

Quality and cost-effectiveness in long-term care and dependency prevention



THEMATIC REPORT: 5

Maximising Care Coordination

Ricardo Rodrigues, Joanna Marczak, Jose-Luis Fernandez, Stanislawa Golinowska, Agnieszka Sowa, Alis Sopadzhiyan, Georgia Casanova, Ismo Linnosmaa, Par Shon

November 2019

Authors

Ricardo Rodrigues, European Centre for Social Welfare Policy and Research, Austria

Joanna Marczak, London School of Economics and Political Science, UK

Jose-Luis Fernandez, London School of Economics and Political Science, UK

Stanislawa Golinowska, Centre for Social and Economic Research, Poland

Agnieszka Sowa, Centre for Social and Economic Research, Poland

Alis Sopadzhiyan, School of Public Health, France

Georgia Casanova, Italian National Institute of Health and Science on Aging, Italy

Ismo Linnosmaa, National Institute for Health and Welfare, Finland

Par Shon, Stockholm Gerontology Research Centre, Sweden

CONTENTS

Executive summary	1
Introduction	1
Main findings	1
Conclusions	1
Introduction	3
Integration as a policy objective	3
The context for the implementation of integration policies	4
The mechanisms for integration	5
Joint assessment and care planning	6
Information sharing	7
Does it work? Findings from literature review	8
Scope and methods of the review	8
1. Quality of life and outcomes	8
2. Use of health and social care services	9
3. Costs and cost-effectiveness	11
New developments in integration policy across Europe	12
Background and methods of comparative analysis	13
Findings	15
Conclusions	21
References	22
Appendices	24
Appendix 1: Key characteristics of reviews included	24
Appendix 2: Rapid literature review summary table	29
Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries	35

Executive summary

Introduction

Integration of health and social care systems has been a policy goal for governments worldwide struggling with demographic changes and the rising costs of health care. An ageing population and rapid rise in the number of people with chronic conditions, multi-morbidity, and complex care needs reinforces the growing need for services that bring together the health and social care sectors.

This report presents and discusses international and European literature on interventions and policy measures to improve coordination in care provision. A rapid review of literature was conducted to synthesize international evidence on (cost) effective measures in care coordination, we also reviewed country reports prepared by the Network to present a synthesis of recent developments in integrated care in LTC across European countries.

Main findings

Relatively few studies have so far evaluated the economic impact of integrated care models, however there is some emerging evidence that integrated care programmes have potential for service efficiencies and can have a positive effect on users' outcomes. Among the different types of integrated care models, Chronic Case Model (CCM) appears to have the greatest potential for improving effectiveness and cost-savings through reducing A&E visits, hospital emergency admissions and length of hospital, whereas Case Management (CM) tend not to show positive effects, especially if applied as a stand-alone measure. There is also some evidence that large pooled budgets may be more effective compared to small budgets, however, overall pooled budgets may also uncover unmet need. Notwithstanding the results, the reviews included in this report highlighted the limited timespan of most evaluations, which could bias the assessment of costs. Analyses of integrated care policies in European countries indicate that although at governmental level integration documents tend to

be produced involving health and social care sectors, at regional and local level integration between health and social care services often involves separate coordination institutions for each of the sectors. In countries with decentralised public services joint administration of, and budgets for social and health care tend to occur at regional levels, although it does not necessarily lead to well-coordinated provision of care services as the scope of the autonomy of local entities and financial means mediates their ability to create coordinated long-term care solutions. Overall, integration and coordination of health and social services in LTC appears to be stronger and more structured in European countries with a conservative-corporatist model. Although countries with a social democratic model locally abound in good practices (e.g. The Norrtälje model in Sweden) difficulties in coordination of services are commonly generated within the healthcare sector. In Southern European countries the situation is particularly complex and diverse due to the large scale of regionalisation, however multiple stakeholders networking model has become increasingly popular in recent years in the provision of formal home care. Coordination between health and social care in analysed Central and Eastern European countries tends to be underdeveloped, and if present it often originates from local government autonomous initiatives and non-governmental organisations. English social and health care systems are generally separate, although care integration has been a policy priority in recent years and numerous new integration measures have been established, including local pooled budgets between health and social care sector.

Conclusions

Although the lack of a single definition of integrated care, and the range of interventions, processes and models it encompasses, makes it challenging methodologically to compare evidence-base and to draw firm conclusions across them, the existing evidence suggests that an investment strategy

targeted at some conditions and models could be a cost-effective solution for integrated care, relative to a wide-range of interventions targeting general group of service users. Moreover, while the cost-savings often are accrued by the healthcare sector through reducing the use of healthcare resources, investment costs may be disproportionately borne by the social care sector which could reduce incentives for pursuing integrated care solutions in the absence of mechanisms that redistribute

financing between sectors and levels of government. As health and social care often fall under different levels of government (central vs. local), this redistribution will depend on the governance structure present in each country. Finally, long-term and larger integration programmes may be the best way to ensure that the investment in integrated care brings desired efficiencies to the system.

Introduction

Integration as a policy objective

Long-term care for dependent older people has gained significant relevance in the past decades as European societies were faced with increased demand for care due to demographic and societal developments. As a result, in a number of countries, long-term care has been recognised as a social risk and specific systems of long-term care financing and delivery have been implemented.

These long-term care systems have either drawn resources from existing and traditionally separated health and social care systems or been superimposed on existing health and social care systems. This meant creating a range of services and professional profiles to address long-term care needs alongside those already existing, and also gave rise to a growing number of stakeholders ranging from different provider organizations (e.g. for-profit and non-profit) to commissioning and regulating bodies.

As demand grew, so did concerns about the fiscal sustainability of long-term care systems, as well as about the quality of care delivered and achieved outcomes. Increased efficiency in care provision and better outcomes (particularly improved quality of life) and user satisfaction became the stated aims of a range of initiatives that within long-term care sought to integrate health and social care (Leutz, 1999). Integrated care was deemed particularly relevant to address the needs of older people with chronic conditions and those with multi-morbidities, who are faced with a persistent and wide range of needs, requiring contact with multiple providers and using different types of services (Leichsenring, 2004). This section provides a definition of integrated care, including the different integrated care models or types commonly defined in the literature, as well as the mechanisms used to bring about integrated care, both at the system and organizational level.

Integrated care can be defined as a range of processes in which single units or providers from

both the health and the social care systems act in a coordinated fashion to bring about improved continuity, quality of life, cost-effectiveness and user satisfaction with care (Leutz, 1999, Kodner & Spreeuwenberg, 2002, Leichsenring, 2004, Kodner, 2009, Allen et al., 2013). Integration can take place between separate units providing different types of care to users – *horizontal integration* – or include different levels of care provision (e.g. integration between primary, secondary and tertiary care) – *vertical integration*. Integration can take place at the level of service delivery or carrying out of care tasks (e.g. aligning processes for specific conditions) or/and in financing and governance (e.g. pooling financial resources from health and social care budgets). It is also possible to refer to a continuum of integrated care possibilities or types, which are usually grouped using the following typology reflecting growing integration (Leutz, 1999):

Linkage or networking: different professionals or providers are aware of each other and the working relationships between them are based on regular exchanges, while maintaining independence.

Coordination: this involves creating specific structures or positions at the interfaces between providers, services, units or systems, which focus on managing transitions, information and service delivery for specific groups of users.

Integration or full integration: new functional units are created that pool resources (e.g. financial and human resources) from different providers or systems. These new units (virtual or with shared ownership) have full control over resources and information.

Integrated care places the user (i.e. older people and their families), their outcomes and satisfaction at the centre of the process of care provision. In this sense, user empowerment and self-direction are key aspects of integrated care, as is maintaining people in their physical and social environment (Nies et al., 2013).

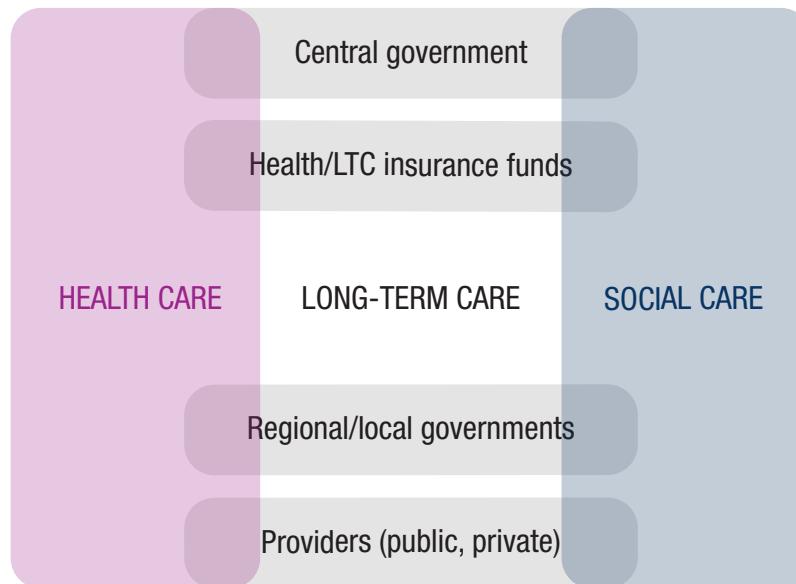
The context for the implementation of integration policies

Integrated care takes place against a background of demographic, cultural and institutional factors at the national level. These influence the integration of care along the following vertical and horizontal dividing lines (Nies et al., 2013), depicted also in Figure 1:

- The health and social or social care systems, together with housing and social assistance;
- Informal and formal care providers (including in some contexts migrant carers);

- Care at home and in the community and in institutional settings (e.g. nursing homes and acute care);
- Public and private (both for-profit and non-profit) providers of formal care;
- Central and regional or local levels of government, with the former including insurance funds (for health or/and long-term care) and the latter including federal regions and municipalities.

Figure 1. The multi-level governance of integrated care in the context of long-term care



Source: Adapted from Rodrigues & Nies (2013, p. 2005).

The traditional health and social care divide can impact integration of long-term care, which stands at the interface between the two, on a number of aspects (Rodrigues & Nies 2013). Each system may respond to different hierarchies and policy priorities, as well as having its own budget, regulations concerning professional or provider accreditation (including curricula for the former), quality management and even eligibility criteria to assess benefits. For example, typically, health care is free at

the point of usage in Europe, while long-term care involves significant cost-sharing from users or means and assets tests to access benefits, reflecting the social assistance rational that governs access to social services in some countries. Other more intangible factors pertaining to the health and social care divide include values and social standing of professionals (hierarchies) that could impact the joint working of staff.

Providers of different kinds may be subject to different regulations – for example, regarding the type of services that they may offer or workforce requirements. In Sweden, for example, some home help tasks supported by tax exemptions may only be purchased from private providers, while in countries such as Germany, Austria and some Italian regions (e.g., Piedmont or Lombardy) all providers need to comply with the same accreditation guidelines or staffing levels. Besides this, for-profit and non-profit providers may have different ethos and respond to different incentives. While this in itself may not necessarily hamper integration, competition may have that potential as it could disincentivise cooperation and the sharing of information or users between providers (Leichsenring et al., 2015).

Integration may also have to contend with a fragmented governance structure in terms of central and regional or local bodies of government or stakeholders. This fragmentation may overlap with the health and social care division as it is often the case that the former is administrated at the central level (through a tax or insurance-based system), while the latter is devolved to regional or local authorities. Partially as a result of this fragmentation, there might be quite different service levels across geographic boundaries, as it is the case between municipalities in Nordic countries, between Autonomous Regions in Spain, or between regions in federal states such as Germany and Austria. As with the health and social care divide, this creates potential for cross-shunting of costs and responsibilities (Allen, Glasby and Rodrigues, 2013).

Another divide concerns the interface between formal and informal care, namely how the formal care system considers and supports informal carers. On a system level, this entails the design of support mechanisms in terms of needs assessment, cash benefits or services in kind, such as respite care or care leave regulations (Naiditch et al., 2013). At the micro-level, it concerns the way in which professional carers interact with or consider informal carers (families) in terms of needs assessment, care planning, delivery and monitoring of care. While (full)

integration might not be an issue at this interface, this is more about networking and coordination, in particular with a view to working in partnership and considering informal carers both as a resource and a beneficiary of care, without increasing the burden faced by carers. Recognizing the importance of this formal/informal care divide, in some European countries there has been a growing discussion about long-term care as a system that coordinates both sectors/providers (e.g. Netherlands, Italy and Spain).

Finally, another dividing line can be observed between settings, namely between community care or care in the community and residential care settings. Integration in this area would embrace, for instance, care provision in the community by professional staff employed by a nursing home or by home care staff in a residential care facility. On a broader scope this might also include primary care settings, community care services and hospitals, or medical doctors in nursing homes.

The mechanisms for integration

Policies and strategies employed to achieve integration may take different forms. Below we describe the main mechanisms towards integrated care, in four interdependent domains: financial integration, joint planning and assessment, and data sharing which often underpins different forms of integration.

Financial integration: Integrated commissioning/contracting/funding models

Financial integration is at the heart of some models of care currently underway in Europe. The impetus behind financial integration is for health and social care organisations to work more closely together to improve health and care for people with long-term care needs and to maximise value from available resources (Humphries & Wenzel, 2015). There are a range of tools, techniques, systems and processes that have been used to enable financial integration. Some of the types of financial integration include: pooled funds where each partner makes contributions to a common fund for spending on

agreed projects or services; integrated commissioning where health and social care services are commissioned jointly with an agreed set of aims. Joint commissioning is believed to be

particularly important for reducing duplication of efforts as well as providing better access to care for individuals with long-term conditions (see Table 1 for more details).

Table 1

TYPE OF FINANCIAL INTEGRATION	DEFINITION
1. Transfer Payments	Allow social care agencies to make service revenue or capital contributions to health bodies to support specific additional health services, and vice versa.
2. Cross charging	Mandatory daily penalties. Compensate for delayed discharges in acute care where social services are solely responsible and unable to provide continuation service.
3. Aligned budgets	Partners align resources, identifying own contributions but targeted to the same objectives. Joint monitoring of expenditures and performance. Management and accountability for health and social services funding streams remain separate.
4. Integrated commissioning	Joint posts and commissioning of services based on jointly agreed set of aims
5. Pooled funds	Each partner makes contributions to a common fund for spending on agreed projects or services
6. Integrated management/provision without pooled funds	One partner delegates duties to another to jointly manage service provision
7. Integrated management/provision with pooled funds	Partners pool resources, staff, and management structures. One partner acts as host to undertake the other's functions. Includes (but is not synonymous with) 'joint commissioning' across health and social care.
8. Structural integration	Health and social care responsibilities combined within a health or social care body under single management. Finances and resources integrated.

Source: (Weatherly et al., 2010).

Joint assessment and care planning

Single assessment processes in long-term care reduce the numbers of assessments that an individual undergoes, and they provide an essential point from which care can be planned and coordinated jointly by health and social care professionals. Joint care planning aims to ensure coherent and seamless service provision and follow up which, in return, should reduce duplication of organisational efforts and reduce time users spend to access different elements of care. Joint assessment and/or care planning may be a single focus of interventions, or they may constitute a part

of broader integration schemes such as case management.

Case management

Case management is an established tool in health and social care services integration¹ around the needs of individuals with long-term conditions. Although it has no single definition, it is overall described as a collaborative process of case finding, assessment, planning, facilitation, and care coordination to meet users' and their family's needs

¹ As well as in integrating services within the health system.

through communication and available resources to promote quality and cost-effective outcomes. The mechanism is user and demand driven to maximise the benefits derived from financial resources.

Case-finding is an essential first element in case management in long-term care to ensure that an intervention is cost-effective, for example, by targeting resources to individuals at high risk of an adverse event (e.g. of hospital admission). A combination of predictive models and clinical judgement is often used to identify people with long-term conditions at high risk, and to make a judgement as to whether the individual is likely to benefit from case management. Assessment of needs is the next step, and single assessment processes are used to assess both health and social care related needs. The care planning in case management should address individual's personal circumstances (including e.g. housing situation, availability of informal care) to create a plan that aims to match health and social care needs with service provision and to ensure that the goals of different services are aligned. Coordination of service delivery for individuals with long-term conditions is the essence of case management, involving a team of various professionals (multidisciplinary teams) and services, managed by the case manager (Ross et al., 2011).

Although case management is used in most European countries, because it covers a range of activities that can vary widely between programmes, it is often subject to different interpretations. The differences may concern objectives, funding and the organisational setting (Leichsenring et al., 2015). Because case management does not refer to a standard intervention, it makes it often challenging to make comparisons between different case management schemes or to draw generalised conclusions regarding its effectiveness in the long-term care sector (Ross et al., 2011).

Information sharing

Information and data sharing are important organisational or system 'enablers' of integration

(Goddard & Mason, 2017). For example, high-quality and effective case management and care coordination in long-term care is only possible if all care providers/multidisciplinary teams have easy access to up-to-date individuals' records and can update these records in a timely manner (Ross et al., 2011). Shared information and access to individuals' records helps different stakeholders to ensure that the various elements of care are aligned and not being missed or duplicated. Changes in individuals' circumstances can be communicated via different means, including exchanging information at meetings, or via electronic transfer, a data system can facilitate this by collecting information on all aspects of a user's care and health status. Shared access to electronic data can facilitate coordination by making information about service users legible, better organized, easily retrievable facilitating the transition of users across services or settings, and making the various demands that professionals face more manageable. Data sharing is also vital for robust and accurate evaluations of integrated schemes, as outcomes and costs need to be assessed across health and social care to establish across sector effects of such schemes, which in turn is important to ensure that the costs and benefits from joint interventions are shared appropriately between the two sectors. Defined, consistent communication protocols and formats are also used to improve communication between health and social care, and to facilitate more integrated working (Lloyd & Wait, 2006).

Although the importance of information sharing for successful care coordination in long-term care tends to be recognised (Goddard & Mason, 2017) and integration programmes have increasingly focused on better user data and information sharing, data sharing can be challenging due to several factors. These include legal and technical issues (e.g. different electronic systems used by agencies, lack of clear legal framework enabling data sharing), as well as cultural obstacles (professional differences, different goals, lack of trust) (RAND Europe & Ernst & Young LLP, 2012, Cameron et al., 2014).

Does it work? Findings from literature review

Scope and methods of the review

The policy relevance of integrated care solutions for older people has in turn stimulated a significant number of evaluations and empirical studies on the potential outcomes, as well as costs, of integrated care. Several reviews of these studies have been carried out in the past years, although their scope and nature (e.g. narrative reviews and meta-analysis) has varied. In fact, reviews of evidence have rarely provided an explicit definition of integrated care/care coordination and they often covered a wide range of interventions and care approaches of diverse complexity that are commonly incorporated under a broad umbrella such as, for example, case management (CM) or multidisciplinary teams (MDT)² (Martinez-Gonzalez et al., 2014, Nolte & Pitchforth, 2014, Goddard & Mason, 2017). Similarly, the outcomes assessed have also varied (e.g. delayed hospitalization, quality of life), as have the target groups of such interventions (e.g. older people or users with particular conditions). Despite this heterogeneity, these reviews provide a good starting point to ascertain what are the benefits of integrated care (if any), and whether integrated care may be cost-effective. This section summarises the international evidence regarding selected effects and (cost) effectiveness of integrated care gathered through a rapid review of literature (see Box 1). The effects include care quality and outcomes (1), followed by findings on use of services (hospital admissions, A&E (i.e. emergency) use, and impact of integrated interventions on length of hospital stay (2). In the last sub-section below, we consider existing evidence on costs and cost-effectiveness (3).

² Multidisciplinary teams involve professionals from various disciplines (e.g. social workers, nurses, mental health professionals etc.) who come together towards achieving a specific set of goals for the service user. The activities of the MDT are often brought together using a care plan which co-ordinates MDTs work. MDTs work in community and/or hospital settings (Ovretveit, 1993).

Box 1. Methodology for the rapid review

This rapid review included narrative, umbrella reviews of systematic reviews, systematic reviews and meta-analyses published in English and identified through the Cochrane Library of Systematic Reviews, google scholar, google and PubMed; academic and research reviews were included.

The searches were not restricted by age, publication date or country.

Reviews identified include interventions delivered across social and health care settings. International evidence in English was completed by evidence from selected European countries in their respective national languages based on both systematic reviews and individual small-scale case studies not included in international evidence.

The characteristics of reviews included here (e.g. regarding their scope and type of integrated care interventions analysed) are presented in Appendix 1 and summary of selected findings are presented in Appendix 2.

In the section below we reference reviews, meta-analyses and umbrella reviews which were examined for this rapid review (see Appendix 1), we do not reference original studies or primary reviews included in the examined umbrella reviews or meta-analyses as these were not reviewed by the authors of this report.

1. Quality of life and outcomes

A number of reviews suggest that joint interventions are linked to improved outcomes for users and carers. For example, 10 out of 11 studies on integrated schemes for palliative care, demonstrated positive outcomes including better symptom control and better quality of life (QoL), better communication between personnel, users and caregiver (Siouta et al., 2016). Other reviews

similarly reported improved QoL, wellbeing, user satisfaction and adherence to treatment; some studies showed reduced mortality and improved quality of care and users' experiences, although some results were mixed (Cameron et al., 2014, Martinez-Gonzalez et al., 2014, Nolte & Pitchforth, 2014, Mason et al., 2015, Damery et al., 2016). Evidence from literature review in French based on randomized controlled studies on CM for people with Alzheimer's disease showed mixed results: one out of three papers reported better QoL for people with Alzheimer's disease and no impact for informal carers, a second study reported an impact on informal carers' wellbeing, whereas two out of three studies reported no impact on either people with Alzheimer's disease and informal carers' levels of depression (Somme et al., 2009). An impact on professional practices was also observed, such as more frequent stick to official good practice guidelines (64% versus 33%, $p<0.0001$) in 1 out of 3 studies included.

Evidence from small scale studies from Germany and Poland in national languages reported a significant increase in users' positive experience of the system and better QoL. Regarding Germany, the evidence from an integrated care delivery model designed for adults (Age 20+) in the Kinzigtal region showed positive effects on older people's health status (although the model was not targeted to this specific age group). Results from Germany included lower risk of fracture in users with osteoporosis and lower mortality in the experimental region than in the control population, as well as positive developments in most quality indicators selected, including that of the prevalence of users with fractures among all insureds with osteoporosis, and better user experience of the system (Hildebrandt et al., 2015, Schubert et al., 2016). Evidence from CEE countries – often absent in international reviews published in English – goes in the same direction, namely, a Polish study on MDT-based interventions in Poland suggested better user's satisfaction (Orczyk, 2015) although without mentioning whether it concerned older people alone and/or their informal carers.

International evidence from systematic literature reviews noted that studies which included large pooled health and social care budgets³ were more likely to illustrate improved outcomes relative to small integrated budgets (Mason et al., 2015). Evidence also suggests that CM alone is not efficient and should be associated to a larger organizational, financial or institutional integration program (Somme et al., 2009). Conversely, there was little evidence that a single health and social services board responsible for delivery of both health and social care in Northern Ireland brought benefits and the success of integrated care varied across trusts (Robertson, 2011).

2. Use of health and social care services

(a) Avoiding (re)admission to acute or residential care

Reviews frequently highlight limited and mixed results, depending on the type of intervention and population studied (see also Goddard & Mason, 2017). For example, five studies of various integrated care programmes reported by Brattstrom's review (2018) illustrated reduced hospital admission rates in intervention groups, three studies showed an insignificant reduction in hospitalization for intervention groups, while two studies reported no effect. Results for readmission were mixed in the systematic review: one study showed lower re-admission rates over 30 days for four conditions (diabetes, heart failure, COPD, hypertension), however readmission for diabetes were higher over 5-year period. One study in the review reported no effect of integrated care on readmissions over 30 to 90 days period (Brattstrom, 2018). Eleven out of 21 reviews across five joint interventions⁴ included in an umbrella review by Demery et al. (2016) reported significantly reduced emergency hospital admissions (ranging from 15–50%). The most effective interventions were based on the chronic case model (CCM), an

³ E.g. merging budgets for Medicare and Medicaid in US, or pooling budgets from all major providers in Australia.

⁴ Case management (CM), multidisciplinary teams (MDT), chronic case model (CCM), complex interventions and self-management.

organisational framework for improving chronic disease management, where 4 out of 5 reviews illustrated statistically significant reductions in emergency admissions (Damery et al., 2016). Multiple component strategies and MDTs were also shown to be effective, while CM were largely ineffective (Damery et al., 2016). Evidence from CM for people with Alzheimer's disease showed no impact on hospital use, but better access to services without a significant change in their use (Somme et al., 2009). An evaluation of three different integration programmes in Germany, UK and the Netherlands similarly illustrated mixed results: interventions in Germany increased admissions; across England's integrated care pilots (ICPs), emergency hospital admissions increased, but planned admissions and outpatient appointments with specialists declined; bundled payments in the Netherlands decreased use of hospital-based specialist care (Busse & Stahl, 2014). In another review, out of six randomised control trials (RCT) of CM and MDT for people with two or more chronic conditions: two studies showed decreased admissions, three no change, one increased admissions. A meta-analysis of 10 RCTs on 'hospital at home' services for the general population found a non-significant increase in hospital admissions, although it showed a significant reduction in mortality at six months (Nolte & Pitchforth, 2014). There is some evidence from small scale UK-based studies that joint intermediate care rapid response teams in the community reduce the risk of admission to care home or hospital. Conversely, other studies in the review found no significant difference in outcomes between integrated and more traditional services. MDT experience from Poland reported an impact on hospital care use without specifying how it interacted with social care (Orczyk, 2015). Moreover, co-location between health and social care services did not appear to improve the likelihood of living in the community for longer (Cameron et al., 2014). Integrated health and social care service in Skævinge, Norway was reported by Robertson (2011) to lead to reduction of delayed hospital discharges and increase use of intermediate care, which overall has led to reduced

hospital admissions by 30 to 40%. In Norwegian helsehus⁵ re-admission rates were almost halved, after six months 25 % of patients were able to live independent lives, compared with only 10 % of those treated in a hospital (Robertson, 2011).

(b) A&E and ED use

The evidence on reduction of A&E attendances tends to be mixed and/or weak. For example, A&E use for patients with chronic disease based on 5 reviews in Damery et al. (2016) umbrella review showed either mixed findings or no association between the intervention and A&E visits. Four reviews for COPD and 1 for patients with heart failure illustrated significant reduction in A&E use (Damery et al., 2016). Four reviews in the Damery et al. (2016) showed that CM and self-management interventions were ineffective⁶; while effective interventions related to CCM, complex interventions, and MDT for heart failure where it contained condition-specific specialist expertise (Damery et al., 2016). In a meta-review, two out of three reviews reported that integrated care for CHF and COPD reduced ED visits (Martinez-Gonzalez et al., 2014). Nolte & Pitchforth (2014) found the assessment of the size of possible effects problematic and evidence lacking robustness: although six of eight studies reported a significant reduction in emergency room (ED) use, the studies lacked a controlled design (Nolte & Pitchforth, 2014).

(c) Length of hospital stay

There is some evidence that coordinated/joint interventions could reduce length of hospital stays (LoS), the reported effects tend to be however moderate. In a recent systematic review four out of five studies evaluating various types of integrated care reported a reduction in LoS in the intervention group, while one study showed no difference

⁵ 'Health house'- a form of intermediate care providing medical care, assessment and rehabilitation in a nursing home setting. Patients spend on average 18 days in the health house which employs more medical staff than usual for a nursing home.

⁶ Confirmed by Somme et al. (2009) review where one out of three reviews show no impact from CM on ED use.

between the intervention group and control group (Brattstrom, 2018). A meta-review of early supported discharge for stroke patients included in Nolte & Pitchforth (2014) reported a reduction of 8 days on average in LoS; although another meta-analysis did not demonstrate significant change in LoS with comprehensive discharge planning for CHF (Nolte & Pitchforth, 2014). Nine out of 16 reviews reviewed by Damery et al. (2016) illustrated positive findings; e.g. two CCM interventions were associated with a reduced mean LoS for COPD (of 2.51 and 3.78 days respectively), however, CM and self-management interventions did not illustrate evidence of effectiveness (Damery et al., 2016). Pooled results from an early supported discharge meta-analysis suggested a mean LoS reduction of 7.7 days for stroke patients, the reduction was 28 days for the most severely impaired, but only 4 days for moderately impaired individuals (Damery et al., 2016).

3. Costs and cost-effectiveness

(a) Costs

A review of UK small scale studies indicated that integrated services have similar costs as standard care. The review also noted that within integrated care initiatives costs can fall disproportionately on social care, particularly if such interventions focus on community services as a way to reduce the cost of acute care. The review suggested that joint intermediate care can be cost-saving if used as hospital discharge or hospital avoidance schemes; however it was pointed out that many individuals who received such care would have either gone home straight from hospital or never attended hospital, and that such services were additional rather than alternative to hospital care (Cameron et al., 2014). Although pooled budgets are likely to reduce duplication of efforts, few studies in the review identified costs savings from integrated financing (Weatherly et al., 2010). Integrated schemes (including pooled budgets) are thus likely to improve access to care and to reveal unmet needs, therefore increasing the total costs of such programmes (Mason et al., 2015). In a meta-review

only 3 out of 17 studies, reported cost-savings (Martinez-Gonzalez et al., 2014). Ten reviews included in Damery et al. (2016) umbrella review reported cost savings, 11 showed mixed findings and 4 reported no difference in costs between intervention and control groups. Most cost-saving interventions were based on CCM⁷ (Damery et al., 2016). The evaluation of a population-based approach in Germany which included various programmes to organize care across all health service sectors and indications in a targeted region in Germany and England's ICPs which took a range of approaches to care coordination also found cost savings (Busse & Stahl, 2014). CM based interventions also showed mixed results: the cost reductions or savings on acute hospital care were not compensated by the costs induced by the implementation of the model (Somme et al., 2009) whereas Orczyk's (2015) Polish study found that 'holistic care' provided by MDT by medical and non-medical personnel reduced the medical costs of care but the authors did not analyse the interventions' impact on social care costs or the costs of volunteer interventions. In a German study of integrated care experience in the Kinzigtal region, costs savings relative to the costs normally expected for the population were observed in each observation year for social health insurance schemes participating to the model (Hildebrandt et al., 2015). Overall, reviews included in this paper noted the importance of context and health care settings for costs, and the need for evaluations to be sufficiently long to demonstrate economic gain. For example, in a community based nursing programme for individuals with Parkinson's disease costs initially increased, but over two years costs were lower in the intervention group (Nolte & Pitchforth, 2014). Another review of evidence highlighted that costs may increase initially before processes are established and operate well (Weatherly et al., 2010).

⁷ Three reviews reported significantly reduced costs; 1 review reported cost savings of between 34% and 70% for CCM interventions however no further details were given on the nature of these savings.

(b) Cost-effectiveness

The evidence on cost-effectiveness is very limited, of poor quality and mixed results, and it is difficult to make comparisons across reviews and individual studies (Cameron et al., 2014, Nolte & Pitchforth, 2014). For example, Cameron et al. (2015) found no studies that met their inclusion criteria and reported evidence on cost-effectiveness. The majority of studies on cost-effectiveness in Nolte & Pitchforth (2014) review covered condition specific approaches⁸. One of the studies concluded that

⁸ Depression (4 reviews), health failure (1 review), COPD (2 reviews), diabetes (1 review).

disease management for COPD could be cost-effective (assuming a willingness to pay €30 000 per QALY) if incremental cost per client did not exceed €7680 over their lifetime. A trial on CM approaches targeting frequent hospital ED users found the intervention to be cost-effective as it led to improved clinical and social outcomes at a similar cost to usual care. Regarding non-condition specific interventions, one study reported on the cost-effectiveness of medication management as part of continuous care for patients in transition between ambulatory and hospital care (€13,000 per QALY) (Nolte & Pitchforth, 2014).

New developments in integration policy across Europe

Institutional arrangements of care for older and chronically ill (dependant) people within the analysed European countries is distinctly different. However, some convergent tendencies can be observed.

Differences result from general institutional organisation of the state; especially with regards to centralisation/decentralisation of social functions of the state. An important differentiating factor is the welfare state model (more public or public-private mix) and healthcare system model (more insurance model or based on state funding) which exists in a given country.

The aim of the work was to recognise and analyse the fundamental differences in institutional arrangements of care. The main question was to what extent the care provided is holistic, i.e. covering all its components: medical care, nursing and social security. We adopted an assumption that the highly integrated way of delivering care from the patient (client) perspective means more effective (efficient) care. Hence, the most important element is the patient's experience; at the local level and related to care provision. The effectiveness of care means that it is carried out efficiently, conveniently and to the satisfaction of the patient, without unduly burdening caregivers. Although the lack of care

integration at the governmental or regional level does not necessarily mean that it is not implemented at the caretaker (patient) level, we have assumed that an integrated approach at the central administrative level fosters greater integration at the bottom – local – level. An important research question was therefore to determine whether and at which levels of the territorial state authority and in what institutions the combination of health and caring functions takes place or whether their separate performance is maintained.

In addition, an important question concerned the character of the combination of both functions; whether it is a whether it is a full integration or, rather, coordination, carried out by a special coordinating entity. Combining health and social care elements at the most general level was also considered, where health and social care problems are recognised together, sometimes also with other social services, but in a broader sense and at the same time taking into account specialised contexts of their organisation, e.g. financing (financial institutions), informing and analysing (research institutions), staff education (educational institutions), evaluation and control, etc. We recognised this type of connection as “linkage”.

Background and methods of comparative analysis

The starting point for the comparative analysis of integration of health and social care was the typology used by Walter Leutz (1999) to analyse American and British practical solutions in this field. Although the author mainly analysed the organisation of direct delivery of health and social

services, the adopted scheme can be successfully used to analyse the administration of care by state institutions at various levels of government: central, regional and local. This typology was also used by Austrian experts for comparative analysis of the LTC utilised in three countries: Germany, Sweden and Austria (Leisering et.al 2015).

Scheme 1: Adoption of modified Leutz typology to administrative decision-making levels



Integration is a solution of a zero-one character when institutions either merge or function independently, separately in the health and in the social sectors.

Coordination means the reconciliation and cooperation of the separate units and activities for the implementation of the planned and common goal, requires the identification of the coordinator. Usually there is a separate organisation coordinating various health and social care functions performed by separate entities both within and between the sectors. Coordination also includes the administrative-spatial dimension of the activity. In presenting a holistic approach to the health and social care of dependent people, the notion of integration is sometimes used as a synonym for the concept of coordination (eg Linnosmaa and Sääksvuori 2017). Considering the broader comparative context and historical experience of

CEE countries in the integration of activities by the central government, in institutional analyses we will use the coordination category as a more democratic and participatory way of combining health and social issues.

The relationship between the health and social care sectors, as mentioned in the introduction, can manifest itself in institutions that do not directly deal with this issue, but perform other public functions that aggregate various administrative problems, including care. These compounds have been referred to as linkages. Examples include organisations or strategic and planning initiatives regarding public finance, control and evaluation of the quality of public activities, extensive social research, debates, etc. Examples of such solutions are illustrated in Scheme 2.

Scheme 2: Examples of possible solutions

		Intregation/Separation Health and Social Care	Coordination Health and Social Care	Linkages
		National	Regional	Local
National	One strategy for health and social care, joint regulation, common ministry, common funding and budgeting for health and social care	Government Commission or Plenipotentiary for health and care, agencies for coordination care issues of regions	Ministry for Education, Ministry for Finance, Working groups of experts	
Regional	One regional regulation and administration for health and social care	Regional coordinator of health and social care departments	Regional conferences	
	Health Social care	Health Social care		
Local	One local regulation and administration for health and social care	Local coordinator of health and social care providers	Projects and programmes of local solutions in care and social integration/coordination	
	For health For social care	For health (e.g. GPs) Between local social care centres		
Provider	Incorporation of social care services into health facilities	Incorporation of health services into social care facilities	Coordination of health services between e.g. providers focused on treatment of long-term conditions	Associations of providers Voluntary cooperation of social and health care providers Networks of private providers
			Coordination of care between e.g. home and residential care	

At every administrative level, decisions concerning various governance functions are taken. These include: strategies, regulations, planning and programming, administration, funding and financing and finally, service provision.

Strategies include preparation of long-term concepts for the development of a given area of social services; either undertaken together; or separately for health and social matters. Such concepts usually arise in government institutions supported by

research institutes or specially appointed working groups brought to life for the preparation of such documents.

Regulations cover legal solutions, constituting the basis for the functioning of a given field: either separately in the field of health or social care or jointly. Responsibility for this area is borne by the policy makers who define the appropriate policies and methods for their implementation.

Planning and programming includes the preparation of short-term (sometimes medium-term) plans for the functioning of a given field within the existing legal framework and specific financial resources

The administration covers the activities of the authorities regarding the performance of designated tasks, their monitoring and evaluation. At every level, administrative activities may be different. At the governmental and regional levels, they can be addressed to lower administrative levels, and at the local level to the institutions responsible for the implementation of services. Administrative activities include coordination of providers, tasks and patient care across different settings. Organisations of professionals distribute necessary health information to care users and their carers across the system. Local management is responsible for tailoring resources and funding streams as well as creating community support for locally rooted services. An important administrative function of the LTC system is dependency assessment for people declaring need for care. This function is typically performed by a network of professional assessment institutions.

Funding and financing cover activities related to raising funds and selecting methods of their distribution between appropriate purposes, funds and entities providing particular services: health and social care separately or health and social care jointly.

The last group of analyses includes **institutions for the direct provision of health and care services**. These are stationary, semi-stationary and home care facilities.

Information necessary for analysis came mainly from national reports prepared by experts from the ten countries participating in the project CEQUA (Cost Effectiveness and Quality in Long-term Care) Network. The analysed countries represent different models of European social policy as defined by Gosta Espring-Andersen (1990) and further modified and adopted to health and care policy (Weimat 2009, Oesterle, Rothgang 2010, Golinowska, Pavlova, Rothgang 2018): the conservative model (Germany, Austria and France), the socio-democratic model (Sweden and Finland), models of southern countries (Italy and Spain) and the model of the CEE (the Czech Republic and Poland).

Country-based detailed information was collected following a framework dedicated to this study, taking into account three dimensions of the analysis: the governance decision level, sectors of integration (health, social) and the nature of the relationship (integration, coordination and additional links). In addition, information from the current WHO *Health in Transition* reports for the analysed countries regarding the health sector was used.

Findings

The picture of institutional health and social care arrangements in the analysed European countries is comprehensive, with differences in several dimensions at the same time. The main ones are:

- A different degree of institutionalisation of long-term care as an independent sector in the structure of public affairs, typically separate in the health sector and the social sector.
- Different level of decentralisation in the country; considerable or limited autonomy of the regional and local level, also with respect to LTC tasks.
- Different nature of governing the LTC sector; with a larger or smaller field for social participation.
- Different types of LTC entities from the point of view of ownership: public versus private and private non-profit versus private commercial.
- Different state responsibility for adequacy and quality of medical and care services for

dependent people (insufficient quality monitoring and control)

- Different sources and methods for financing long-term care services; either insurance or general tax based, sometimes with cost-sharing of some charges by dependents or their families.
- Different methods of supporting LTC beneficiaries, with the predominance of cash benefits for dependent persons and/or their guardians or with the majority of in-kind benefits in the form of unpaid access to care services for dependent people.

LTC sector in the analysed countries

Given the complexity and divergence of long-term care governance, some country-specifics can be underlined.

France is a country where the health and social care sectors are separate. The common category of medico-social service is used, merging medical and social services needed for care of dependent people.

The separation of the LTC sector as a relatively independent welfare sector, not being a part of the health or social sectors, occurs in Germany, and for several years (since 2014) also in Great Britain. In Germany, the care insurance system is established as the financial basis for the defined sector of long-term care services for the dependent population. In England, the Care Act adopted in 2014, resulted in the coordination of health and social care for dependent people at the local level, which is served by a separate special care fund and joint administration – the Health and Wellbeing Boards.

Austria also belongs to the group of countries with separate long-term care. The basis for LTC service development is the universal cash benefit (Pflegegeld), introduced in 2011 and amended in 2015. The benefit defined on the eligibility criteria, can be allocated by the dependent person, selecting the most suitable method of care provision. It means that users may spend it at their own discretion to purchase services and/or compensate informal

carers (Rodrigues, Bauer and Leichsenring 2017). Granting the benefit remains a responsibility of the Social Ministry and Consumer Protection Agency.

In countries with strong regionalisation, hereby represented by Italy and Spain, system performance is differentiated between regions. Some of the regional solutions may become role models for the whole country. Such an example is the Regione Emilia Romagna introduced in 2004 in Italy, where the general health and service standards, including LTC were defined. In Spain in several regions: Catalan, the Basque Country, Andalusia, Navarra and the Balearic Islands, strategic plans have been formulated for a defined policy in the field of health and care assistance.

In some Scandinavian countries – with a high level of decentralisation characterised by public decisions at the local level (together with a larger range of locally charged taxes in the state revenue structure), mainly in Sweden and Finland – LTC services are the responsibility of local authorities and only in the general framework are determined by legislative state acts. Swedish municipalities have a high degree of autonomy not only in setting local tax rates and creating budgets but also in defining local guidelines for different social areas. This includes LTC as well. Horizontal coordination of services towards dependent people has been generally an important policy feature of the Swedish institutional arrangement of social services. In Finland the government has more prerogatives in targeting care actions towards older dependent people. In 2012 a regulation was passed on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older Persons. It became the basis for local activities in adjusting support for specific services and the individual needs of older people.

In the countries of Central and Eastern Europe, LTC is not a separate sector either in general as a policy field or within the health or social care sectors. Medical and care services are provided without formal recognition within the health sector, and care services within the social sector. An exception may

be policy in the Czech Republic, where the Social Services Act (2006) was adopted and a care allowance (2007) for dependent persons was introduced. Despite this, the scope of support is limited, and funds for financing the allowance have been reduced (Sowa, Wija 2017 - country report).

Generally, the scope of formal care services, although growing, is significantly smaller than in Western European countries. An important difficulty in providing holistic care services (health and social) is a still not solid or independent local self-government with a long tradition of self-management⁹. At the same time, social decisions are made at the local level, and in health matters, more in the structure of a hierarchically organised health sector with a growing range of services provided by private entities. Changes in the forms of taking care of elderly dependent persons, consisting in decreasing the scope of family home care accompanied by the underdevelopment of formal care infrastructure, lead to the development of a private care services market (often in the grey economy) with very different prices and with limited quality control of services. The actions taken by the states tend towards modest and universal financial support for the elderly and their carers rather than the development of benefits in kind with the guarantee of basic standards of quality. The development of care service supply based on market-oriented mechanisms leads to serious inequalities in supply of formal care or diversified quality of care. Development of the care supply in the private market leads to significant inequalities in access to formal care and, at the same time, to an unequal quality of services, in some cases resulting in dramatically poor quality, below the required standards of care.

Also in the CEE countries, a need to support the development of home care has been noted. However, this is not home care secured by appropriate care and caring services from the community. This is mainly family, unpaid care.

⁹ Independent local governments were introduced only in the 1990s.

National institutional difficulties are an obstacle to the development of formal health and care services for elderly people provided at home. The health and social sector still does not cooperate effectively, and regulations motivating this are still lacking.

Access to coordinated health and social care

The right to care in dependency is treated in Europe as a social law and recorded in the European Pillar of Social Rights¹⁰. Its implementation requires consideration of both medical and social services, which in the institutional tradition of many countries are implemented in two different sectors.

Meanwhile, the perspective of a dependent person requires a holistic approach to care. Coordination of health and social care addressed to dependent people has become a priority objective of social policy declared in the policy documents of several of the analysed countries: in Sweden (Johansson and Schön 2017), in England (Marczak, Fernandez, Wittenberg 2017), in Finland (Linnosmaa and Sääksvuori 2017). Every reform in recent years lists this goal expresis verbis, justifying actions taken.

Separation of long-term care from other social functions of the state improves clarity with respect to state responsibilities for provision of care services for dependent people. In recent years, when in many European countries what is known as internal market reforms of public sectors have been carried out and business management methods (NPM) have been introduced into state administration, the perception of state responsibility has changed. The main task with respect to care has become supporting the incomes of people facing care needs so that they can get the necessary benefits as they choose. The development of institutions and care services has not become as much of a priority as has the appropriate level of purchasing power to be able to buy the necessary services on the market. The opportunity to choose – between stationary and home care, among other things – has become a propaganda slogan of reform. Reforms aimed at

¹⁰ European Parliament resolution of 19 January 2017 on a European Pillar of Social Rights (2016/2095(INI)).

providing income to people in need of care were carried out in Germany (Pflegeversicherung, 1995), in Sweden (choice of care and vouchers, 2011) and in Austria (Pflegegeld, 2011).

Granting a care allowance in cash for dependents requires identification of their needs. Also granting a place in nursing homes or home care services requires a dependency test. To this end, criteria and measures assessing dependency level have been defined. The relevant regulations establishing eligibility criteria are also the task of public authorities. The assessment of the need for care, e.g. in Austria, is made according to seven levels of demand, estimated at hours of care, five levels in Germany and three levels in the Czech Republic. The functions of dependency assessment are usually fulfilled by the government and/or regional administration. In Sweden, however, the assessment of care needs is performed autonomously by the local care manager. The dependency assessment and the granting of an appropriate benefit is an expensive function and is often burdened with conflicts.

An important element of the “market” reforms in social services, including the field of LTC, was the admission of profit-oriented private companies to the publicly supported purchasing of the dependent people. Following the slogan of freedom of choice, for-profit companies also offered care services. It soon turned out that the natural interest of a for-profit company does not necessarily go hand in hand with providing good quality of services (Schön 2016). This can be counteracted by using appropriate quality control tools. Consumer and patient organisations also undertake control functions. If they have adequate social and public support which enables them to operate on a wider scale, they are effective in their activities, have prestige and inspire confidence. However, this cannot replace the systemic control of public authorities.

Ensuring the quality of services provided in various forms, in various establishments in terms of ownership and organisation and by many differently

prepared carers is still the responsibility of the state. Quality control of provided services has become another goal of public activity in the LTC sector. Institutional arrangements to control the quality of provided LTC services in the analysed countries are generally the responsibility of regional authorities.

Discussion

Institutional arrangements of health and social care for dependant people respond to the objectives of contemporary social reforms as well as results from institutional arrangements and the societal culture of addressing problems.

On the one hand, there is a tendency to organise a quasi-market of care services based on cash benefits for dependent persons, and on the other, to support the development of infrastructure and the potential of care and care staff (health- and care-workforce), providing access to needed care services free of charge or at low prices.

Although a mix of different LTC policies is in place, in some countries there is a tendency to develop a quasi-market of care services based on cash benefits for dependent people. Separation of the LTC sector and income support for people in need of care has resulted in a significant reduction in the demand for hospital beds, as indicated by the data of the analysed countries (e.g. Johansson, Schön 2017).

However, there is no sufficient evidence that cash benefits are conducive to home care, as assumed, which is supposedly more effective and desirable by dependants. If they enable transferring care onto the shoulders of the family (often mainly women), even with its profitable support, this is only a partly satisfactory solution. However, if it is used for community care, in which integrated teams provide comprehensive care at home or in a nearby community, this brings much more satisfaction for each of the parties. It seems that new models of community and semi-stationary solutions, which also ensure social integration of pupils, are better perceived. In this new, more satisfying care model, the limited supply of care- and health-workforce is a

problem. Hence, in many countries the education of carers and nurses, the creation of good working conditions and better remuneration for caring constitute an openly exposed problem of a separate LTC sector with significant consequences for the increase of care costs.

Administering a system of LTC services, which are partly located in the health sector, partly in the social sector and, at the same time, at various levels of state responsibility, is becoming more and more complex. In countries with a decentralised governance structure, care services are organised at the local level by local territorial self-governments. Although the health sector is always structured more vertically and hierarchically than the social sector, which is organised more horizontally, the institution of a coordinator of the operation of medical and social facilities for dependent persons is introduced regardless of the level of public authority.

The separation of the LTC sector, with coordinated health and social care services, means that we are dealing with a coordinating institution for each function in the process of providing benefits. At the government level, strategic documents are created in which the issues of both sectors are combined. Laws and joint administration are duly expanded. In countries with a decentralised structure of public authority, the joint administration of social care and health care occurs at regional levels. Joint funds for LTC are also created. This does not always mean that the provision of care services for dependent people will be well coordinated. In this case, the scope of the autonomy of local entities and their possibilities and means in creating coordinated solutions is of great importance.

Table 1 indicates these institutional solutions in which coordination of social and health care towards dependent people in the ten analysed countries takes place. Neither of the analysed CEE countries, the Czech Republic and Poland, have a separate LTC sector, and the coordination of social

and health care towards dependent people, if takes place, is implemented within the framework of local self-government decisions and non-governmental organisations.

Coordination of health and social services in the care for dependent persons is stronger and more structured in European countries with a conservative-corporatist model in which the LTC sector has been identified, appropriate funds have been created and the criteria for entitlement to support have been clearly indicated.

Countries with a social democratic model, contrary to expectations, pursue a policy of more market-oriented provision of benefits, although based on clearly defined rights and income support. Coordination of social and health care, although locally abounding in good practices (e.g. The Norrtälje model in Sweden), is also not straightforward, and difficulties are generally generated in the medical sector (Linnosmaa and Sääksvuori 2017).

In Southern European countries, the situation is particularly complex and diverse due to the large scale of regionalisation, although the traditional model of care provision for dependent persons within the family is still dominant. An interesting trend in recent years is the development of a formal home care network in the form of the MS (multiple stakeholders networking) model. So far, these are rather pilot solutions, supported by EU funds, but can be treated as a kind of social innovation (Casanova, Lamura, Principi 2016), gaining more and more followers (Casanova 2018).

British solutions in LTC, despite the inclusion of UK social policy in the liberal model (Esping-Andersen 1990), both in health care and in the care of dependent persons do not fit into the liberal concept. The care sector has been separated, rights have been defined, an appropriate fund has been created and coordination actions have been taken at the local levels.

Table 1: Health and social care institutions coordinating services provision for dependant people

	Governmental	Regional	Local	Service provision
France	National Strategy 2018–2020 Medical-Social Act One ministry CNSA budget	ARS (Regional Health Agency)	CLIC (local coordination and information centres) PAERPA's tactical meetings	
Austria	Health and Social Assistance Act	Regional Long-Term Care Acts Regional funds		
Germany	LTC Act 1994 and further amendments	State (Länder) ministries for health and other social issues	Care Support Centres (Pflegestütz-punkte)	
Sweden	Social Services Act 2010 National Guidelines in Dementia Care 2010 National Board of Health and Welfare	The Norrtälje model ('one-stop-shop' organisation)	Local authorities Health and Social Care Board	Home care teams
Finland	The 2012 Act on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older Persons		Committees for steering home health care centres	Multiprofessional groups of care workers
England	Care Act 2014 Better Health Fund		Health and Wellbeing Boards	
Spain	The Dependency Act 2006 One Ministry (health, social policy and equality)	Regional Ministry of Equality and Inclusive Policies: strategic social and health care assistance plans in some regions	Municipality centres with care and nursing	
Italy	Department of Health and Social Care in the Health Ministry National long-term care fund decentralised to Regions	Regional Laws MS networks (e.g. Regional long-term care funds in Liguria)	Local social plans	Home care model of multiple stakeholders networking
Czech Republic	Social Services Act 2007			
Poland			Social and health departments in some local governments	

Sources: based on country experts' templates (tables)

Conclusions

The diversity of mechanisms for integration of health and social care is one of the main challenges faced when attempting to systematize the evidence base for the cost-effectiveness of these policies and initiatives. In addition, any evidence gathered is likely to be context-dependent, given the diversity of health and social care systems in Europe and the inherent particularities surrounding the financing, delivery and information management of each national system. The main focus of this report was to assess the evidence on the cost-effectiveness, or lack of it, of different forms or models of integrated care. The current state of evidence does not allow for a firm conclusion in either direction. The existing studies specifically addressing cost-effectiveness are still limited in number and geographical scope, with mixed findings and significant methodological limitations. A greater investment in sound evaluation studies seems therefore warranted across Europe and health conditions.

On costs alone, the evidence reviewed in this report seems to indicate that while cost-savings are often limited, integrated care services are also not more expensive than standard service delivery. Among the different types of models, Chronic Case Model (CCM) seems to show the greatest potential for cost-savings. However, the reviews included in this report highlighted the limited timespan of most evaluations, which could bias the assessment of costs. While most of the cost-savings were reaped by the healthcare sector (e.g. through reduced use of some services), investment costs were disproportionately borne by the social care sector. This could hamper incentives for pursuing integrated care solutions in the absence of mechanisms that redistribute financing between sectors and levels of government.

Quality of life, wellbeing and satisfaction with care are the areas where the evidence of a positive impact from integrated care policies and initiatives is the strongest. This seems to confirm the relevance of integrated care for improving users' reported experiences with care and to bring about person-

centred care. On the use of different health and social care services, including admission to care homes, there is also evidence of a positive impact of integrated care. Positive impact is however, limited to specific conditions, population groups, type of intervention and care services. CCM and similar chronic condition management models showed positive results in terms of re-admission to acute or residential care. On length of stay in acute care settings there is also some evidence that several types of integrated care could bring about reductions in the length of stay, albeit with great variability on the effect (i.e. the actual number of days saved). Among the several models covered by the reviews included in this report, case management seems to be the least effective, especially if applied as a stand-alone measure.

Against this backdrop of limited and sometimes conflicting evidence it is nonetheless possible to draw policy conclusions or recommendations. First of all, it is important to stress that one cannot conclude for the lack of cost-effectiveness of integrated care models. The evidence suggests however that policy-makers should follow a targeted investment strategy on some conditions and models of integrated care provision, instead of allocating funds to a wide range of different initiatives aiming to cover all groups of users. Users with multimorbidities and chronic conditions could benefit the most. The cost-savings offered by integrated care seem to fall disproportionately on some sectors or stakeholders, usually associated to the health care sector. This means that some form of integration of financing or redistributing mechanism would be necessary to align incentives. As health and social care often fall under different levels of government (central vs. local), this redistribution will depend on the governance structure present in each country. Finally, playing the long game seems like the best way to ensure that the investment in integrated care pays off, which highlights the need for consensus and stakeholder engagement to benefit from integrated care.

References

Allen K, Glasby J, Rodrigues R (2013). Joint working between health and social care. In: Leichsenring K, Nies H, Billings J (eds). *Long-Term Care in Europe*. London: Palgrave Macmillan.

Brattstrom F (2018). *Effects of integrated care for older people. A systematic review on patient related outcomes*. Sweden: Aging Research Center, Karolinska Institute.

Busse R, Stahl J (2014). Integrated care experiences and outcomes in Germany, the Netherlands, and England. *Health Aff (Millwood)*, 33, 1549–1558, 10.1377/hlthaff.2014.0419.

Cameron A, Lart R, Bostock L, Coomber C (2014). Factors that promote and hinder joint and integrated working between health and social care services: A review of research literature. *Health and Social Care in the Community*, 22, 225–233.

Damery S, Flanagan S, Combe, G (2016). Does integrated care reduce hospital activity for patients with chronic diseases? An umbrella review of systematic reviews. *BMJ Open*, 2016, 1–31, 10.1136/bmjopen-2016-011952.

Goddard M, Mason A (2017). Integrated care: a pill for all ills? *Int J Health Policy Manag*, 6, 1–3, 10.15171/ijhpm.2016.111.

Hildebrandt H, Pimperl A, Schulte T, Hermann C, Riedel H, Schubert I, Köster I, et al. (2015). Triple Aim – Evaluation in der Integrierten Versorgung Gesundes Kinzigtal – Gesundheitszustand, Versorgungserleben und Wirtschaftlichkeit. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 58, 383–392, 10.1007/s00103-015-2120-y.

Humphries R, Wenzel L (2015). *Options for Integrated Commissioning*. London: King's Fund.

Kodner D (2009). All together now: a conceptual exploration of integrated care. *Healthcare Quarterly*, 13 (special issue).

Kodner DL, Spreeuwenberg C (2002). Integrated care: meaning, logic, applications, and implications – a discussion paper. *International Journal of Integrated Care*, 2, e12–e12.

Leichsenring K (2004). Developing integrated health and social care services for older persons in Europe. *Int J Integr Care*, 4, e10.

Leichsenring K, Rodrigues R, Winkelmann J, Falk R (2015). *Integrated Care, Choice and Competition*. Vienna: European Centre for Social Welfare Policy and Research

Leutz WN (1999). Five laws for integrating medical and social services: lessons from the United States and the United Kingdom. *Milbank Q* 77(1), 77–110.

Lloyd J, Wait S (2006). *Integrated Care – A Guide for Policymakers*. London: Alliance for Health and the Future.

Martinez-Gonzalez NA, Berchtold P, Ullman K, Busato A, Egger M (2014). Integrated care programmes for adults with chronic conditions: a meta-review. *Int J Qual Health Care*, 26, 561–570, 10.1093/intqhc/mzu071.

Mason A, Goddard M, Weatherly H, Chalkley M (2015). Integrating funds for health and social care: An evidence review. *J Health Serv Res Policy*, 20, 177–188, 10.1177/1355819614566832.

Naiditch M, Triantafillou J, Di Santo P, Carreto P, Durrett EH (2013). User perspectives in long-term care and the role of informal carers. In: Leichsenring K, Nies H, Billings J (eds). *Long-Term Care in Europe*. London: Palgrave Macmillan.

Nies H, Leichsenring K, Mak S (2013). The Emerging Identity of Long-Term Care in Europe. In: Leichsenring K, Nies H, Billings J (eds). *Long-Term Care in Europe*. London: Palgrave Macmillan.

Nolte E, Pitchforth E (2014). *What is the evidence on the economic impacts of integrated care?* European Observatory on Health Systems and Policies.

Orczyk M (2015). Interdyscyplinarne zadania zespołu medycznego w opiece nad osobami starszymi. In: Szkoła Biznesu W, Górnicej D, Głowacka P (eds). *Fizjoterapia w Geriatrii*. Poland.

Ovretveit J (1993). *Coordinating community care: multidisciplinary teams and care management*, Buckingham, Open University Press.

Rand Europe & Ernst & Young LLP (2012). *National Evaluation of the Department of Health's Integrated Care Pilots*. Cambridge: RAND Europe; Ernst & Young LLP.

Robertson H (2011). *Integration of health and social care. A review of literature and models. Implications for Scotland*. Scotland: Royal College of Nursing.

Ross S, Curry N, Goodwin N (2011). *Case management. What it is and how it can best be implemented*. London: The King's Fund.

Schubert I, Siegel A, Köster I, Ihle P (2016). Evaluation der populationsbezogenen ‚Integrierten Versorgung Gesundes Kinzigtal‘ (IVGK). Ergebnisse zur Versorgungsqualität auf der Basis von Routinedaten. *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*, 117, 27–37, 10.1016/j.zefq.2016.06.003.

Siouta N, Van Beek K, Van Der Eerden ME, Preston N, Hasselaar JG, Hughes S, Garralda E et al. (2016). Integrated palliative care in Europe: a qualitative systematic literature review of empirically-tested models in cancer and chronic disease. *BMC Palliat Care*, 15, 56, 10.1186/s12904-016-0130-7.

Somme D, Carrier S, Trouve H, Gagnon D, Dupont O, Couturier Y, Saint-Jean O (2009). Niveau de preuve de la gestion de cas dans la maladie d'Alzheimer: revue de littérature. *Psychologie & NeuroPsychiatrie du vieillissement*, 7, 29–39, 10.1684/pnv.2009.0194.

Weatherly H, Mason A, Goddard M, Wright K (2010). *Financial Integration across Health and Social Care: Evidence Review*. Edinburgh: Scottish Government.

Appendices

Appendix 1: Key characteristics of reviews included

Review characteristics and data sources	Population included	Countries covered	Studies included	
Busse et al. 2014	Studies in peer-reviewed as well as in grey literature were included. The review aimed to examine newer evidence on integrated care (published after 2012)	Varied between countries: a population-based approach that organized care across all health service sectors and indications in a targeted region in Germany for people of all ages and conditions; and England's ICPs which take a range of approaches to care coordination for a variety of populations, and bundles payments in the Netherlands for patients with a single chronic condition.	Germany UK Netherlands	The study examined various integrated care approaches in Germany, England's ICPs, and bundles payments in the Netherlands. The evaluated integrated care approaches used both control groups and, if possible, measurements before and after the start of the intervention, often combined in a difference-in-differences approach.
Brattstrom F. 2018	Data sources: Medline (Ovid), Embase.com, Cochrane (Wiley), Web of Science Core Collection and Ageline (Ebsco). English-language literature published between January 1995 and March 2018 was included.	Interventions targeting patients aged 65 years or over were the focus of the review.	Canada Italy US the Netherlands France England.	12 studies were included in the review. Studies that included an intervention on an organizational or systemic level of integration were included. Interventions consisting of only multidisciplinary team, care coordination and care planning contents were excluded.
Cameron et al. 2016	Review of interventions which covered mostly: multi-agency teams; placements of individual staff across agency boundaries, co-locations of staff that were not formal teams, SAP, the provision of intermediate care, structurally integrated services, use of pooled budgets. Data sources: Studies published in peer-reviewed journals, most were published before 2007.	The majority of studies (22) evaluated services for older people, 6 examined mental health services and 3 looked at services for both older people and people with mental health problems.	UK only	46 studies were included

Review characteristics and data sources	Population included	Countries covered	Studies included
Damery et al. 2016			
An umbrella review conducted on integrated care interventions across health and/or social care settings Data sources: MEDLINE, Embase, ASSIA, PsycINFO, HMIC, CINAHL, Cochrane Library (HTA database, DARE, Cochrane Database of Systematic Reviews), EPPI-Centre Studies published in English since January 2000	Adults with one or more chronic conditions (e.g. dementia, arthritis, hypertension, diabetes, coronary heart disease, stroke, cancer, heart failure)	UK US Canada Netherlands Spain Japan Switzerland Norway Australia Greece Denmark Sweden Hong Kong Ireland	50 reviews included: narrative reviews (21), reviews of reviews (3) and meta-analyses (26) A total of 1,208 individual primary studies were included Eligible reviews could include primary studies of any experimental or quasi-experimental study design
Martinez-Gonzalez et al. 2014			
Meta-review of systematic reviews and meta-analyses identified in Medline (1946–March 2012), Embase (1980–March 2012), CINHAL (1981–March 2012) and the Cochrane Library of Systematic Reviews (2012) Studies published in English and one in German were included	Adult patients with chronic non-communicable diseases, except addiction and mental disorders.	Various geographical coverage-no detailed description of countries provided	27 reviews were included
Mason et al. 2015			
Searches were carried out in: Medline, ASSIA, HMIC, EconLit, Social Services Abstracts, Conference proceedings Citationindex, Zetoc and Index to Theses Published in or after 1999 in English language	Adults	8 countries, mostly evidence from: Australia Australia Canada England Sweden US	38 schemes were included: RCTs (6 schemes), quasi-experimental studies (12) Qualitative studies (17) Mixed methods studies (10) Fifteen schemes were evaluated using data from uncontrolled studies Analyses of administrative data were used in 10 schemes

Review characteristics and data sources	Population included	Countries covered	Studies included
<p>Nolte et al. 2014</p> <p>A rapid evidence review which focused on integrated care approaches, chronic care interventions and disease management programmes but excluded those that examined single interventions only, although it included CM approaches where these involved linking two or more different providers</p> <p>Data sources: PubMed, the National Library of Medicine's Medline and pre-Medline database, Embase and the Cochrane Library.</p> <p>Studies published from 2004–2012 were included</p>	<p>Varied greatly: for example adults with chronic conditions (e.g. heart failure, depression, COPD, diabetes, cancer patients), frequent ED users older adults</p>	<p>International review, but the review does not systematically identify countries covered</p>	<p>19 studies included: 11 systematic reviews 6 systematic reviews and meta-analyses 2 'other' reviews.</p>
<p>Siouta et al. 2016</p> <p>Data sources: Cochrane, PubMed, EMBASE, CINAHL, AMED, BNI, Web of Science, NHS Evidence</p> <p>Search dates included 1995 to 2013 in Europe</p> <p>Languages included: English, French, German, Dutch, Hungarian or Spanish</p> <p>A narrative synthesis was used</p>	<p>Adult patients with advanced cancer/chronic disease</p>	<p>UK Norway Netherlands France Spain Germany Italy</p>	<p>14 studies were included in the review</p>
<p>Robertson et al. 2011</p> <p>Data sources: CINHAL, Ovid, EMBASE and Cochrane Library</p> <p>The literature review was carried out between mid-November 2010 and early January 2011</p> <p>The search included peer-reviewed, academic publications and grey literature published in English or with English summary</p>	<p>Some studies explicitly mentioned older people, but age group was not always specified.</p>	<p>Denmark England Finland New Zealand Northern Ireland Norway Sweden</p>	<p>Several individual studies/evaluations reviewed from the 7 countries</p>

Review characteristics and data sources	Population included	Countries covered	Studies included
<p>Weatherly et al. 2010</p> <p>Data sources: ASSIA, ECONLIT, Conference Proceedings Citation Index, HMIC, MEDLINE, SOCIAL SERVICES ABSTRACTS, Zetoc, Index to Theses</p> <p>Experts in the field were contacted to identify further evidence which was not picked up by searches</p> <p>Papers in English from 1999 onwards were included</p>	<p>Some studies explicitly mentioned older people, but age group was not always specified</p>	<p>Australia Canada England Wales Italy Northern Ireland Sweden US</p>	<p>119 individual studies included (based on database searches and from hand-searches/expert contacts)</p>
<p>Somme et al. 2009</p> <p>Literature review on randomized controlled studies on case management for older people suffering from the Alzheimer's disease</p>	<p>The three studies concerned older people with Alzheimer's disease</p> <p>Each study concerned one of the following programmes:</p> <p>Case management in a disease management programme</p> <p>Collaborative service model with individualized case management performed by a nurse; strong link with family doctor and strong implication of family carers</p> <p>Medicare Alzheimer's Disease Demonstration and Evaluation</p>	<p>Not reported</p>	<p>9 articles reporting results from 3 randomized controlled studies on case management on patients with Alzheimer's disease</p>
<p>Marek Orczyk 2015</p> <p>Individual small-scale study</p>	<p>Age group: 70+</p> <p>Types of intervention: Coordination Multidisciplinary teams Data sharing Digital records Telecare</p>	<p>Poland</p>	

Review characteristics and data sources	Population included	Countries covered	Studies included
<p>Hildebrandt et al, 2015</p> <p>Individual small case study based on routine data analysis of insures of two social health insurance funds (AOK SHI and LKK BW) from 2004 to 2011</p> <p>Quasi experimental controlled study</p> <p>Indicator data of the Kinzigtal cohort is being compared to a representative sample of AOK and LKK insures in the Baden Württemberg region</p>	<p>Aged 20 and older</p> <p>AOK insurants: 21,411 of which 5,268 were enrolled into the integrated care scheme</p> <p>LKK insurants: 1,299 of which 338 enrolled in integrated care scheme</p>	<p>Germany</p>	<p>Intervention: an integrated care model based on an integrated care contract between management company "Gesundes Kinzigtal GmbH" and two statutory health insurers.</p> <p>Doctors and other care providers and patients (about 50% of the Kinzigtal region population) were able to join on a voluntary basis. Patients were still able to receive care from providers who did not join. There were no financial incentives for patients to participate.</p> <p>The model is indication independent and cross-sectoral, and aims to improve coordination between care providers, implementation of preventive services, and optimise care across providers so to improve patient satisfaction, reduce morbidity and reduce comparative cost of health care in this region.</p> <p>The managed care companies contract contains a "savings clause", i.e. its revenue is calculated as the difference between actual and norm costs based on the risk adjustment scheme implemented between SHI funds</p>
<p>Schubert et al, 2016</p> <p>Longitudinal study with non-randomised control group based on health insurers' claims data from 2004 to 2011</p> <p>Intervention group: persons in the Kinzigtal region insured by AOK</p> <p>Control group: persons in other regions of Baden-Württemberg insured with the AOK</p> <p>Trend and outcome analyses rely on Poisson and Cox regressions adjusted for age, sex, the Charlson Index, and multimorbidity</p> <p>The aim was to check whether the overuse/underuse of health care services in the area of intervention declined or increased</p>	<p>All patients aged 20 and older</p> <p>Mean age intervention: 50 Control: 53</p> <p>In 2004: Intervention: 24,454 Control: 512,086</p>	<p>Germany</p>	<p>Intervention details: same as previous.</p>

Appendix 2: Rapid literature review summary table

Type of intervention	Positive effects	No effects	Negative effects	Other reported	Cost-effectiveness
Nolte et al. (2014)	A significant reduction in mortality (meta review, adjusted HR 0.62; 95% CI 0.45, 0.87)		Non-significant increase in hospital admissions (1 meta-review including 5 RCTs (HZ 1.49; 95% CI 0.96, 2.33)		
Discharge planning/early supported discharge	Significant reduction in length of hospital stay (8 days on average) (1 meta-analysis) Significantly lower hospital readmission rates (relative risk (RR) 0.75; 95% CI 0.64, 0.88) (1 meta-analysis)	No significant change in length of hospital stay (1 meta-review) No significant change in readmissions (1 meta-analysis)		Limited and inconclusive evidence of improved QoL, pooled effect size not significant (1 meta-review)	Median saving of 20% (range 4–30%) (1 review). Pooled cost differences ranged from -\$359 compared to usual care in non-US based trials to -\$536 in US trials (1 meta-analysis)

Appendix 2: Rapid literature review summary table (continued)

Type of intervention	Positive effects	No effects	Negative effects	Other reported	Cost-effectiveness
Case management	A beneficial effect on delaying admission to nursing home (1 systematic review)			Mixed evidence on impact on number of admissions (1 literature review)	Targeting frequent hospital ED users was deemed cost-effective because the intervention led to improved clinical and social outcomes at a similar cost to usual care (1 trial in a review).
Collaborative care, with various definitions (if these were reported in the review)	Reduction in depression-free days but not always maintained over time. Non-significant impact on number of individuals moving into residential care or admissions to hospital (1 systematic review) Significant improvement in SCL score-not always sustained (1 systematic review) Reduction in ED visits (1 out of 3 RCTs; 6 before and after studies) Reduction in unscheduled readmissions for uncontrolled pain from 4.4% to 4.0% in one year (1 systematic review)		Significant increase in ED visits (1 RCT)	Inconclusive evidence on HRQoL (1 systematic review)	Increment in intervention-related costs ranged from \$519 to \$1,974, but lower cost per successfully treated patient (\$21,478–\$49,500 per QALY; highest cost per depression-free day \$24 (1 systematic review) £8,190–19,483 per QALY, cost per depression-free day, £0.50–£19.00 (1 systematic review) Significant reduction in ED costs: median reduction per patient: \$2,406 after intervention (from \$21,022–\$14,910) for all hospital services costs and median reduction in ED costs per patient: \$1,938 from \$4,124–2,195 (1 before and after study)

Appendix 2: Rapid literature review summary table (continued)

Type of intervention	Positive effects	Negative effects	Other reported	Cost-effectiveness
CCM/ disease management including CCM	<p>2 out of 6 controlled studies showed a significant reduction in ED use (1 review)</p> <p>Significant reductions in the number of hospital days or length of stay (7 studies in 1 systematic review)</p> <p>Significantly fewer readmissions (8 studies in the above review)</p> <p>Short-term improvement in HRQoL but evidence of no difference at 12 months follow-up (16 studies)</p> <p>Relative risk of reduction in readmission rates was 35% in favour of intervention.</p> <p>Relative risk of hospitalization varied from 0.64 to 1.50</p> <p>Relative risk of ED visits ranged from 0.28 to 2.28, both favouring the intervention (1 systematic review)</p>	<p>Limited evidence of reduction in ED visits (3 studies in one systematic review)</p>		<p>Comprehensive disease management (\$9,051–49,500 per QALY? not clear)</p> <p>The upper estimate of cost per QALY CCM for diabetes was \$34,238–69,027 but was higher for heart failure (\$1,747–156,655) (1 review)</p> <p>Incremental cost: \$34,248–69,027 per QALY (1 study)</p> <p>\$2,518–66,686 per QALY (1 study)</p> <p>\$17,747–156,655 per QALY (2 studies).</p> <p>Expenditure significantly reduced with intervention (6 studies)</p> <p>Limited evidence from studies of heart failure care of reduced total cost or hospital cost and intervention cost (3 studies)</p> <p>Based on changes in HRQoL and survival, programme cost-effective if incremental cost does not exceed €7,680 per patient over lifetime (6.7 years) if a societal WTP of €30,000 per QALY (1 study)</p>

Appendix 2: Rapid literature review summary table

Type of intervention	Positive effects	No effects	Negative effects	Other reported	Cost-effectiveness
Mason et al. 2015	<p>Integrated health and social care funds</p> <p>Health outcomes (5 schemes)</p> <p>Improvement in health, less depression and better HRQoL (1 RCT)</p> <p>Health improvement (1 controlled study)</p> <p>Length of stay significantly reduced (1RCT)</p> <p>Reduction in the number of acute hospital patients with delayed discharges (1 RCT)</p> <p>Elective admissions and outpatient visits significantly reduced (1 study)</p> <p>Reduction in emergency admissions and in mean length of hospital stay (1 study)</p> <p>Improved access to services and improved knowledge of health services (2 studies).</p>	<p>Health outcomes (13 schemes found no significant effect)</p> <p>No difference in health (7 RCT)</p> <p>Admission rate or risk of admission (1RCT)</p> <p>No significant difference in the use of emergency services (1 study)</p> <p>No difference in patient satisfaction (2 studies)</p>	<p>Health outcomes (1 scheme)</p> <p>Deterioration in physical functioning (1 study)</p> <p>Higher admission rates (1 RCT)</p> <p>Higher rates of emergency admission (1 RCT)</p> <p>Denied access to care for some users 'cream skimming'</p> <p>(1 study)</p>	<p>Mixed results on health outcomes (5 schemes)</p> <p>Mixed evidence on care quality (1 study)</p>	<p>No significant effect was found on secondary care costs or utilisation (11/34 schemes)</p> <p>Significantly lower secondary care use (3 schemes)</p> <p>Evidence was mixed or unclear (19 schemes)</p> <p>Cost neutral, but cost of nursing home care lower in the subgroup of frail older people who were living alone at the start of the trial (1 RCT)</p>

Appendix 2: Rapid literature review summary table (continued)

Type of intervention	Positive effects	No effects	Negative effects	Other reported	Cost-effectiveness
Martinez-Gonzalez et al. 2014					
Main schemes included:	Improved QoL.	QoL: COPD (0/5 reviews)	No review found any evidence of harm of integratedcare programmes (27 systematic reviews)	Few reviews found that costs of services were reduced: CHF (1/8 systematic reviews)	
Comprehensive services across the care continuum (96% of studies)	Chronic Heart Failure (CHF) (4/8 systematic reviews) Diabetes (4/5) Asthma (1/2)			Diabetes (1/4) COPD (0/3) Asthma (1/2)	
Standardized care through inter-professional teams (93%)					
Patient focus (81%), Performance management (63%)	Higher patient satisfaction: Diabetes (4/4 reviews) COPD (2/2) Asthma (1/2)	Higher patient satisfaction: CHF (0/2 reviews)			
Physical integration (56%)					
Information systems (48%)	Reduced mortality CHF (5/8 reviews)	Reduced mortality: COPD (0/3 reviews)			
	Reduced hospital admissions: CHF (4/6 reviews) Diabetes (2/3) COPD (2/5) Asthma (2/3)				
	Reduced readmissions: CHF (5/9 reviews) COPD (2/3)				

Appendix 2: Rapid literature review summary table (continued)

Type of intervention	Positive effects	No effects	Negative effects	Other reported	Cost-effectiveness
	Reduced length of hospital stay: CHF (4/8 reviews) Diabetes (1/1) COPD (4/4)				
	Reduced number of ED visits CHF (2/3 reviews) Diabetes (1/3) COPD (2/3) Asthma (1/2)				

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries

ENGLAND		Health	Integration	Coordination	Linkage	Separation
		Social care	Health	Social care	Health	Social care
GOVERNMENTAL						
Strategies			NHS England's Five Year Forward View and 'New Models of Care'			
Regulations				Care Act (2014)		
Administration	Department of Health and Social Care				National Health Service (NHS)	
Planning Programming						
Funding	Better Care fund				General taxation and National Insurance contributions	
REGIONAL						
Strategies			Sustainability and Transformation Plans (STP)			
Regulations						
Administration						
Planning Programming						
Funding						

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

ENGLAND		Integration	Coordination	Linkage	Separation	
LOCAL	Health	Social care	Health	Social care	Health	Social care
Strategies		Joint Health and Wellbeing Strategies				
Planning and programming		The Integration Pioneers				
		Vanguard sites				
		Better Care Fund plans				
Administration, Supervision, Monitoring	Devolution (e.g. greater Manchester Combined Authority (gMCA), Health and Wellbeing boards)	Joint Health and Wellbeing Boards		Clinical Commissioning Groups	Local Authorities: Adult Social Care and Public Health	
Funding		Better Care Fund pooled budget			Local taxation (e.g. Council Tax), user co-funding, central government grants	
PROVIDERS						
Funding		NHS can fund nursing care (e.g. by registered nurses) in nursing and care homes.				
		NHS can also fund continuing healthcare in institutions or at home				
Service provision		Multidisciplinary teams				
		Some integrated care schemes train social care staff (e.g. in nursing or care homes) in more specialist care				

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

AUSTRIA		Integration	Coordination	Joint health and social care coordination bodies and activities	Health	Linkage
GOVERNMENTAL	Strategies	Social care	Health	Social care	Social care	Social care
Regulations (legal framework)	The Health Care Quality Act (2007) Amendment to the Long-term Care Act (public subsidies for 24-hour care)	Personal Carers' Act (2007) Amendment to the Long-term Care Act (public subsidies for 24-hour care)	Dementia Strategy (Federal initiative but regional and local development and implementation)	Long-term care Fund Act	Federal Long-Term Care Act (1993) and amendments (e.g. in 2012)* Health and Nursing Care Act (1997) and amendments (e.g. in 2016)* Harmonization of social care professions and integration of nursing and social care skills into one professional profile in 2005*	Austrian health quality strategy
Administration	Federal Ministry of Labour, Social Affairs and Consumer Protection	Austrian Public Health Institute	Voluntary quality assurance certificate for residential care homes (NQZ) Quality assurance with selected beneficiaries of LTC allowance	Austrian Public Health Institute (GÖG) and Ministry of Health Health professionals registry including qualified nurses that are both in health and social care sector (administered by the Chamber of Labour and GÖG) The Austrian Health Portal – information	The Austrian Chamber of Commerce (registration of personal carers) Social Insurance	
Planning Programming	Structural Plan for Health	Framework of health plans for regions		Planning objectives for health including social care planning		
Funding				Tax-based funding of long-term care allowances (Federal level) Long-term Care Fund (to fund development of Tax-based funding of long-term care services in regions including integrated care)	Fund for Health Promotion Support for informal carers: Social insurance (health care) Care leave/part-time care leave Financial support for respite care	

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

AUSTRIA		Health	Integration	Coordination	Joint health and social care coordination bodies and activities	Health	Linkage
		Health	Social care	Social care		Health	Social care
REGIONAL							
Strategies		Promoting palliative care in residential care homes (only in selected regions)					
Regulations					Regional Long-Term Care Acts		
Administration, Supervision, Monitoring				Health and Social care departments (specific to regional regulations)			
Planning Programming						Needs and Development Plans for LTC presented to Federal Ministry on a regular basis	
Funding	Regional Health Fund				Case and care management as a part of implementation on regional and local level of the Act of the LTC Fund		Various contributions by different governance levels (municipalities, districts)
LOCAL							
Strategies				Healthy cities/ municipalities/ hospitals (selected examples)		Dementia-friendly communities	
Planning and programming						Alternative housing facilities (in selected municipalities/examples)	
Administration							
Funding							

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

PROVIDERS	AUSTRIA	Health	Integration	Social care	Health	Coordination	Social care	Health	Linkage	Health	Separation	Social care
Service provision	Home care services include home help and home nursing (and day care facilities)			Residential care Day care facilities					Medical Nursing Home Care: a service based on specified indications avoiding hospitalization			
Funding									Medical Nursing Home Care is paid by the health care insurance			

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

GERMANY		Integration		Coordination		Linkage		
	Health	Social care	Long-term care	Health	Social care	Long-term care	Health	Social care
GOVERNMENTAL								
Strategies								
Regulation/legal framework	Act to Strengthen Competition in SHI (2007)	Family Care Act (2008) Care Leave Act of (2008)	LTC Act (1994) LTC Development Act (2008)	Preventive Health Care Act (2015)				
Administration, Supervision, Monitoring	The Federal Ministry of Health	The Federal Ministry for Family and Civil Society (BAFZA) Federal Ministry of Arbeit & Soziales	The Federal Ministry of Health	Federal Alliance of Voluntary Welfare Organizations – Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege	A Federal Commissioner for the Concerns of Disabled People	*Federal Association of Doctors *Federal Associations of Sickness funds	Federal Joint Committee (quality, efficiency supervision) The Federal Centre for Health Education	Federal Assembly (Bundesrat) Federal Insurance Authority
Planning Programming								
Funding/financing	Statutory Health Insurance	General taxation Health Fund	Statutory LTC Insurance 1994					Federal Financial Supervisory Authority

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

SWEDEN	Integration			Coordination		Linkage
	Health	Social care	Health	Social care	Health and social care	
GOVERNMENTAL						
Strategies			National Strategy for Dementia (2018) Coordination as a strategy is embedded in current legislation. National guidelines (about 80 guidelines for different diseases)			Swedish Agency for Health Technology Assessment and Assessment of Social Services Health & Social Care Inspectorate National Health & Welfare Board
Regulations			Health & Medical Services Act (1982) Safe and Effective Discharge from Inpatient Care Act (2015)	Social Services Act (2001) Support and Service for People with Certain Functional Impairments Act (1993)		
Administration, Supervision, Monitoring					Ministry of Health & Social Affairs National Board of Health & Welfare Agency for Health & Care Services Analysis Health & Social Care Inspectorate (monitoring and supervision)	Pensioners' organisations (five relatively strong organisations)
Planning Programming					Collaboration with regional councils on planning and resource allocation for highly specialized regional (tertiary) health services and certain investments in high technology	
Funding					State grants for at county level for certain conditions, e.g. heart transplants	

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

SWEDEN		Integration		Coordination		Linkage	
		Health	Social care	Social care	Special body connecting health and social care	Health	Social care
REGIONAL	Strategies			The 21 County Councils are responsible for coordination of health care in collaboration with the municipalities in accordance to national legislation		Research and development units	
	Regulations			The county councils are responsible regional authorities	Health and Social Care Inspectorate Regional (county) administrations with health and care issue department	Regional pensioners council	
	Administration, Supervision, Monitoring				Resource allocation decisions by County Council		
	Planning Programming						
	Funding	One county council/municipality (Norrtälje) have pooled budgets		Regional taxes			

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

SWEDEN		Integration		Coordination		Linkage
		Health	Social care	Health	Social care	
LOCAL	Strategies			The 290 municipalities are responsible for coordination of social care in collaboration with the county councils in accordance to national legislation		
	Administration, Supervision, Monitoring			The municipalities are responsible local authorities	Health and Social Care Inspectorate	Local/municipal pensioners' councils
	Planning Programming				Local taxes (90%)	One county council/municipality (Norrtälje) have pooled budgets
	Funding					
PROVIDERS						
	Funding	One example, the Norrtälje model		Regional taxes, basic home health care is funded by local taxes	Based on local taxes	
	Service provision	The Norrtälje model: public or private provider according to a choice model				

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

FINLAND		Integration		Coordination		Linkage	
	Health	Social care	Health	Social care	Joint	Health	Social care
GOVERNMENTAL							
Strategies				Development programme for informal care support 2014–2020		Quality recommendations for LTC 2001, 2008, 2013 and 2017	
Regulations		Primary Health Care Act (1972)	Social Care Act 2014 Support for Informal Care Act (2005), amended in 2016	Act on Supporting the Functional Capacity of the Older Population and Social Health Services for Older Persons (2012)		Public Health Care Act (2012)	Ministry of Social Affairs and Health
Administration, Supervision, Monitoring, Needs assessment							
Planning Programming							
Funding/ financing		General taxation	General taxation				
REGIONAL							
Strategies							
Regulations							
Administration							
Planning Programming							
Funding							

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

FINLAND	Integration		Coordination		Linkage
	Health	Social care	Health	Social care	
LOCAL (311 MUNICIPALITIES)					
Strategies					
Regulations					
Administration			Primary health care centres		Municipal units organize residential care and home care
Planning Programming					Common care plans
Funding/ Financing	National Health Insurance	State subsidies, municipal taxation and user fees	State subsidies, municipal taxation and user fees	State subsidies, municipal taxation and user fees	State subsidies, municipal taxation and user fees
PROVIDERS					
Service provision			Primary health care centres	Community care Cooperatives and NGOs delivering home services Private providers in residential care and home care	
Organisations of providers				Multi-professional groups of home care workers	
Funding					

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

FRANCE	Integration/Separation		Coordination		Linkage
	Health	Social care	Health	Social care	
GOVERNMENTAL					
Strategies					National health strategy (2018–2022) aims to improve health and social care coordination Strategy for transforming the health care system (2018): accent on improving coordination between social (medico-social) care and health (hospital and primary) systems
Regulations			Modernizing the health care system Act (2016)	Adapting society to an ageing population Act (2015)	
Administration					National working group on 'convergence' of health and social care
Planning Programming					CNSA (National Solidarity Fund for Autonomy) common budget from different funding sources: social insurance, various taxes and other sources, financing benefits in cash and in kind for older people and people with disabilities
Funding	Social Health Insurance (SHI) Voluntary Health Insurance (VHI) General taxation Direct payments	General taxation – public subsidy Local taxes Private LTC insurance Direct payments			

CNSA – Caisse National de Solidarité pour l'Autonomie

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

FRANCE	Integration/Separation		Coordination		Linkage	
	Health	Social care	Health	Social care	Joint	Health
REGIONAL						
Strategies					CRSA (Regional Conferences for Health and Autonomy); a consultative body created by the HPTS law in 2009	
Regulations						
Administration, Supervision, Monitoring					ARS (Regional Health Agencies)	
Planning Programming					PRS (Regional health plans) actions and initiatives developed/written by the ARSs, including health and social (medico-social) sectors	
Funding					ARS/FIR (Regional intervention fund) or funded through transfers from the State budget, the SHI and the CNSA	

CRSA – Regional Conferences for Health and Autonomy that aim to formulate opinions on regional health policy

ARS (Agence Régionale de Santé) – Regional Health Agencies responsible for implementing national health and medico-social care policies at regional level

PRS (Project Régionaux de Santé) – Regional health plans developed by the ARS

FIR (Fonds d'Intervention Régional) – regional fund that supports actions that aim to improve the health and social care system

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

FRANCE	Integration/Separation		Coordination		Linkage		
	Health	Social care	Health	Social care	Joint	Health	Social care
LOCAL							
Strategies					Conférence des financeurs: Piloted by the Conseils Départementaux, these gather all institutional actors intervening and financing prevention actions MAIA's strategic meetings and MAIA's tactical meetings PAERPPA's strategic and tactical committees		
Administration, Supervision, Monitoring, Needs assessment					Conseil Départemental: responsible for social policies for older people at the local level Multidisciplinary teams within the Conseil Départemental as part of the APA scheme for dependant 60+, funded by local taxes and general taxation		
Planning Programming					Departmental plans and services for older people		
Funding					Local taxes		

APA (Allocation personnalisée d'autonomie) – allowance for people aged 60+ who are dependent, managed and financed locally by the Conseil Départemental. There is a national grid framework, but it can be implemented and used very differently depending on local resources and priorities. Needs assessment for care is done within the APA

MAIA – method designed to improve support for people aged 60+. Strategic meetings – main institutional and financing actors (ARS, Conseils départementaux, CARSAT, RSI, MSA, CPAM, etc.) meet to develop the agenda for coordination of health and social care for the elderly. In practice, no strategic and financing decisions are taken at this level. Tactical meetings – develop integrative proposals and projects.

PAERPPA (Elderly people at risk of loss of autonomy) – a national experiment which aims to improve the care pathway for people aged 75+ by removing barriers or interruptions to care.

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

FRANCE	Integration		Coordination		Linkage	
	Health	Social care	Health	Social care		
PROVIDERS						
Service provision	Rehabilitation and long-term care units	GPs coordination HAD (hospital at home)	SSIAD (community nursing service) Daily care Respite care Retirement homes	MAIA's complex case managers: intensive follow-up for elderly people with complex health and social care needs, carried out in collaboration with health and social care professionals. Also provide needs assessment	Collective housing facilities (foyers logements)	
Organisation of providers			CLIC: Local coordination and information centres	PTA: platform for medical professionals created by the Health Law 2016 PAERPA's dedicated territorial coordination (CTA)	MAIA's complex case managers: intensive follow-up for older people with complex health and social care needs, carried out in collaboration with health and social care professionals	
Funding	SHI	APA + means tested cost-sharing Direct payments	SHI + co-payment	Mixed public funding		

CLIC (Centres Locaux d'Information et de Coordination) – local information and coordination centres. Open to the elderly, their families, and gerontology and home care professionals.

HAD (Hospitalisation À Domicile) – full-time hospital care provided at the person's home.

PTA (Plateformes territoriales d'appui) – provider organisation that supports for health, social and medico-social professionals in the coordination of complex health pathways. Not specific to care of older people.

SSAID (Service de Soins Infirmiers à Domicile) – community nursing service.

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

COUNTRY	Integration/Separation			Coordination		Linkage
	Health	Social care	Health	Social care	Joint	
GOVERNMENTAL						
Strategies	Pacts for Health' 2014–2016		A strategy for the protection of mental health		National strategy on social policy/ development	National Institute for Health (ISS)
Regulations	Establishment of the National Health Service (1978)	National law for informal care			National law for health care and social care (2000)	National Agency for the Regional Health Services 2014
Administration, Monitoring	Ministry of Health Department of Health and Social Care		National Agency for the Regional Health Services 2014			Inter-ministerial Committee for Economic Planning
Planning Programming	National Health Plans (every two years?) National Plan for Chronic Diseases (2016) National Health Outcomes Programme	The National Prevention Plans as a basis for regional plans State-Regions Conference on health workforce education (every three years)				National fund supporting informal care decentralized to regions
Funding	From general taxes		National Long-term Care Fund decentralized to Regions			

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

ITALY	Health	Integration	Social care	Health	Social care	Joint	Coordination	Linkage	Social care
REGIONAL (19 REGIONS AND 2 AUTONOMOUS PROVINCES)									
Strategies					Regional plans for long-term care are health-oriented in some cases				Multi-stakeholder networks on specific policies
Regulations	Regione Emilia Romagna (2004) general norms on the organization and functioning of the regional health service		Marche regional laws supporting family care				Regional Laws MS networks e.g. in Liguria region		
Administration, Supervision, Monitoring							Regional Health Department Regional Agency for Health Services	Regional Government	
Planning Programming									
Funding	Regional NHS financed by general taxes						Regional budget Regional long-term care funds		

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

ITALY	Integration/Separation		Coordination		Linkage
	Health	Social care	Health	Social care	
LOCAL					
Strategies					Multi-stakeholder networks on specific local policies
Administration, Supervision, Monitoring			Local social plans		
Planning Programming			Local government		
Funding	Transfer from regional NHS (capitated budget)				
PROVIDERS					
Service provision	Residenze Sanitarie Assistenziali (RSA)	Community nursing homes (case protette)	Public health and community health services GP teams	Home care model (Assistenza Domiciliare Integrata – ADI) Some integrated care schemes aim to train social care staff (e.g. in nursing or care homes) to perform some of the more specialist care	Health houses e.g. Tuscany
Funding	RSA financed by local capitated budget				

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

SPAIN	Health	Integration/Separation	Social care	Health	Coordination		Linkages
					Social care	Joint	
GOVERNMENTAL Strategies					*Pact for the Health System (2008 and 2017) *National Health Strategies *The Regional Health Service *Strategies for Approaching Chronicity of the National Healthcare System (2012)		
Regulations	Health Care General Act (1986)	The Dependency Act (2006)					
		Law of Cohesion and Quality of the National Health System (2003)					
		Health Services Act (2011)					
Administration							
Planning Programming					Inter-territorial Council of the national health system (CISMS)	Ministry of Healthcare, Social Policy and Equality	Conferences of Presidents (regional authorities)
Funding	General taxation	Social Security				National Health	General Treasury

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

SPAIN		Integration/Separation		Coordination		Linkages	
LOCAL		Health	Social care	Health	Social care	Joint	
Strategies							
Administration, Supervision, Monitoring				Basic Health Zones			
Planning Programming							
Funding							
PROVIDERS							
Service provision	Medical and care treatment beds in hospitals	Primary health care team – GP as a coordinator	Social institutions with medical services Home care system (SAAD)	Municipality centres with care and nursing			
Funding/ financing	Global budget						

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

CZECH REPUBLIC	Health	Integration/Separation		Social care	Health	Social care	Joint	Coordination	Linkages
		GOVERNMENTAL	Strategies						
Regulations Legal framework	Public Health Insurance Act (1997) Health Services Act (2011)								
Administration, Supervision, Monitoring, Needs assessment	Ministry of Health								
Planning Programming								Action Plans on the Development of Social Services	
Funding	Social Health Insurance (SHI)			General Taxation					

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

CZECH REPUBLIC	Health	Social care	Health	Integration		Social care	Joint	Coordination		Health	Social care	Linkages
				Strategies	Regulations	Administration	Planning Programming	Funding				
REGIONAL (14 REGIONS "KRAJE")												
Regional authority – Department for Health	Regional authority – Department for Social Affairs	The Association of Regions Departments for Social Affairs and Health*	Medium-term (every 3 years) plans of social services development**	National Health Insurance								
		Register and authorisation of care providers										
			Action Plans on the Development of Social Services in regions									
			Subsidies from the state based on general taxation									

*At regional and local levels, there are usually 'joined' Departments of Social Affairs and Health Care – their agenda is separated under different 'units' but not in every region or city. The names of such departments are not unified or prescribed by legislation, so the structure can differ in different regions and cities.

** All 14 regions (one of them is Prague) are obliged to prepare a 'medium-term plan for social services development' for a period of three years in cooperation with the municipalities in their territory according to the Social Services Act.

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

CZECH REPUBLIC	Integration/Separation		Coordination		Linkages	
	Health	Social care	Health	Social care	Joint	Health
LOCAL						
Strategies						
Regulations					Municipality authorities: Departments for social affairs and health	
Administration					Community planning of social services***	
Planning					Subsidies from the local (municipal) budget – general taxation	
PROVIDERS						
Service provision	Hospital beds, Nursing homes				Homes for seniors Home health care agencies home social care agencies	
Provider organisations					Association of Social Services Providers	Interdisciplinary teams at the level of single health and social care providers (nurses, carers and social workers)
Funding/ financing					Health insurance, regional /local subsidies and users and user payments	Care allowances, subsidies

*** Cities are not obliged to prepare the plans by Social Services Act, but they do it in line with their personal capacities. Bigger cities have plans (cities with higher administrative competencies and more inhabitants).

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

POLAND	Integration/Separation		Coordination		Linkages			
	Health	Social care	Health	Social care				
GOVERNMENTAL								
Strategies			National Health Programmes 2016–2020	Strategies for Seniors 2014–2020				
Regulations Legal framework	Medical Activity Act (2011) amended many times, recently in 2018	Older People Act (2013) Primary Care Act (2017)	Publicly Funded Health Care Act (2004)	Welfare Act (1990) amended in 2014	Public Health Act (2015)			
Administration			Ministry of Health (MZ)	Ministry of Family Labour and Social Policy (MRPiPS)	National Public Health Institute (NIZ-PZH)*	Institute for Labour and Social Studies (IPSS)*		
Planning Programming				ASOS (Activity of older people) Senior+ Care 75+	Drugs for seniors (75+)			
Funding	Health insurance (NFZ)	General taxation		Ministry of Finance	Chamber of medical professions	Ministry of Family, Labour and Social Policy (MRPiPS)		
Education and training of care workforce			Ministry of Health with medical universities	Ministry of Education	Universities			

* Analytical and advisory body

Appendix 3. Institutional information on integration/coordination of health and social care for dependent people in 10 European countries (continued)

POLAND		Integration/Separation		Coordination		Linkages	
	Health	Social care	Health	Social care	Joint	Health	Social care
REGIONAL							
Strategies Planning Programming	Health regional strategies for seniors	Regional strategies of social policies				Marshal offices produce/develop a variety of regional development strategies	Regional semi-parliaments (Sejmiki wojewódzkie)
Regulations							
Administration		Regional offices of social assistance (ROPS)				Regional department – social and health at the Marshal office (regional self- government)	Voivodship offices (governmental body)
Funding	Transfer from SHI (NFZ) to regions		General taxation – transfer from central budget				Regional chambers of accounts
LOCAL							
Strategies Planning and programming			Local public health programmes	County programmes to solve social problems	Local self-government offices		
Administration, Supervision, Monitoring					Social and health department at the local self-government	Senior Councils	
Funding	Transfers from NFZ		General taxation – transfer from central budget and local funds			Association of Polish Counties Association of Polish Cities Compound Rural Communities of Poland	

Appendix 3. Institutional information on integration/coordination of health and social care for dependant people in 10 European countries (continued)

POLAND		Integration/Separation		Coordination		Linkages	
		Health	Social care	Health	Social care	Joint	Health
REGIONAL							
Service institutions	Nursing homes (ZOL ZPO) Hospital beds	Social homes (DPS) Day care centres	Primary health care (GPs)	Social assistance centres (OPS)		Social and health department at the local self-government	
Funding/ Financing	NHI based on contracts	General taxation – transfer from central budget to the local and from local to the facilities based on contracts Individual payments				Non-governmental organizations	