The King's Fund
The Commonwealth Fund
HSPRN

Authors
Nick Goodwin
Anna Dixon
Geoff Anderson
Walter Wodchis

January 2014

# Providing integrated care for older people with complex needs

## Lessons from seven international case studies

## Key messages

- Integrated care is a process that must be led, managed and nurtured over time. Initiatives often have to navigate and overcome existing organisational and funding silos.
- There is no single organisational model or approach that best supports integrated care. The starting point should be a clinical/service model designed to improve care for people, not an organisational model with a pre-determined design.
- Fully integrated organisations are not the end (goal).
- Greater use of ICT is potentially an important enabler of integrated care, but is not a necessary condition.
- Professionals need to work together in multidisciplinary teams (with clearly defined roles) or provider networks – generalists and specialists, in health and social care. However, patients with complex needs that span health and social care may require an intensity of support that goes beyond what primary care physicians can deliver.
- Important service-level design elements of care for older people with chronic and multiple conditions include holistic care assessments, care planning, a single point of entry, and care co-ordination.
- Success is more likely where there is a specific focus on working with individuals and informal carers to support self-management.
- Personal contact with a named care co-ordinator and/or case manager is more effective than remote monitoring or telephone-based support.

## Introduction

Industrialised countries face the common challenge of caring for a growing number of older people. In 2010, 15 per cent of the population of countries belonging to the Organisation for Economic Co-operation and Development (OECD) were aged 65 or over, and by 2030 this is expected to reach 22 per cent (OECD 2009). Not only is there a growing proportion of people aged 65 and over, but they are living longer. For example, a woman who was aged 65 in 2009 could expect to live for another 21 years – an almost 40 per cent increase in life expectancy compared with 50 years ago (OECD 2011).

Although longevity is worth celebrating, older age is associated with an increased incidence of multiple chronic conditions and a growing number of functional and cognitive impairments. Studies in the United States show that about half the population aged over 75 have three or more chronic conditions, and that individuals aged 85 or older are six times more likely to have multiple functional impairments than those aged between 65 and 69 (Anderson 2011). There is also evidence that the number of older people who are living alone is increasing at the same time as the availability of informal care by spouses or family members is declining (Coyte *et al* 2008). These trends have resulted in a growing demand for health care services to treat multiple chronic medical conditions as well as services to help individuals cope with everyday activities such as dressing, bathing, shopping, or preparing food. The latter – commonly referred to as social care services – are often provided by family members or informal caregivers but can also be provided by formal service providers, either as home care services or as part of residential long-term care.

Often, these formal social care services are organised and funded separately from health care or medical services, which can result in fragmented care for people who need both types of service. A common response is to develop integrated health and social care for older people with complex needs. Integrated care can mean different things in different settings; however, a common feature of this approach is that it seeks to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs.

In October 2013, The King's Fund published a report from a two-year research project funded by Aetna and the Aetna Foundation that examined the key lessons and markers for success in delivering co-ordinated care to people with long-term and complex medical problems across five UK-based programmes (Goodwin *et al* 2013). The report found a number of recurrent design features associated with success, yet many of the key themes – such as the extent of GP engagement or the ability to develop integrated health and social care teams – seemed particular to the UK context. Hence, it was not necessarily clear that the same organisational and management strategies towards integrated care would be transferred successfully to other care systems.

This report synthesises evidence from seven case study programmes, each from a different country, that are successfully delivering integrated health and social care for older people with complex needs. The aim is to identify lessons for policy-makers and service providers to help them improve how care is designed and co-ordinated. The seven countries that provide our case studies – Australia, Canada, the Netherlands, New Zealand, Sweden, the United Kingdom and the United States – all have a large proportion of their populations aged 65 and over and can expect many of these people to live for at least another two decades (*see* Table 1 opposite). The added value of examining case studies from different countries is to elicit those features of integrated care development that appear to be universal determinants for successful deployment, thus overcoming some of the constraints from previous work that has general been highly context-specific.

**Table 1** Demographic profile of case study countries

| | % of population aged 65 and over in 2010 | Average further life expectancy (years) for women aged 65 in 2009 | Average further life expectancy (years) for men aged 65 in 2009 |
|---|---|---|---|
| Australia | 14 | 21 | 19 |
| Canada | 14 | 21 | 18 |
| Netherlands | 15 | 21 | 17 |
| New Zealand | 13 | 21 | 19 |
| Sweden | 19 | 21 | 18 |
| United Kingdom | 17 | 21 | 18 |
| United States | 13 | 20 | 17 |

Source: OECD (2009, 2011)

For older people with complex health and social care needs, integrated care often means a single point of entry – designating a case manager who helps with assessing needs, sharing information, and co-ordinating care delivery by multiple formal and informal caregivers. The Appendix (p 25) provides a hypothetical example of an older individual with complex needs, and shows what an integrated care intervention would look like for that individual.

Key components of integrated care models, such as case managers and routine information-sharing, are at different stages of development in different countries. The seven countries that contribute our case studies all participate in the Commonwealth Fund surveys of patients and primary care physicians. The results of recent surveys highlight the extent to which these components are currently in place in those countries (*see* Table 2 overleaf).

Primary care providers were asked questions about case managers and electronic exchange of records with other doctors. Case managers were found to be more common in some countries (78 per cent in the United Kingdom and 73 per cent in the Netherlands) than others (41 per cent in Sweden and 43 per cent in the United States), while there was wide variation in the extent to which electronic records are shared among professionals (55 per cent in New Zealand, 14 per cent in Canada). From the patient perspective, there was variation in the proportion of patients who were contacted by a health professional as part of follow-up (31 per cent in the United States, 16 per cent in Australia and Canada). About one in five primary care doctors reported that other providers failed to share important information. The United Kingdom had the lowest proportion of doctors (7 per cent) reporting this problem.

**Table 2** Survey response on aspects of care co-ordination

| | % of practices using case managers | % of providers exchanging records electronically with other doctor | % of patients who were contacted by health professional | % of doctors reporting other providers failed to share important information |
|---|---|---|---|---|
| Australia | 59 | 27 | 16 | 12 |
| Canada | 44 | 14 | 16 | 14 |
| Netherlands | 73 | 49 | 22 | 15 |
| New Zealand | 68 | 55 | 22 | 12 |
| Sweden | 41 | 52 | 22 | 18 |
| United Kingdom | 78 | 38 | 29 | 7 |
| United States | 43 | 31 | 31 | 17 |

Source: The Commonwealth Fund (2011, 2012)

## Our approach

Through key contacts in each country, based on the knowledge and expertise among the project team and further advice from the Commonwealth Fund, we identified integrated care projects that met the following criteria:

- population focus on older people with complex needs
- process focus on integrating health and social care
- community-based models of care
- outcome focus on one or more of: user experience, functional ability, quality and costs (eg, reduced/prevented use of hospital/acute/institutional settings)
- established models of care (not pilots) covering a defined population/geographic area.

We gathered basic information on each potential case study programme against these criteria, and then made the final selection. While we were keen to identify programmes that had demonstrated success in achieving at least some of the outcomes of interest, it was not always possible to verify this and we relied to some extent on their reputation among experts in each country. Case study programmes were approached to request their co-operation with the project.

Authors were identified who had a track record of research and evaluation of integrated care for older people with complex needs and were familiar with the case study programme but independent of the organisation delivering care. Many of the authors had been involved in formal evaluation of the programmes and were, in some cases, able to draw on data that were not in the public domain.

The research team developed a template and authors were asked to complete the information using document sources as well as key informant interviews with staff from each programme. Some of the case study programmes are reasonably well known internationally but we believe that by adopting a more structured and in-depth approach to describing their services using a common template, we have generated new insights. Other case studies are relatively new and therefore not even well known within their own country. Two of the case study programmes (in Canada and the United States) that provide the best evidence on impact had systematic evaluations built in from the outset. The others have been evaluated, but not as systematically or rigorously.

## Key features of the health and care system in each country

All seven countries have a publicly funded programme for providing health care to people aged 65 and over. These programmes cover primary care and specialist physician services as well as acute care hospitals. They all have some form of prescription drug coverage for older people. Detailed descriptions of the health care system in each country are available from the World Health Organization (WHO 2013).

The seven countries also fund and organise home care and residential care in a variety of ways. In general, medical care and home or residential care services are not paid for by the same sources, are not provided by the same organisations, and are sometimes not organised at the same level of government. In addition, all countries allow for private payment for home and community services in addition to insured services. The summaries below, drawn from the OECD report *Help Wanted? Providing and paying for long-term care* (Colombo *et al* 2011), briefly describe how care is organised and delivered in each of the seven case study countries.

### Australia

Primary care through general practice is funded by the federal government. Community nursing services are part of hospital care and are administered and largely funded by each state. The federal government in Australia has responsibility for financing and delivery of care for those aged over 65 while the six states and two territories manage care for disabled individuals under the age of 65. Residential long-term care is provided based on assessed need and subject to a means test with co-payments, with a standard maximum set as a proportion of the national old age pension. Home care is delivered through a joint federal–state programme that is allocated according to needs-based priority within the available funding that individual service providers are given to assist clients. There are also specific federal programmes for individuals who are eligible for residential care so that they can remain in the community and receive enhanced home care subsidies to provide higher levels of service.

### Canada (Quebec)

Primary physician care is provided universally with no co-payments, although the financing and payment falls within the jurisdiction of the 10 provinces and 3 territories. Physicians are paid either by provincial or local regional health authorities. Home care services, including case management and professional services such as nursing and rehabilitation, are covered by all provinces. However, availability of services varies widely and non-professional services require co-payments, generally matched to income. Residential long-term care services are paid for with means-tested co-payments. Quebec (the province for our case study) provides home care and long-term care services to all eligible clients based on assessed need, using a standardised assessment tool.

### The Netherlands

The mixed funding system consists of a compulsory national insurance scheme for acute and short-term health care (such as general physician and medical care in hospitals, paramedical care, and pharmaceutical care). Everyone over 18 pays a flat-rate premium for the standard insurance package. Second, there is compulsory insurance for – usually – long-term care services (such as personal care, nursing, and care in long-term care facilities). Citizens pay a premium that is income related. Service users pay a significant personal contribution. Many social services, such as home care and support of informal carers, fall within the domain of local authorities and are tax-based.

Individuals who are eligible for long-term care under the national scheme are assessed using a standardised and centralised tool, typically resulting in a decision about hours and types of care that will be provided. A risk-adjusted capitation payment is used to purchase care packages from providers. However, individuals have the option to receive a personal cash budget instead of direct care provision, with which they can select and purchase their own services. Capitation payments and personal budgets are set according to need, income, household composition, and age.

## New Zealand

Primary care is delivered by GPs who operate private businesses and are able to set fees for their own consultations. District health boards negotiate fees with GPs. Primary care is increasingly provided through primary health organisations that offer team-based primary care and lower patient co-payments. Home care and household management services are provided free by district health boards up to an income threshold, after which means-tested co-payments apply. Residential long-term care is paid for with means-tested co-payments. Assessments to determine eligibility for home and residential (nursing home) services are standardised across New Zealand and are conducted by the district health boards.

## Sweden

Physician care is primarily delivered by group practices, in which most doctors are salaried, largely financed by the county councils. There is a national standard for eligibility for long-term care services, which is determined by cognitive and functional limitations alone (not income). Co-payments do apply, however, and are determined based on a calculation of income less defined sustenance costs so that low-income residents face no co-payment and there is a maximum level of co-payments for home help services. The local municipality controls the provision of home care, day care and other services.

## The United Kingdom (England)

Health care is predominantly funded through national taxation and is largely free at the point of use. General practitioners (GPs) are independent contractors to the National Health Service (NHS). In contrast, responsibility for funding (and some provision) of long-term care for the elderly rests with local government and is means-tested, with strict eligibility criteria based on level of need. Residential long-term care is predominantly privately provided, with co-payments set out in national rules for residential care charges. Unlike residential care for which charges are set nationally and must be adhered to, home care is subject only to advisory guidelines and there is considerably more variation in the organisation, delivery and coverage of domiciliary services at the local level. Direct payments are increasingly being made available to eligible recipients of local authority-funded social care, which allows individuals to control and directly purchase services to meet their own needs.

## The United States

Physician and post-acute nursing home and home care services for elderly people and people with disabilities are covered by the federal Medicare programme for those aged over 65. State-run safety-net Medicaid programmes cover long-term home care and residential long-term care for the poor based on income and asset-based means tests. Home care services are generally available only to those who are eligible for residential long-term care. Finally, it is possible for an individual to be 'dually eligible' – that is, to be covered by both Medicare and Medicaid. This is a major impediment to integrating care.

## Overview of the case studies

### HealthOne Mount Druitt, Sydney, Australia

HealthOne Mount Druitt is a virtual organisation based on a hub-and-spoke model of care that operates in a socially disadvantaged area of Western Sydney based around a community health centre (the 'hub'). The model, which began in 2006, is based on 'virtual' care planning and aims to improve co-ordination of care for older people with complex health needs, as well as to reduce unnecessary hospitalisations and ensure appropriate referral to community and specialist health services. General practice liaison nurses organise multi-disciplinary case conferences, co-ordinate care between various care providers, and ensure that information about the patient is provided to the GP or case manager.

### Programme of Research to Integrate the Services for the Maintenance of Autonomy (PRISMA), Quebec, Canada

PRISMA began in Quebec in 1999, and aimed to implement an integrated service delivery network to improve the health, empowerment, and satisfaction of frail older people and to increase health and social service utilisation without increasing caregiver burden. Its key components are service co-ordination, single entry point, case management, a single functional assessment tool, individualised service plan, and a shared information system. Since 2001, the Quebec Ministry of Health and Social Services made implementing the six features of the PRISMA approach a province-wide goal in the programme now known as RSIPA (Réseaux de services intégrés aux personnes âgées).

### Geriant, Noord-Holland province, the Netherlands

Since 2000, Geriant has offered a community-based service to people diagnosed with dementia, 24 hours a day, 7 days a week. The teams include case managers, social geriatricians, psychiatrists, clinical psychologists, dementia consultants, and specialised home care nurses. Case managers act as the focal point for the client and their informal caregivers, co-ordinating services from the team and from other network partners including GPs, hospitals, home care and welfare organisations. For more intensive treatment or observation, clients have access to a 16-bed short-stay clinic.

### Te Whiringa Ora, Eastern Bay of Plenty, New Zealand

Te Whiringa Ora is a collaboration, started in 2011, between a community care organisation and a new merger of three physician practices. The programme began with a focus on chronic respiratory disease and has expanded to include any patient with chronic disease with high health care utilisation. The programme includes assessment, care co-ordination, telephone support and telemedicine monitoring as a tool for self-management. These services are delivered by paired nurse and community-based care co-ordinators.

### Norrtalje, Sweden

In 2004, Stockholm County Council (which is responsible for health care services) and the Norrtalje local authority (which is responsible for social care) formed a joint governing committee that is responsible for health and social care for the Norrtalje population. The governing committee owns and steers a public company that is responsible for purchasing and delivering care. The model is characterised by: funding responsibilities for a single population; increased focus on health promotion for the population; and a common and integrated health and social care organisation to achieve greater patient and user benefit. There is an emphasis on using case managers and on developing pathways and plans around transitions in and out of hospital, from nursing homes to hospital.

### Torbay and Southern Devon Health and Care NHS Trust, the United Kingdom

Torbay Care Trust was originally created in 2000 as a single organisation with responsibility for the commissioning and provision of health and social care. Care is provided by multidisciplinary health and social care teams, with care co-ordinators who work in geographical 'zones' aligned to general practices to provide a range of services that meet the specific needs of older people after they are discharged from hospital. More recently, proactive case management of at-risk older people, using predictive risk tools, has provided an added capability to intervene before hospitalisation occurs. These teams also provide ongoing care and support in the home environment.

### The Massachusetts General Care Management Programme, Boston, the United States

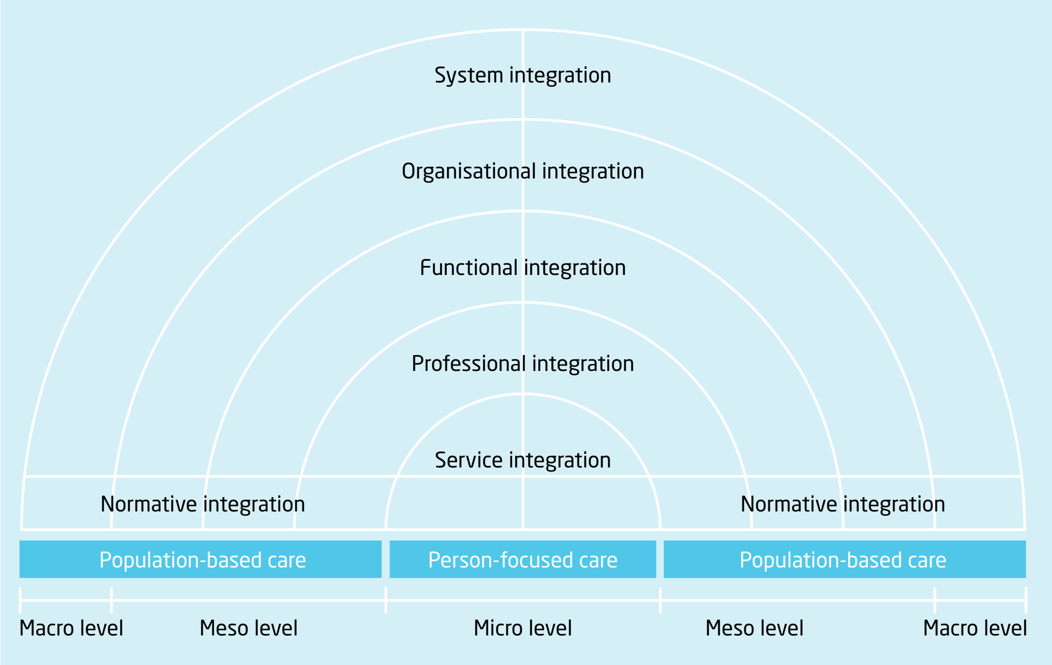
The MassGeneral Care Management Programme started in 2006 as a demonstration at one academic site and has evolved, first by expanding to more sites, including non-academic settings, and then as a component of a new Pioneer Accountable Care Organisation. The programme focuses on high-cost patients with multiple chronic conditions and multiple hospitalisations, who are offered integrated care by a case manager embedded in a primary care practice. Practice-based case managers have regular and good communication with their patients through periodic telephone calls (at least once every four to six months), meetings at the physician's office or when hospitalised, and home visits on an as-needed basis.

## Frameworks for analysing integrated care

Different taxonomies of integrated care have been used to compare and contrast approaches – for example, by examining: *types* of integration (eg, organisational, professional); *breadth* of integration (eg, vertical, horizontal); *degree* of integration (ie, from linkage to full integration); and *processes* of integration (ie, cultural and social as well as structural and systemic) (after Nolte and McKee 2008). Figure 1, opposite, brings together a number of different concepts relating to integrated care. It identifies different levels and types of integration, including at the macro (system), meso (organisational, professional) and micro (service and personal) levels (Valentijn *et al* 2013). Functional integration refers to aspects such as communication and information technology (IT), whereas normative integration is concerned with shared cultural values.

All the case studies included here have elements of integration at the micro level, centred on co-ordinating services for individual patients and users. They exhibit differing degrees of professional integration, but many are based around multidisciplinary teams. Surprisingly, few have much functional integration facilitated through integrated ICT (information and communications technology) systems, though all are attempting to implement linked or shared information systems. Only the case study programmes from Sweden and the United Kingdom exhibit significant organisational integration; in most other cases, the organisational structures have been preserved but other joint governance or accountability arrangements have been created to oversee the specific service or programme.

**Figure 1** The levels of integrated care



Source: Valentijn *et al* (2013)

Reviews of approaches to support better integration of care for older people with complex needs commonly conclude that there is no 'single model' that can be applied universally (eg, Curry and Ham 2010). Indeed, this characteristic of integrated care is revealed in the different approaches to care undertaken across the seven case studies reviewed here (*see* Table 3, below). These differences illustrate the point that integrated care is a complex intervention, where the management and organisational processes required to support it must, of necessity, differ greatly if they are to succeed within varied local and national contexts.

**Table 3** A comparison of key features of the seven case study programmes providing integrated care for older people

| | **Australia**<br>HealthOne | **Canada**<br>PRISMA | **Netherlands**<br>Geriant | **New Zealand**<br>Te Whiringa Ora | **Sweden**<br>Norrtalje | **UK**<br>Torbay | **USA**<br>MassGeneral |
|---|---|---|---|---|---|---|---|
| **General description** | Community-based case management | Integrated service delivery network | Community-based multidisciplinary dementia teams | Community-based multidisciplinary long-term conditions teams | Integrated purchaser-provider organisation | Community-based multidisciplinary teams for older people | Intensive practice-based care management |
| **Objectives** | Integrate GP and community health services to provide continuum of care. Improve referral process to specialist and other care services. Reduce hospital readmissions | Improve co-ordination of health and social care for elderly people with chronic conditions. Improve health outcomes, empowerment and satisfaction | Improve the capacity, quality and alignment of cure and care services. Enable people with dementia to live at home for longer. Protect clients' and informal caregivers' quality of life | Improve access to care. Reduce disparities in health outcomes. Better long-term conditions management. Reduce preventable hospital admissions and length of stay. Encourage self-management | Older people supported to remain in own home. Improved care continuity, quality of life and feeling of security. Improved quality of care for people with dementia and at end of life | Improve quality of care for users, simplify access, reduce number of assessments, improve referral times, improve independence, reduce hospitalisations | Improve quality of care and outcomes to beneficiaries, improve quality of working life to primary care physicians, reduce costs |
| **Dates** | 2005 to the present | 1999 to the present | 2000 to the present | 2011 to the present | 2006 to the present | 2000 to the present | 2006 to the present |
| **Target population** | People with complex and chronic health needs at risk of hospitalisation | Over 65s with functional disabilities requiring at-home care support by multiple health and social care providers | All people living at home with dementia | Patients with complex, long-term health needs who are high users of hospital services | Older people with complex health and social care needs | Over 65s needing rehabilitation/re-ablement at point of discharge from hospital. Individuals at risk of hospitalisation living in community | High-cost service users with complex medical problems that could benefit from enrolment in care management |

| | **Australia**<br>HealthOne | **Canada**<br>PRISMA | **Netherlands**<br>Geriant | **New Zealand**<br>Te Whiringa Ora | **Sweden**<br>Norrtalje | **UK**<br>Torbay | **USA**<br>MassGeneral |
|---|---|---|---|---|---|---|---|
| **Coverage** | 125 active chronic and complex patients enrolled in programme in August 2011 | Service delivered across one Canadian province. Each case manager aims to have between 40 and 45 clients | In 2011, the organisation cared for 2,860 clients | The average caseload is 60 patients per team | All older people in Norrtalje (12,000 people over 65 in 2011) | All older people in Torbay. Team caseloads vary from 60 to 90 persons | Between 2006 and 2009, cared for 2,600 enrolled patients |
| **Funders** | State government – publicly funded programme | Multiple: including research, state and regional authorities, local health/social care agencies, client fees | Multiple and annual contracts with health care insurers, plus client contribution | Provider alliance purchases and provides care – contract from Healthcare New Zealand | Integrated purchaser–provider organisation – contract from county council and local authority | Pooled funds from NHS clinical commissioning group and local authority | Contract with federal government's centres for Medicare and Medicaid |
| **Model type** (organisational integration) | | | | | | | |
| **Breadth of integration** | Contractual – supports both vertical and horizontal integration | Contractual – emphasis on agency co-ordination to support vertical and horizontal integration | Real integration. Horizontal (multi-disciplinary teams) | Virtual with multiple providers. Horizontal (multidisciplinary teams) | Real integration. Vertical (hospital–home) and horizontal integration (home care) | Real integration. Vertical (hospital–home) and horizontal (multi-disciplinary teams) | Real integration. Vertical (care transitions) and horizontal (case management) |
| **Degree of integration** | Linkage model connecting to multiple care providers – no formal integration | Co-ordinated model – agencies share responsibility for clients – no formal integration | Fully integrated provider model for team; co-ordinated model other care providers | Co-ordination model connecting to multiple care providers – no formal integration | Fully integrated health and social care provider (prime contractor) with integrated funding | Fully integrated provider model for team; co-ordinated model other care providers | Integrated delivery system – large co-ordinated network of care providers |
| **Information management** (functional integration) | | | | | | | |
| **Use of shared electronic medical record** | No | Yes – computerised client chart accessible by all affiliated health professionals, excluding some primary care physicians | No | No | Limited – joint medical documentation, moving towards shared records in future | Limited – integrated community health and social care information system (not GPs) | Limited – hospital electronic medical records (EMR) and case management system |
| **Use of risk stratification** | No | Yes, based on a functional assessment | No | No | No | Yes | Yes |
| **Providers** (professional integration) | | | | | | | |
| **Direct** | GP liaison nurses with primary care physicians | Case managers, with active participation of primary care physicians | Case managers, social geriatricians, dementia consultants, home care nurses, clinical psychologist, psychiatrist | Case managers (registered nurses); community support workers (kaitautoko) | Specific multi-disciplinary teams for home care – home care workers, district nurses, chief physician | Care co-ordinators, community nurses, occupational therapists, physiotherapists, social workers | Specialist nurse case managers, family physicians, social workers, mental health, and end-of-life care |
| **Indirect** | Community health staff, counselling, other allied health services, hospitals (not social care/ home care) | Hospitals, rehabilitation services, geriatric care, long-term care, in-home nursing, therapy, social work, equipment and supplies, pharmacy, voluntary sector services | Family physicians, hospitals, home care, welfare | Family physicians, community providers, hospitals, iwi providers (health, social and educational support) | Fully integrated and comprehensive health and social care provision | Family physicians, hospitals, home care | Financial counsellor; community and acute hospitals; home care |
| **Approach to care** (service integration) | | | | | | | |
| **Single point of referral** | Yes – referrals from multiple sources | Yes – referrals from multiple sources, including self-referral | Yes – referrals from GPs only | Yes – referrals from multiple sources | No – focus is on building 'chains of care' | Yes – referrals from multiple sources | Yes – voluntary enrolment pre-selected beneficiaries |
| **Eligibility criteria** | Yes – inclusion criteria | Yes – inclusion criteria | Yes – any person diagnosed with dementia | Yes – detailed inclusion criteria | No – available to all people over 65 in locality | Not defined – deal with all 'vulnerable' patients | Yes – detailed inclusion and exclusion criteria |
| **Single assessment** | No – based on previous assessments | Yes | Yes | Yes | Yes – home care service only | Yes | Yes |
| **Care planning** | Yes | Yes | Yes | Yes | Yes – 'meeting points' to share records, home care | Yes | Yes |
| **Care co-ordinator or case manager** | Yes | Yes | Yes | Yes | Yes – home care workers | Yes | Yes |
| **Multidisciplinary team** | Limited | Limited | Yes | Limited | Yes – home care only | Yes | Yes |
| **Telehealth/telecare** | No | No | No | Yes | No | No | Telephone monitoring |
| **Engaged users** (personal integration) | | | | | | | |
| **Self-management support** | Yes – by GP liaison nurse | Limited – care co-ordinators rather than self-care support | Yes – by case manager | Yes – by case manager, community support worker and via telehealth | Yes – by home-based service | Limited – care co-ordinators rather than self-care support | Yes – by nurse case manager |

| | **Australia** HealthOne | **Canada** PRISMA | **Netherlands** Geriant | **New Zealand** Te Whiringa Ora | **Sweden** Norrtalje | **UK** Torbay | **USA** MassGeneral |
|---|---|---|---|---|---|---|---|
| **Focus on supporting informal carers** | No | Yes – by case manager | Yes – by case manager | Yes – full involvement of whanau extended family | Yes – by home-based service | Yes – by care co-ordinators | Yes – by nurse case manager |
| **Results** | | | | | | | |
| **User and professional experiences** | Clients feel supported/ less anxious. GPs have high satisfaction | Increase in client satisfaction and empowerment | Informal carers provided positive assessments | GPs evaluate service positively | Improved information and communication among professionals | Increased staff motivation and positive evaluations from GPs | High patient/physician satisfaction |
| **Care outcomes** | – | Lower incidence of functional decline. Lowered unmet needs | Longer time spent at own home | Longer time period between COPD events post-enrolment | Easier and faster access to care | Shorter waits to receive social care support | Annual improvements in mortality |
| **Utilisation of services** | Reduced emergency room (ER) visits and lengths of stay post-intervention. Reduced referrals to community health | Reduced ER visits and hospitalisations. No increase in consultations with health professionals nor of home care services | Reduced dementia-related hospital care and reduced lengths of stay in nursing homes | Reduced hospital bed days for COPD patients | Reduction in nursing home placements among elder adults | Reduction in emergency admissions, bed days and lengths of stay. Fewer residential home placements | Reductions in inpatient admissions and use of emergency departments |
| **Cost-effectiveness** | – | Improved system performance at no additional cost | – | – | Lower costs per user for home care than similar municipalities | Improved system performance at no additional cost | Significant cost savings to Medicare |

## Key similarities and differences between case study programmes

### Aims and objectives

As the comparisons (below) of the care models demonstrate, each of the case studies has taken a different route to support older people with complex health and social care needs. While the aims and objectives in each case have similarities, there are important differences between approaches. Some have been primarily designed to improve user experience and home-based independence through greater continuity of care between care professionals (eg, PRISMA and Norrtalje). Others have had a more explicit focus on reducing utilisation rates in hospital and home care settings in order to reduce costs (eg, the MassGeneral Care Management Programme). However, all seven programmes have recognised that better co-ordination of care among professionals should result in better and more cost-effective care outcomes.

### Target populations

Each case study programme has a slightly different target population. For example, some have defined a very specific older adult client group linked to a clear process for identification and enrolment (eg, dementia care in Geriant or high-cost service users in the MassGeneral Care Management Programme). Others have sought to undertake a more holistic approach to care by focusing on population health management to defined communities (eg, the integrated delivery systems in PRISMA and Norrtalje, or the community-focused approaches in Te Whiringa Ora and Torbay).

### Funding

The way each case study programme is funded differs according to the national, regional and local health and social care funding arrangements in place. In locations where care funding is highly fragmented, such as the United States and Australia, approaches to integrated care have been supported by specific state or federal funding (eg, HealthOne and MassGeneral). In less fragmented funding systems, most of the case study programmes sought to create pooled budgets to purchase health and social care collectively, often supported by the creation of a 'prime contractor' model, in which provider networks are given capitation-based funding to create 'fully integrated' purchaser–provider organisations (eg, Norrtalje, Te Whiringa Ora, and Torbay). Exceptions to this pooled funding approach include Geriant in the Netherlands, a specialist independent provider of dementia care with a range of contracts for providing integrated services in different communities, and PRISMA in Quebec, which has the least integrated and most complex funding model of all seven programmes.

## Organisational type and development

All of the case study programmes started with a developmental or piloting process, often using specially allocated funds (eg, research grants, growth monies or pilot and demonstration projects). Over time, organisational and service-level developments have changed significantly as the different approaches to integrated care have gone through an iterative process of development. For some (such as PRISMA, Geriant, Norrtalje and Torbay), the approaches have matured to become established models of care. The MassGeneral Care Management Programme has been incorporated into a larger and more ambitious integrated care model known as a Pioneer Accountable Care Organisation (ACO), sponsored by Partners Healthcare. Others, such as HealthOne and Te Whiringa Ora, are currently still being developed, with identifiable ambitions to adapt and change in the future.

Very different organisational models exist, ranging from ‘fully integrated’ health and social care providers (eg, Geriant, Norrtalje and Torbay) to approaches that have instead sought to build alliances between professionals and providers to co-ordinate care, often based on contractual relationships between otherwise separate partners (eg, PRISMA, HealthOne and Te Whiringa Ora). In Norrtalje (Sweden), a new organisation was created to merge the purchasing and provision of health and social care, which are otherwise split between municipalities and county councils. It appears that the focus on organisational integration consumed considerable time and energy, and that tangible improvements to services have been slow to materialise. In the case of Te Whiringa Ora (New Zealand) and HealthOne (Australia), local GP leaders and community services came together to drive the initiative, with joint governance arrangements put in place to ensure a single line of accountability. In the case of HealthOne, a steering committee was set up to oversee the programme, and included representatives from a range of organisations involved, including GPs. These legitimately different approaches to organisational integration reflect what is possible given historic organisational boundaries, models of funding, and professional and cultural differences.

## Information management

None of the case study programmes has developed fully shared electronic patient records accessible by all professionals involved in patient care. While MassGeneral Care Management Programme’s information system is not fully integrated, it is perhaps more extensive than some of the other programmes, which have found it particularly difficult to fully integrate data across organisational and professional boundaries with primary care physicians. Most either had partial data sharing capabilities electronically, or had ambitions to develop and/or improve such capabilities. PRISMA (Canada) had the most developed fully accessible electronic client chart, although even here there were a few non-affiliated doctors who could not access the information. This is interesting given the general lack of penetration of electronic medical records among primary care doctors in Canada. One of the key obstacles in rolling the model out to other parts of Quebec has been implementing the electronic client chart.

## Care providers

A key feature of the seven case studies was the differentiation between a 'core' group of professionals and/or care teams undertaking close and ongoing care of older people, and a wider network of care providers who could be drawn on to support care assessments or improve access to a range of services. Even in Norrtalje, the most fully integrated health and social care approach, there was a difference between the intensive home care service teams and its organised network of other health and social care providers. In the MassGeneral programme, several dedicated teams had been identified to deal with different health issues.

The nature of the 'core group' has differed depending on whether the approach to care has focused on care management (direct to service users through multidisciplinary teams) or care co-ordination (indirectly, across networks of care providers to facilitate access and care co-ordination). Hence, in PRISMA, HealthOne and Te Whiringa Ora, the 'core' team has primarily comprised care co-ordinators working closely with local community staff or primary care physicians, but whose role is primarily to support continuity and access to care across a provider network. The care co-ordinators in these examples are part of a wider network of multidisciplinary professionals who are not usually employed directly by the programme. For example, while GP liaison nurses are HealthOne employees, the GP, community health nursing, nursing specialists, allied health and in some instances outside providers that support HealthOne clients in their own homes are part of a broader multidisciplinary team. In the other models of care, the 'core' team is multidisciplinary in nature, with a remit of managing and providing a range of care and cure services to older people directly, often within their own homes.

As Table 4 (opposite) illustrates, primary care physicians are identified as important players in supporting care co-ordination.

One of the distinguishing features of all seven case study models is the presence of a named care co-ordinator or case manager who takes personal and direct responsibility for supporting service users (and usually informal carers/family members as well). This job role is usually embedded in either primary care or the community, and the jobholder co-ordinates not only aspects of medical care but also social care services such as home care and supportive housing. Case managers or care co-ordinators work to update providers on changes in the individual patient's status and treatment, and are in direct contact with clients to ensure that they attend appointments, adhere to their medications, and have access to the appropriate services. Each worker/team would have a defined caseload of patients, the size of which varies depending on the intensity and complexity of patients' needs and the admission/discharge criteria for the programme.

Whereas care co-ordinators have tended to be non-clinicians (eg, health care assistants or social care staff) whose role is to facilitate access to care services as well as provide a key point of contact, case managers have had specific training and expertise in caring for older people with complex needs. Hence, case managers not only undertake the care co-ordination function, but also provide much of the care directly. The professional background of case managers/care co-ordinators in the seven programmes varied, with registered nurses and community social workers jointly sharing this role in Te Whiringa Ora, for example. In Quebec, case management for the elderly has traditionally been undertaken by social workers, but within PRISMA, nurses and rehabilitation therapists also became case managers. In Torbay, care co-ordinators do not have a professional health care background and are therefore relatively inexpensive, but provide valuable additional skills and capacity to the teams.

**Table 4** The role of primary care physicians within the seven integrated models of care

| | |
|---|---|
| **Australia**<br>HealthOne | Two GP liaison nurses operate across the locality and connect with up to 90 local primary care physicians. Primary care physicians involved in the steering committee are directly remunerated for their involvement. Otherwise, GPs did not benefit financially from the programme but did appreciate the extra support for managing complex patients. |
| **Canada**<br>PRISMA | Primary care physicians work closely with case managers to support needs assessment and care planning. Governance arrangements are in place that set out their role in this regard but levels of commitment are variable if 'mostly proactive', in part due to the lack of payments to attend multi-disciplinary teams and for providing care co-ordination. |
| **Netherlands**<br>Geriant | The organisation only takes referrals to its dementia home care service from GPs, as GPs have a role as gatekeepers to specialist care in the Netherlands. While GPs are kept informed of how care is progressing, they are not directly involved in the dementia care process unless patients are referred back to them for a separate medical problem. The GP remains responsible throughout the process. For non-dementia-related care, the GP still has a central role. Across these domains, Geriant practitioners and GPs share relevant information and consult each other if required. |
| **New Zealand**<br>Te Whiringa Ora | Case managers (registered nurses) and community support workers (kaitautoko) support the process of holistic assessment and care planning. Primary care physicians are informed of care plans but are not directly involved in the process, though the service may gain referrals from them and they may be contacted where GP support is identified. |
| **Sweden**<br>Norrtalje | Primary care physicians work for and on behalf of the integrated health and social care provider and so are integral to the care provided to older people locally. A single chief physician supports the home care service. |
| **United Kingdom**<br>Torbay | Health and social care teams operate in localities linked to the registered populations of local general practices, but GPs are rarely involved directly as part of the 'core team' in managing patients in the community. Under case management, all GP practices have signed up to, and are paid to support, the care planning process and are seen as more central to the team, though levels of commitment 'vary'. |
| **United States**<br>MassGeneral | Family physicians play an important and central role in the intensive case management of high-cost patients, working closely with nurse case managers and other professionals. |

## Approach to care

The co-ordination of care for older people with complex health and social care needs usually comprises a number of core elements, including: eligibility criteria for receiving care; a single point of referral; a single and holistic care assessment; a care plan; a named care co-ordinator (or case manager); and support from a multidisciplinary team of care professionals (Nies 2009). As Table 1 on pages 9–11 shows, these elements are almost universally applied across the seven case study programmes, suggesting that these core features of care co-ordination are indeed key features in successful approaches to older people's care *regardless* of the specific client group or care focus involved. Nonetheless, certain differences exist, with the most important being:

- the nature of the referral process (for example, from one source such as a GP to multiple sources, including self-referral)

- the definitions applied to eligibility criteria – from very broad and undefined inclusion criteria (eg, Torbay and Norrtalje) to highly defined inclusion and even exclusion criteria (eg, MassGeneral Care Management Programme)
- the role of the care co-ordinator or case manager (*see* above)
- the presence of multidisciplinary teams providing care directly vs co-ordinated networks of care providers (*see* above).

Of all the care processes used, the most homogenous were linked to the development of single care assessments and subsequent care planning supported by an individual with the power to provide and/or co-ordinate care on behalf of service users.

There was only one example where telehealth was deployed. In Te Whiringa Ora, in New Zealand, monitoring devices are available for use in clients' homes to measure heart rate, blood pressure, spirometry, pulse oximetry, body temperature, body weight, and blood glucose levels. In this case, technology was primarily used to train patients in self-management, but data are also accessible to clinical staff so that they can pick up early signs of exacerbation.

## Engaged users

Without exception, all seven approaches to care sought to promote engagement of service users *and* their informal carers or family members. In Geriant (the Netherlands), case managers, clients and informal caregivers jointly make a plan for care treatment each year. HealthOne (Australia) stresses that patients and caregivers should be active participants in care planning and management but also emphasises that patients and family can participate in case conferences if appropriate and to the extent that the patient and family want to. In Canada's PRISMA programme, clients and family have input into the care plan (perhaps similarly to Geriant), though the emphasis has been to shift from a client focus to population-based care management by providing different levels of support to patient groups with different levels of need. In some regions, PRISMA patients may also choose a direct payment option where they are given funds to purchase their own care services, an option mostly taken up in retirement home settings where in-house services are already available.

In Torbay (United Kingdom) and Norrtalje (Sweden), patient pathways were developed based on a vignette (such as that of 'Mrs Smith' in Torbay) which, while being patient-centred, did not appear to engage patients in the care plan. However, Torbay patients are given yellow folders that contain their care plan so that they can make this available to any professional involved in their care. In the United States, the MassGeneral programme offers patient-centred case management, but is not specifically focused on patient engagement.

Of all the programmes, Te Whiringa Ora places the most emphasis on engaging service users and family members as the key to achieving its programme goals, which are defined by the client (rather than medical or clinical goals).

## Results and impact

It is difficult to provide an overall comparative assessment of the success of the seven case study programmes because of the variation in the types of evaluations that have been conducted and the data collected and reported. The Te Whiringa Ora and HealthOne initiatives are smaller and more recent than the others, which means there is as yet only limited evidence available on their impact. On the other hand, PRISMA and the MassGeneral Care Management Programme started as pilot projects that were carefully evaluated through funding provided by national research organisations before being rolled out. The other three programmes have had published evaluations but these were carried out retrospectively, and do not have the rigour of the evaluations conducted in Canada and the United States.

There seem to be a number of reasons why these three programmes (Geriant, Norrtalje and Torbay) do not have robust evaluation measures to demonstrate impact, including the following.

- Evaluation is a secondary concern to service delivery. Not all programmes set out to prove or measure whether the service innovations they put in place worked.
- Evaluations are methodologically very complex and causality of effectiveness is hard to attribute.
- Lack of available data, and/or work to translate data into information to monitor outcomes.
- Lack of formal evaluation of impacts using controls, beyond process evaluations and data on professional and user views.
- No governance imperative and/or link to pay for performance to collect data to demonstrate performance.
- Professional resistance to use of hard measures of performance in an approach that relies on others to deliver and on the participation of patients.

All of the case study programmes report positive results in terms of improved end user satisfaction and reductions in utilisation of hospital facilities and/or care homes, though some of these results depend on pre- and post-utilisation, which we know is problematic due to regression towards the mean.

The lack of evaluations or standardised monitoring of performance can reduce the opportunities for learning and improvement, and to ensure the sustainability and spread of programmes. Generally, there appears to be no common way of doing this, and a lack of attention to systematically measuring impact and outcomes. It remains unclear in some cases whether care outcomes were improved from the users' perspective, while little formal work has been done to examine cost-effectiveness.

## Discussion

### High touch vs high-tech care

Much of the literature on integrated care emphasises the importance of a shared electronic medical record and integrated IT system to support implementation and delivery (Bodenheimer 2008; Ham 2010; Hofmarcher *et al* 2007; Øvretveit 2011). Indeed, it is clear that this can be an important enabling mechanism to share information between professionals involved in the care of an individual. The seven case study programmes have made considerable efforts to improve communication between professionals and organisations as a route to supporting better care co-ordination and information exchange. However, these examples show that it is possible to deliver integrated care without an integrated IT system. 'Old' information technologies such as telephone and fax are being used to ensure that information is shared appropriately among professionals.

There is also considerable interest in (if not yet evidence for) the use of telehealth and telecare devices to support older people with chronic conditions to live independently for longer and to self-monitor and self-manage. Interestingly, most of the seven case studies did not deploy telehealth or telecare as part of the intervention. This may in part be due to timing, as some of the interventions pre-date initiatives around telehealth/telecare; but it may also reflect the view that such monitoring tools are not currently seen as integral to delivering integrated care.

In contrast, most of the models of care examined here were high touch – that is, they involved close personal, often face-to-face contact between members of the care team, often a care co-ordinator or case manager and the client. There has been extensive use of telephone-based support in the United States, where disease management support has traditionally been provided by third-party companies (often linked to the insurer rather than providers), and this was also deployed in the MassGeneral programme.

In most of the case studies, case managers/care co-ordinators had regular face-to-face contact with patients, often in physician offices, and undertook home visits as well as using the telephone. They varied the frequency and type of contact according to each client's needs. This highly personalised and flexible approach appears to be a common feature of the case studies examined in this report.

Overall, these case studies suggest that high-touch, personalised care is more important than high-tech care, which relies on electronic patient records or telehealth/telecare devices. While the latter may have their place in supporting co-ordinated care if they enable shared information between professionals in the wider care team and with the patient and carers, they are not essential to the successful delivery of integrated care.

## Top-down vs bottom-up interventions

The literature on integrated care is clear that organisational integration does not necessarily lead to integrated care as experienced by the patient (Curry and Ham 2010). This raises the issue of whether the successful development of integrated care is possible only if it comes from the 'bottom up' through the development of specific 'micro-level' interventions by a small number of providers. Organisational integration then comes as a consequence rather than a cause, and may not occur at all. It is interesting that apart from the programmes in Sweden, the Netherlands and the United Kingdom, the others focused on integrating care at the micro service level rather than attempting to merge organisations.

The lack of organisational integration has meant that local actors have had to work to overcome organisational boundaries, which has required unified vision and leadership from those involved. While there are clearly some advantages of having a unified organisation with a common structure – for example, single budgets and clear lines of accountability – the evidence from these case studies suggests that a great deal of time and effort is required to merge organisations. While such organisational arrangements can provide a unified platform on which to deliver integrated services, they also appear to be more vulnerable to top-down interference.

Interestingly, the organisational changes that took place in Norrtalje (Sweden) and Torbay (United Kingdom) were at a regional level and not part of a national reorganisation. However, in both cases, subsequent changes in national policy relating to choice and competition have resulted in organisational upheavals affecting the case study programmes, as fully integrated geographical population-based organisations are seen to be monopolistic and reduce patient choice. As a consequence, the organisational arrangements are being challenged although it appears – at least in Torbay – that the local model of care will continue to be delivered and developed further.

Some programmes made use of national and state-wide funding opportunities – for example, Phase I of the MassGeneral programme (USA) was funded by a special Medicare demonstration, and in Australia, the New South Wales state treasury provided funding for capital projects that were used to build a community hub from which HealthOne services were run, while funding for a national initiative (Better, Sooner, More Convenient Health Care in the Community) was used by Te Whiringa Ora in New Zealand. Most of the case study programmes were the result of a bottom-up initiative to improve the delivery of care; none resulted from a national policy on integration. This is interesting, and suggests that national policy priorities may not reflect the priorities felt by those working on the ground in health and care services locally. The findings of the case studies suggest that national policy-makers would do well to:

- recognise the importance of addressing this agenda of integrated care for frail older people
- provide stimulus through funding or other means to support the development of local initiatives to improve care for this group of people
- avoid a top-down policy that requires structural or organisational mergers
- remove barriers that make it more difficult for localities to integrate care, such as differences in financing and eligibility.

## Role of service users

Patient-centred care is an increasingly important approach to improving care and outcomes for patients with complex needs. The seven case study programmes all adopted a patient-centred approach to care, but each engaged patients, their carers and families to different degrees. The highest degree of involvement is found in the Te Whiringa Ora programme, where patients and whanau (families) decide on their three most important goals through an extensive assessment and goal planning approach with nurse and community worker care co-ordinators. This has even caused some challenges for physicians when patients choose goals that are not directly health care-related, as they may not feel they have a direct role to play in helping patients achieve such goals. There needs to be agreement that a strong network of providers and community support is more likely to be effective than a physician-centred programme.

The degree to which formal self-care support is provided differs, but is most obviously present in models with specialist case managers and larger multidisciplinary teams. Hence, the depth of knowledge required to support self-care for service users appears to be less achievable in the co-ordinated care models of HealthOne and PRISMA compared with the more intensive case management-based approaches of, for example, Geriant, MassGeneral, and the home care teams of Norrtalje. Self-management still requires professional support and must not be seen as a means of shifting the burden of care onto the service user and informal carer.

Across all seven programmes, it is evident that patient-centred care that enables co-ordinated care management across providers and care settings is a foundation for integrated care programmes to ensure service integration. The direct engagement of patients is less well developed but offers opportunities to increase self-management as patients are empowered to focus on their self-identified priorities.

## Sustainability

Five of our case study programmes (in Canada, the UK, the USA, the Netherlands and Sweden) have been in existence long enough to produce some insights into factors that are related to sustainability. Two of the programmes, Torbay and Norrtalje, were developed in a context where health and social care were funded and organised at different levels, and required a commitment to change the 'rules' in order to allow centralised funding and organisation. In both cases, the rules were changed and although both programmes still exist, the fundamental changes that allowed them to develop are not universal, and both programmes are potentially at risk from subsequent changes in national policy. Their sustainability in their own regions is tenuous at best, while the opportunity for rolling out to other regions in the same country is limited.

Two of the other cases, PRISMA and MassGeneral, began with a specific intervention model that was implemented and evaluated as part of a research project funded by a national agency. In these two cases it was the specific model of care that was proven, the next stage was modification and scaling up to cover larger populations. In these two cases there is evidence of sustainability and generalisation. This highlights the importance of defining the intervention, testing and adapting it and consistently working within the existing system.

The Geriant intervention has been able to survive and grow because it has been able to make the move from a small start-up effort to an organisation that is able to survive in a commercial and competitive environment. Its sustainability is based on its ability to make an ongoing 'business case' for its value.

Most of the seven case studies started life as small-scale demonstration projects or pilots. They have survived, grown and matured over time, but this has not been an easy journey. Those involved describe having to work 'against the grain' of how care systems or organisations operate, often with the need for 'special measures' (eg, legal or financial) to support them. Sustainable models appear to require a stable policy context and a clear business case or proven track record, demonstrated through robust evaluation.

## The role of the primary care physician

The literature on care co-ordination for older people with complex medical problems and/or multimorbidity places high importance on the role of primary care, with many studies suggesting that the more effective approaches have a GP or primary care physician at the centre of a team-based approach (Bodenheimer 2008; Coleman *et al* 2009; Ham 2010; Hofmarcher *et al* 2007). However, the seven case study programmes we looked at suggest that primary care physicians are rarely part of the 'core' team that provides co-ordination of care or a case management function for service users (*see* Table 4, p 14).

Experiences across the case study programmes demonstrate that it has often been difficult to engage primary care physicians to share data about their patients and to play a proactive role in care delivery, thus providing a barrier to driving primary and community care-led integration. This represents a paradox: a core role of primary care physicians is to provide continuity of care to local people and most usually act in a co-ordinating role through referrals to other services; yet they appear to play a tangential rather than central role in the care process.

The question arises then as to whether medical care in the community for older people with complex multiple conditions requires a generalist profession such as a GP or whether it should be seen as a specialist task, while the management (or integration) of medical and non-medical services is carried out by a co-ordinating discipline, which takes the *role* of case manager. GPs' work processes, funding mechanisms and expertise are generally not well suited to meeting the requirements of treating and managing older patients with complex chronic medical and social needs. There is a risk that expectations of what GPs can achieve in this regard may be unrealistically high.

A number of reasons might be put forward to explain this. For example, many primary care physicians prefer to operate as independent practitioners (indeed, they often have both professional and business motives to protect this status) and are not natural partners in collaborative initiatives, even where they might agree with the principle involved. As many primary care physician practices have intensive workloads, they often cite lack of time as a barrier to getting involved in activities such as care planning or case reviews.

Associated with this is the remuneration required for this additional work and/or to backfill time away from direct patient care. As our case studies revealed, primary care physician participation has usually been linked to the development of new activity-related payments specific to their involvement in care co-ordination programmes. A good example is in Torbay, where the UK national system pays independently run GP practices via a national contract (with pay-for-performance targets) to provide a set of services to registered patients. The work of GPs, therefore, sits outside of the wider health and social care system, making it problematic to integrate their services more formally with those of other providers.

This commodification of the relationship between primary care physicians and the wider care co-ordination teams necessarily creates boundaries in what is achievable. Moreover, since levels of participation appear to vary in many cases, activity-related payments are not necessarily enough to ensure full participation. In the case of PRISMA (Canada), the addition of governance arrangements appears to have supported more proactive involvement in spite of not having specific payments to physicians. In Norrtalje (Sweden), with its integrated health and social care provider working under a single contract, one would expect primary care physicians to be central. However, payments to primary care physicians 'within system' include a number of specific elements of pay, including to support information exchange and care co-ordination. Hence, it does not always follow that what looks like a 'fully integrated' model of care, or a system characterised by a strong network of primary care practices, necessarily provides the right building blocks for integrated care.

## Conclusions

The seven case study programmes reviewed show that it is possible to successfully organise and provide integrated care for older people with multiple and complex needs in a variety of different ways. In common with other reviews on the process of integrated care (eg, Curry and Ham 2010), no single approach emerges as a 'best method'. Rather, in line with the conceptual model described in Figure 1 (on page 9), achieving better integrated service provision has been the culmination of a complex range of influences and processes that occur simultaneously at different levels over time. To understand 'how integrated care can be built' it is necessary to recognise that such service innovations are complex and dynamic. Given that successfully achieving integrated care for patients and service users results from the alignment of activities undertaken at multiple levels, what transferable lessons can we draw from this study? The key lessons are set out in the box overleaf.

The core conclusions from this synthesis of seven international case examples have remarkable similarities to The King's Fund's earlier study of five UK-based examples of care co-ordination to people with complex needs in terms of the strategies required to make a success of care co-ordination at a personal, clinical and service-level (Goodwin *et al* 2013). As Curry and Ham (2010) point out, the most crucial aspect of integrated care is how care is better co-ordinated by service providers around people's needs, and how professional groups work together in teams to ensure this is achieved successfully. It may be, therefore, that the synergy in findings between this report and its predecessor reveal important truths about achieving better integrated care to older people with complex needs – for example, that the process needs to be holistic in assessing and meeting the wide range of care needs; that named care co-ordinators are required to ensure continuity of care; and that multidisciplinary teams working flexibly and communicating effectively with each other are a necessity. What also seems clear is that these processes are more likely to be supported within integrated systems of care delivery. In other words, where care providers are working within common governance and incentive rules (perhaps with pooled budgets) facilitated through closer organisational partnership arrangements the more likely it seems that integrated care on the ground can be supported.

## Key lessons for the successful adoption of integrated care

### System level

- Recognise the importance of addressing this agenda of integrated care for frail older people.
- Provide stimulus through funding or other means to support the development of local initiatives to improve care for this group of people.
- Avoid a top-down policy that requires structural or organisational mergers.
- Remove barriers that make it more difficult for localities to integrate care, such as differences in financing and eligibility.

### Organisational level

- There is no single organisational model or approach that best supports integrated care.
- The starting point should be a clinical/service model designed to improve the care that is provided rather than an organisational model with a pre-determined design.
- It takes time for approaches to integrated care to develop and mature, with most programmes constantly evolving.
- Fully integrated organisations are not the (end) goal.

### Functional level

- Success appears to be related to good communication and relationships between those receiving care and the professionals and managers involved in delivering care.
- Greater use of ICT is potentially an important enabler of integrated care, but does not appear to be a necessary condition for it.
- Building relationships to support integrated care requires time to build social capital and foster trust.

### Professional level

- Professionals need to work together in multidisciplinary teams or provider networks – generalists and specialists, in health and social care.
- Within teams, professionals need to have well-defined roles, and work in partnership with colleagues in a shared care approach.
- In most of the case study programmes, care co-ordination was being delivered alongside rather than by primary care physicians. This suggests that patients with complex needs that span health and social care may require an intensity of support that is beyond what primary care physicians can deliver.

### Service level

- A number of common elements in the design of the care process at a service level appear to be important. These include:
  - holistic care assessments
  - care planning
  - a single point of entry
  - care co-ordination
  - the availability of a well-connected provider network that can facilitate access to the necessary support, particularly for self-management.

### Personal level

- All case studies had a specific focus on working with individuals and informal carers to support self-management.
- Continuity of care and care co-ordination to meet individuals' specific needs is important and highly valued.
- Personal contact with a named care co-ordinator and/or case manager is more effective than remote monitoring or telephone-based support.

All seven case study programmes were able to demonstrate some positive benefits from integrated care. Each took a different route to achieve integrated care, but there were some common features, including clinical and service innovations that enabled them to succeed. In each case, there appear to be different reasons as to *why* the model chosen worked (*see* box below). There was no common approach to evaluating or measuring outcomes across countries. Indeed, the degree to which impact measures to evaluate performance and/or care quality were used was highly variable and rarely robust. This represents a dual problem: first, innovations in integrated care are characterised by a poor ability to prove the 'value' of their work; second, it is difficult to transfer lessons about potential impact from one approach to another.

### Why did the different models work?

- HealthOne (Australia) – Better care planning and case management of older people with complex health needs supports more appropriate signposting and links to the right care providers, so reducing unnecessary hospital admissions.
- PRISMA (Canada) – Intelligent co-ordination of care using real-time data and information between care providers enables earlier, faster and more effective delivery of care and cure services.
- Geriant (the Netherlands) – Intensive multidisciplinary care support to dementia sufferers and their informal carers allows users to remain at home for longer.
- Te Whiringa Ora (New Zealand) – Strong focus on education and supported self-care enables people with long-term conditions to better manage their conditions and reduces acute episodes of care needing hospitalisation.
- Norrtalje (Sweden) – Integrated communication and co-ordination between care providers enables earlier, faster and more effective delivery of care and cure services. Intensive home-based service allows users to remain at home for longer and so reduces home care placements.
- Torbay (United Kingdom) – Multidisciplinary care support to older people reduces acute episodes of care needing hospitalisation, and allows users to remain at home for longer, which reduces home care placements.
- MassGeneral (United States) – Intensive case management of high-cost patients with strong self-care support and close working relationships with primary care physicians reduces acute episodes of care needing hospitalisation.

Since the underlying motivation of implementing integrated care is that it will help to meet the goals of improved user experience, improved clinical outcomes and reduced cost, there needs to be a much stronger focus on measuring impact, if decision-makers are to commit to future investment in this approach. Since each of the case study programmes has its own story to tell about the problems of achieving integrated care, they do at least provide a better understanding of how integrated care is 'built', given the inherent complexities and inter-relationships that are known to have an important bearing on outcomes.

Since integrated care initiatives often sit 'outside' the normal approach to care – and therefore are not usually treated as 'core business' from the outset – their sustainability is not guaranteed unless positive benefits can be proven. Without the full alignment of political, regulatory, organisational and professional support for the goals of integrated care, a significant degree of local leadership and commitment is needed at a service and clinical level to make change happen. This does not appear to be a sustainable proposition for the long-term future of integrated care, nor will it allow the widespread uptake of these approaches. Perhaps all countries need to re-evaluate and recalibrate their health and social care systems such that local service innovations can be supported to integrate services that better meet the growing needs of older people with complex and multiple conditions.

## References

Anderson G (2011). 'The challenge of financing care for individuals with multimorbidities' in *Health Reform: Meeting the challenge of ageing and multiple morbidities,* pp 81–107. Paris: Organisation for Economic Co-operation and Development. Available at: http://dx.doi.org/10.1787/9789264122314-6-en (accessed on 25 June 2013).

Bodenheimer T (2008). 'Co-ordinating care – a perilous journey through the health care system'. *The New England Journal of Medicine,* vol 358, no 10, pp 1064–71.

Coleman K, Austin BT, Brach C, Wagner EH (2009). 'Evidence on the Chronic Care Model in the new millennium'. *Health Affairs,* vol 28, no 1, pp 75–85.

Colombo F, Llena-Nozal A, Mercier J, Tjadens F (2011). *Help Wanted? Providing and paying for long-term care.* Paris: OECD. Available at: www.oecd.org/health/health-systems/helpwantedprovidingandpayingforlong-termcare.htm (accessed on 23 April 2013).

Coyte P, Goodwin N, Laporte A (2008). 'How can the settings used to provide care to older people be balanced?' Policy brief. Denmark: WHO Regional Office for Europe. Available at: www.euro.who.int/__data/assets/pdf_file/0006/73284/E93418.pdf (accessed on 23 April 2013).

Curry N, Ham C (2010). *Clinical and Service Integration: The route to improved outcomes.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/clinical-and-service-integration (accessed on 24 April 2013).

Goodwin N, Sonola L, Thiel V, Kodner D (2013). *Co-ordinated care for people with complex chronic conditions.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/co-ordinated-care-people-complex-chronic-conditions (accessed on 13 January 2014).

Ham C (2010). 'The ten characteristics of the high-performing chronic care system'. *Health Economics, Policy and Law,* vol 5, pp 71–90.

Hofmarcher M, Oxley H, Rusticelli E (2007). *Improved Health System Performance through Better Care Coordination.* OECD Health Working Paper No. 30, Paris: OECD. Available at: www.oecd.org/health/health-systems/39791610.pdf (accessed on 25 June 2013).

Nies H (2009). 'Key elements in effective partnership working' in Glasby J, Dickinson H (eds), *International Perspectives on Health and Social Care: Partnership working in action,* pp 56–67. Oxford: Blackwell.

Nolte E, McKee M (2008). 'Integration and chronic care: a review' in Nolte E, McKee M (eds), *Caring for People with Chronic Conditions: A health system perspective,* pp 64–91. Maidenhead: Open University Press.

Organisation for Economic Co-operation and Development (2011). 'Life expectancy and healthy life expectancy at age 65' in *Health at a Glance 2011: OECD Indicators.* Paris: OECD. Available at: http://dx.doi.org/10.1787/health_glance-2011-66-en (accessed on 24 April 2013).

Organisation for Economic Co-operation and Development (2009). 'Ageing societies' in *OECD Factbook 2009: Economic, Environmental and Social Statistics* [online]. Available at: http://dx.doi.org/10.1787/factbook-2009-3-en (accessed on 24 April 2013).

Øvretveit J (2011). *Does Clinical Coordination Improve Quality and Save Money?* London: The Health Foundation. Available at: www.health.org.uk/publications/does-improving-quality-save-money/ (accessed on 28 June 2013).

The Commonwealth Fund (2012). *Commonwealth Fund International Survey of Primary Care Doctors* [online]. Available at: www.commonwealthfund.org/Surveys/2012/Nov/2012-International-Survey.aspx (accessed on 24 April 2013).

The Commonwealth Fund (2011). *Commonwealth Fund International Health Policy Survey of Sicker Adults* [online]. Available at: www.commonwealthfund.org/Events/2012/International-Health-Policy-Survey.aspx (accessed on 24 April 2013).

Valentijn P, Schepman S, Opheij W, Bruijnzeels M (2013). 'Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care'. *International Journal of Integrated Care,* vol 13. Available at: www.ijic.org/index.php/ijic/article/view/886/1979 (accessed on 23 April 2013).

World Health Organization (2013). *European Observatory on Health Systems and Policies: Health systems in transition* [online]. Available at: www.euro.who.int/en/who-we-are/partners/observatory/health-systems-in-transition-hit-series (accessed on 23 April 2013).

# Appendix Vignettes

**Frank Chong: vignettes describing an older person with complex needs and integrated care delivery.**

*Frank Chong is an 84-year-old retired man who lives alone in an apartment. He recently gave up smoking after being diagnosed with severe chronic obstructive pulmonary disease (COPD). He is independent and does his own shopping and cleaning. His wife died three years ago and he has two children who live in the same city. Along with COPD he has diabetes, hypertension and depression. He gets his primary care from a family physician.*

**Mr Chong's primary family physician would assess him and would ask him if he would like to work with a case manager. The case manager would get to know Mr Chong during primary care visits and through periodic phone check-ins. The case manager would ensure that Mr Chong's depression was treated and monitored. Medications would be reviewed for optimal health outcomes and he would be engaged in motivational interviewing on lifestyle choices.**

*Frank Chong is now 87 years old. He has developed sleep apnoea but does not like to use his continuous positive airway pressure (CPAP) machine. He has started to exhibit some confusion, especially in the morning, and suffers from frequent headaches. His children are increasingly worried about him and have brought him to the emergency department (ED) twice in the past six months. He has become increasingly short of breath and rarely leaves his house. He has cancelled his last two appointments with his family physician.*

**His case manager would meet him in the ED to assess reasons for visits and ensure that the primary casre physician is notified about the ED visits. The case manager would follow up to see why he had missed two of his appointments. The case manager would work with him on adherence to CPAP and work to develop a care plan that avoided the need to use the ED.**

*Frank Chong is now 89 years old and is effectively housebound. His children have hired a caregiver who spends three hours with him in the morning and three hours in the afternoon. A home care nurse visits him twice a week. The caregiver ensures that he takes his medications and helps with meal preparation and bathing. He is now on 12 different medications. He has been to the ED seven times in the past year and admitted to hospital three times. He is still able to feed and toilet himself, but he needs help with bathing. He can transfer independently and walk very short distances with a walker. His cognitive status is still good and he enjoys visits from his children and grandchildren.*

**A case manager would be responsible for co-ordinating care across multiple providers and for communicating with the primary care provider about changes in Mr Chong's status and care. Pharmacists would review medications and the case manager would work with the patient, his family and physician on goals of care, including his wishes for end-of-life planning.**

## Acknowledgements

This report provides a summary of in-depth case studies that were commissioned by the Commonwealth Fund from authors in seven different countries. Each of the case studies was selected on the basis that it could demonstrate how integrated care for older people and for those with complex needs had been successfully achieved in the context of different countries. Authors of the seven case studies were selected for their expertise in this area, and each used a mixture of documentary evidence-gathering and stakeholder interviews to gather the necessary data to build up an in-depth picture of each case. The seven case studies were written to a template, enabling us to create this synthesis that brings out the key lessons from the international examples.

We would like to acknowledge the following authors for the development of these reports, which provided rich case histories and detailed understanding of the care-giving process and its positive impact. In addition, we very much welcomed the direct input of the authors into shaping this report both in developing its key lessons and observations and ensuring that their reports were accurately reflected in the synthesis.

The case study authors and the title of their submitted works were as follows:

**Australia**
Dr Justin McNab and Associate Professor James Gillespie, Menzies Centre for Health Policy, University of Sydney
HealthOne Mount Druitt, Sydney: Bridging the chronic care gap

**Canada**
Dr Margaret MacAdam, University of Toronto
Programme of Research to Integrate Services for the Maintenance of Autonomy (PRISMA), Quebec

**Netherlands**
Ludo Glimmerveen and Professor Dr Henk Nies, VU University, Amsterdam
Geriant, Noord-Holland: Integrated community-based dementia care

**New Zealand**
Dr Peter Carswell, School of Population Health, University of Auckland
Te Whiringa Ora, Eastern Bay of Plenty: High-tech and high-touch person-centred care

**Sweden**
Dr Monica Andersson Bäck, Department of Social Work, University of Gothenburg, and Professor Johan Calltorp, Jönköping Academy for Improvement of Health and Welfare, Jönköping University*
Norrtalje: A unique Swedish model for integrated health and social care

**UK**
Dr Nick Goodwin, International Foundation for Integrated Care, and Lara Sonola and Veronika Thiel, The King's Fund, London
Torbay and Southern Devon Health and Care NHS Trust: Care for older people in Torbay

**USA**
Professor Dennis L Kodner, International Visiting Fellow, The King's Fund
The Massachusetts General Care Management Programme, Boston

We are also grateful to the staff involved with each of the case study programmes who gave time to speak to the authors, provided documentation and responded to the questionnaires. Finally, thanks to Clare Bawden, who co-ordinated all the different aspects of the project to ensure that it remained on track.

*The authors would like to pay their respects to the friends and family of Professor Johan Calltorp, who sadly died before this work was published.

## About the Authors

**Nick Goodwin** is a social scientist, academic and policy analyst with a special interest in investigating the organisation and management of primary, community and integrated care. Nick is co-founder and CEO of the International Foundation for Integrated Care, a not-for-profit membership-based foundation dedicated to improving the science knowledge and application of integrated care (www.integratedcarefoundation.org), and is Editor-in-Chief of *International Journal of Integrated Care* (www.ijic.org). Nick also works as a Senior Associate at The King's Fund, London, supporting its programme of research and analysis for improving and integrating care to older people and those with long-term conditions.

Nick is very active in research, development and support for integrated care at both a political and practical level. He continues to work with the UK government to support its policies on integrated care, including the evaluation of its health and social care integration pioneer programme. Nick supports international commitments to the application of integrated care within the European Union as part of the research team Project INTEGRATE (www.projectintegrate.eu) and the European Innovation Partnership on Active and Healthy Ageing. Nick is leading work for the World Health Organization to support the development of a global strategy to develop person-centred and integrated care.

**Anna Dixon** is Director of Strategy and Quality and Chief Analyst at the Department of Health England.

Anna began her career with the World Health Organization working as a research officer for the European Observatory on Health Care Systems. In 2003–4 she worked as a policy analyst in the Department of Health Strategy Unit where she focused on a range of issues including choice, global health and public health. She has undertaken consultancy work for a range of clients including OECD, Monitor, Care Quality Commission, and the Treasury, as well as advising numerous Ministries of Health including Hong Kong, Portugal and the UK government.

Anna was previously Lecturer in European Health Policy at the London School of Economics and Political Science. In 2005–6 she was awarded a Harkness Fellowship in Health Policy by the Commonwealth Fund of New York.

Before joining the Department of Health, Anna was Director of Policy at The King's Fund where she led work on health system reforms, regulation, patient choice, self-management of long-term conditions and the future of health and social care in England.

She has a PhD in Social Policy from the London School of Economics and Political Science and is a Visiting Senior Fellow at LSE Health.

**Geoff Anderson** MD, PhD, is Professor in the Institute of Health Policy, Management and Evaluation, University of Toronto, where he holds the Chair in Health Management Strategies.

**Walter Wodchis** PhD, is Associate Professor in the Institute of Health Policy, Management and Evaluation, University of Toronto, and Principal Investigator for the Health System Performance Research Network. Walter is a 2011–12 Commonwealth Fund Harkness Fellow. His research is focused on health economics and financing, health care policy evaluation, and long-term care.

9 781909 029163

The King's Fund
11–13 Cavendish Square
London W1G 0AN
Tel 020 7307 2400

Registered charity: 1126980

www.kingsfund.org.uk

The King's Fund is an independent charity working to improve health and health care in England. We help to shape policy and practice through research and analysis; develop individuals, teams and organisations; promote understanding of the health and social care system; and bring people together to learn, share knowledge and debate. Our vision is that the best possible care is available to all.