes Kinzigtal (GK) programme is a comprehensive population-based integrated care programme, run by the GK GmbH, which is a joint venture of a health sciences based management company and an interdisciplinary physician and psychotherapist network. It serves a general population (all patients insured by two insurance companies the Kinzigtal Valley), amounting to almost 30,000 patients. Specific care for persons with multi-morbidity is offered with respect to polypharmacy, prevention and self-management training. It involves over 100 providers and other facilities in the region, including GPs/ primary care practices, nursing homes, policlinics, general hospitals (outside the valley), patient organizations, social care organizations, pharmacies, and a management company (OptiMedis AG). Key characteristics are self-management support, prevention, patient-centred care, shared-decision making, electronic networking system, and a shared savings approach. The Gesundes Kinzigtal programme is pursuing the Triple Aim: improving the health of the population in the Kinzigtal region, improving the individuals experience of care and at the same time reducing the per capita costs of care. The programme is one of the few programmes in Germany with a population based approach. It has cooperated in several research projects and gathers a wide variety of data to carry out evaluations.

Casaplus

The Casaplus programme is a geriatric case management programme, ongoing since 2007, which targets patients over 55 years who are at high risk of avoidable hospital admissions within the next 12 months. The mean age of the elderly participants is 77 years and the mean participation duration within the programme is 20 months. Casaplus involves GPs, informal carers, case manager, and nurses. Key elements of the programme are geriatric case management, risk assessment, self-management support, patient-centred care, increasing adherence to medication therapy, and quality assurance (regular documentation). Patients are assisted with several services (e.g. organisational procedures, questions regarding care, medication and health problems) by telephone. Each patient is comprehensively assessed and visited by a so called risk nurse, to determine whether the patient is at risk. . The overall aim of the programme is to reduce hospital admissions, support health promoting activities and to ensure a safe and adequate home environment. A participant survey showed that 97% of the patients are satisfied with the programme and the programme has reported savings.

Hungary

- Onconetwork

Onconetwork is a new programme that has started in 2015, which currently covers 1,500 patients and adds 240-300 new patients per month. The target groups are newly diagnosed patients with solid tumours subject to hospital admission. The enrolled population have a high rate of hypertension, cardiovascular diseases, or diabetes in general, while increased rate of other chronic comorbidities is observed in specific cancer types (e.g. musculoskeletal diseases including osteoporosis in breast cancer patients, or chronic liver disease and chronic alcoholism in rectal cancer patients). Involved providers include a university and general hospital, outpatient services, primary care, physiotherapy, dieticians, home care, and volunteers. New oncology patients in the region are identified by a custom IT solution, supporting personalized patient path management by patient path administrators. Care by different medical and non-medical (physiotherapy, nutrition, etc.) specialists is integrated and the patient is continuously followed by a named personal patient path manager. Important features include tailored IT software, patient path management, a personal consultant, sustainable operation without extra financing, and the development of a reliable oncology patient database

- Palliative Care Consulting Service (Mobile) Team

This program is a local project at the University of Pécs Clinical Center which is a central regional inpatient institution in the county of Baranya. The palliative care consulting service team was established to offer interdisciplinary help to clinicians and to coordinate the complex care of terminally ill patients. Moreover, it provides professional support for mainly cancer patients and their family members. The programme has started in 2013 and provided different health and social care services (pain relief, psychological support, nursing care, dietetics, social care etc.) to almost 1000 patients. Palliative services can be provided within the hospital or at home. Patient care is provided by a dedicated, trained and interdisciplinary team which is in close collaboration with other professionals from the hospital. The mobile team is available upon request for their services and for consultations with the treating physicians and/or specialists. The hospice specialized nurse or the coordinator of the mobile team should be at the respective hospital department within 24 hours. At the bedside of the patient the treating physician and members of the mobile team consult about the condition and the reasons for providing palliative care. The coordinator of the mobile team defines the further hospice/palliative somatic care and the psychological/social care after discussion with the treating physician, the patient and the family members.

Norway

- Learning Network

The Learning network for whole, coordinated and safe pathways in the municipalities targets new users of home nursing services or short-term stays in nursing homes (post-hospital-discharge) in 48 municipalities (organized in two networks). These are mostly frail older people with multi-morbidity. The programme involves all primary health-, social- and community care providers, e.g. GPs, home care nurses, health care workers, physiotherapists, occupational therapists. It has started in 2013 and is ongoing and under further development (hospitals) and extension (larger cities, remote areas). Key features include initial dialogue with patients, description of patients' individual objectives, the use of a patient-specific functioning scale (PSFS), follow-up dialogues after 4 weeks and a patient pathway checklist. Four conferences are arranged for the involved municipalities, targeted at planning, measurements, evaluation and consolidation. The programme is managed by the Norwegian Association of Local and Regional Authorities.

- Medically Assisted Rehabilitation (MAR) Bergen

The MAR programme targets about 1000 adults with opioid addiction (ICD-10), enrolled in a substitution/treatment programme. The patients suffer from multi-morbidity, several drug addictions, psychiatric and somatic comorbidity; and extensive social problems. This group of people is hard to reach with standard care, and thus hitherto received poor care. The programme involves doctors (GPs, specialists in drug addiction, psychiatry), psychologists, nurses, and social workers. Seven outpatient clinics provide coordinated primary and specialist health care, community social services and substitution therapy. It provides low-threshold integrated multidisciplinary care for a patient group with a high disease burden and has a lifetime perspective.

Spain

- Barcelona Esquerre (AISBE)

The AISBE programme has been a test bed for the deployment of ICT supported integrated care and seeks to improve health and social outcomes using a population approach defining shared pathways and outcomes across levels of care. It focuses on people in an urban healthcare sector in Barcelona covering 540.000 inhabitants (Barcelona-Esquerra). It includes 3 Hospitals and 19 Primary Care Centres. There are two main goals for the period 2016-2017. Firstly, the deployment of a program addressing adaptive case management of multi-morbid patients (3000 patients) with a focus on (a) highly specialized services directly delivered at home, (b) patients needing coordination among specialists and

across healthcare tiers, and (c) frail patient in the community (long-term care). Secondly the programme focuses on standardization and extensive deployment of several ICT-based integrated care services (> 10 services) currently deployed at the participating Hospital Clínic.

- Badalona Serveis Assistencials (BSA)

Badalona Serveis Assistencials (BSA) is an integrated private care organization with entirely public capital that provides health and social care services since 2000 to a total population of 419,797 inhabitants in Badalona, a very populated suburban area of Barcelona (Spain).

The Care Model for the Patients with Complex Chronic Conditions (MAMCC) consists of a model of integrated attention, in which professionals from different disciplines work together in order to deal with the needs of these patients. The model puts the person at the center combining medical attention with social resources and 24/7 emergency support.

One of the objectives of the Model is to promote the independent life of Chronic Patients, offering support to avoid institutionalisation and hospitalisation. Depending on the capacities and needs of the patients, medical attention can be provided at the primary care centers, at the Hospital Municipal de Badalona or at the patient's home through home care of through the program "Hospital at home". A specialized nurse (case manager) cares for patient needs and guarantees the continuity of care.

Another specific feature of BSA, that distinguishes it from other healthcare providers in Catalonia, is the integration of medical and social services. In 2004 Badalona's Council transferred social services to BSA and constituted a team that is in charge of the management of all the social resources addressed to patients that live at home and their caregivers (cleaning services, personal services, home catering, telemonitoring services, etc.). These resources can be prescribed not only by social care systems but also by health services, avoiding duplicities and providing a continuum of services.

The Netherlands

- Care Chain Frail Elderly (previously called KOMPLEET)

This program targets frail older persons with complex care needs and case complexity, living at home, and registered in one of three large care groups in the Netherlands that includes many GP practices. Person-centered integrated care is provided for by a core team that consists of a GP, a nurse practitioner specialized in elderly care (who functions as the care coordinator), an elderly care physician, and a community nurse. The three care groups have adopted a pro-active case finding approach by setting up strong regional networks across health- and social care.

A holistic assessment of the elderly is performed by the specialized nurse practitioner, who functions as care coordinator, identifying problems in the physical, psychological, cognitive, communication, and social domains. Depending on the needs identified, the specialized nurse practitioner involves other disciplines in the neighborhood, such as geriatric physical therapists, occupational therapists, social workers, elderly care physicians, geriatricians, dementia care trajectory supervisors, welfare consultants, and informal care support. Multidisciplinary team meetings are held, and an individual care plan is made together with the elderly and the informal caregiver(s); choices are made with and by the patient. This care plan an electronic medical record that is accessible by all disciplines involved.

Two major health insurance companies are involved. Different payment systems have been implemented, among which a bundled payment system for the frail elderly care. The program aims to improve functional ability, health status and wellbeing, and prevent or postpone nursing home admission.

- Proactive Primary Care Approach for Frail Elderly (U-PROFIT)

U-PROFIT is a nurse-led approach for frail elderly (≥60) living at home, that aims to transition primary care for frail elderly from reactive to proactive, improve quality of care and health, and to reduce costs. The proactive primary care approach consists of two components: a frailty screening (U-PRIM) and a nurse-led care program (U-CARE). The frailty screening is done with a software tool that uses routinely collected data in Electronic Medical Records in primary care centers to identify potentially frail elderly on the basis of polypharmacy, a frailty index score, and/or a consultation gap. Every three months a report is generated within the primary care practice. A specialized elderly care nurse and the general practitioner use this instrument as a first step to identify potentially frail elderly at risk for adverse events. Next a postal questionnaire is send to measure the level of frailty, complex care needs and wellbeing. In the next step, the elderly care nurse provide integrated and person-centered care, by taking the findings from a holistic assessment and the preferences of the frail elderly [and his/her informal caregiver] to create an individualized care plan. The care is provided in close collaboration (e.g.,

multidisciplinary team meetings are held) with the GP and other relevant disciplines such as the elderly care physician, pharmacists, and mental health services.

The specialized elderly care nurses are GP practice nurses and community nurses that have received special elderly care training and can use an evidence-based toolkit of 13 care pathways specially developed for this care program: falls and mobility, physical functioning, nutrition and malnutrition, mood and depression, loneliness, cognition, urinary incontinence, polypharmacy, vision impairment, hearing loss, and caregiver burden). The U-PROFIT approach was initially introduced in the form of an RCT (2010-2013), and continues to be used and implemented regionally. Discussions are being held with the predominant health insurance company to arrange a form of more structural and sustainable financing for the approach.

- Better Together in Amsterdam North (BSiN)

The BSiN program targets persons with complex problems in multiple life domains living in the northern region of Amsterdam. The program is provided for by an alliance of 11 providers in welfare (debt services case managers, social workers), social security (municipality return-to-work coordinators, home-care services), primary healthcare (GPs), secondary healthcare (hospitals), and youth- and mental health services. The aim of BSiN is to increase the self-sufficiency and well-being of persons, improve quality of care, and reduce costs in the region.

Providers from each of the organizations in the alliance can request that an individual be holistically assessed and 'triage' this person in a multidisciplinary team meeting to determine the level of care that is needed and which organization can best provide for this. The Self-Sufficiency Matrix is used to determine problem-areas and needs, in the life domains: finances, daily activities, housing, relationships at home, mental health, physical health, addiction, activities of daily living, the social network, social participation, and justice issues. Four groups are distinguished after triage: self-sufficient (no care needed), care coordination needed, client support needed, and case management needed. The organizations in the alliance provide staff that are trained as case managers and work as such on a part-time basis alongside their regular work. In the case management trajectory, care is integrated and coordinated, personalized action plans are made with the individual, and progress is routinely monitored. The person of interest is actively involved and there is a focus on his or her own abilities in solving problems. A typical case management trajectory takes 6 months to 1 year.

After a pilot phase in 2 neighborhoods, the approach is now being implemented in the entire region. Structural financing has been arranged via the predominant health insurer in the region and the municipality.

UK

- South Somerset Symphony Programme

The South Somerset Symphony Programme aims to develop fully integrated health care services along primary care, secondary care, community, mental health and social care services. It also aims to shift from high cost secondary care to preventive and public health based care for the target population. The site covers roughly 115,000 people, and will initially target at least 1500 people with multi-morbidity. The programme centres around three new 'care hubs' that bring together primary, secondary and other sorts of care in one place. The hubs will provide care co-ordination, senior medical input and a single personalised care plan that helps multi-morbid patients to look after themselves. Other GPs will increasingly provide 'enhanced primary care', with additions such as health coaching for less complex patients. The programme is also exploring new contractual arrangements, moving from current commissioning arrangements to capitated outcomes-based commissioning contracts. It aims to integrate funding streams for various elements of health and social care with a single pooled budget between the Hospital Trust and GP Federation.

- 'Salford – Salford Integrated Care Programme (SICP)/ Salford Together

Salford is one of ten local areas in Greater Manchester. The integrated care programme aims to improve care for those with long-term conditions by having GPs, community staff, mental health services and social workers working together in a much more joined up way. Initially the programme has targeted the elderly population (65+). The total Salford population is roughly 250,000, with 35,000 over 65 years old. 23% of these older people are classified as moderate to very high risk of secondary care admissions. The programme uses a stratified approach to care, dependant on patient's risk level. There are three main aspects to the programme 1) 'Neighbourhood Multidisciplinary Group (MDG)', case management for the highest risk 2) 'Centre of contact', a single-point-of-access health and social care telephone hub for patient navigation and support 3) 'Community assets', investing in voluntary groups and local facilities to increase the opportunities for older people in Salford to socialise and remain active. The programme also uses new ICT support, for example a shared electronic patient record (the Salford Integrated Record), as well as organisational and financing arrangements (an 'Alliance contract' and pooled health and care budget) to enable the integration process.'