



Financial Integration Across
Health and Social Care:
Evidence Review

FINANCIAL INTEGRATION ACROSS HEALTH AND SOCIAL CARE: EVIDENCE REVIEW

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EXECUTIVE SUMMARY

Introduction

1. Throughout the developed world, health and social care systems are subject to continuous reform, as policy makers seek to improve efficiency in the financing and delivery of services and to enhance the quality of care. Although the interdependence of different sectors, such as health and social care, is widely accepted, this is not always mirrored in financial frameworks.
2. The Integrated Resource Framework (IRF), has been developed in Scotland jointly by Scottish Government, NHS Scotland and the Convention of Scottish Local Authorities (COSLA), to help facilitate greater integration of services and re-alignment of resources to improve patient outcomes. It is intended to assist health and social care partners to provide financial and activity information to inform the process of service re-design. A small number of test sites around Scotland are trialling the IRF.

Objectives

3. The aim of the project was to inform the test sites on better use of joint resources within and across health and adult social care services. This supports the Scottish Government's aim of improving health and social care outcomes for local people and shifting the balance of care. The review assessed the international literature on financial and resource mechanisms to integrate care (i) within health care and (ii) across health and social care. Integrated resource mechanisms (IRMs) were identified and assessed from an economic perspective.

Methods

4. A review of the international literature was undertaken. IRMs were identified based on searches of electronic databases, hand searches and contacts with experts.

Results

5. 1,434 references were identified and screened for relevance and 79 potentially relevant papers were retrieved. A further 40 papers were identified from hand searches and contacts with experts. The IRMs identified included methods for financial governance such as pooled budgets and tariffs, as well as methods for organisational governance such as Chains of Care in Sweden, Care Trusts in England and the veterans' health care system administered by the U.S. Department of Veterans Affairs (VA).
6. Few studies evaluated the effect of IRMs on health outcomes, and those that did provided a mixed picture. Improvements in carer burden, carer and patient satisfaction, and functional independence were reported, but most studies that assessed health impact found no effect. There was some evidence of improvements in process measures, such as hospital admissions and delayed discharges. Although there was weak evidence that IRFs could achieve cost savings, the transferability of findings to the Scottish setting was unclear.

7. In the implementation period, staff satisfaction sometimes fell and costs increased. This highlights the need for adequate study duration in the IRF evaluations.

Lessons from the review

8. The review of empirical studies of IRMs identified several factors critical for the success of the Integrated Resource Framework (IRF). It also highlighted methodological challenges that provide lessons for evaluating the IRF.

Critical success factors

9. Clear, joined-up vision: The goals driving integration need to be made explicit to all those involved in providing the service. Full structural integration is rare. Recognition of different perspectives on key issues such as client risk, financial constraints and accountability is vital if the partnership is to flourish. Financial and non-financial incentives and organisational processes may be used to help align aims of the IRM with the appropriate behaviours and actions of those involved. The use of common objectives would help to support integrated care on the front line. All programme staff need to see how integration benefits them and their work. Use of a central co-ordinator or team may be useful for driving change and supporting staff within the integrated system. It is important that there is agreement from providers on a key set of data to be recorded routinely and uniformly.
10. A one-size-fits-all approach to integration should be avoided: The type and degree of integration should reflect programme goals and local circumstances. Approaches to integration require some flexibility, adapting to stakeholder views including those of front-line staff, users and managers. The evaluation process can be useful for identifying successes and challenges and in supporting change. Allowance for a local approach within the framework of central/national guidance may be appropriate.

Methodological implications

11. Assessment of schemes: Assessing the effectiveness and cost-effectiveness of financial integration systems across health and social care poses substantial methodological challenges, particularly in terms of obtaining unbiased estimates of effect. Whilst RCTs are a key source of evidence on relative effectiveness, few experimental studies have been conducted in the field. Where RCTs cannot be undertaken, natural experiments and non-experimental data can be used to fill gaps in the evidence base. Statistical techniques may be useful to analyse observational data. Non-equivalent group designs can be used if a common set of data is collected from pilot and non-pilot sites.
12. The need for data collection: Establishing a common dataset, with key resource use, activity, process and outcomes data, to which all health and social care bodies contribute, will enable analyses to adjust for confounding factors. Potential incentives and disincentives should be clearly identified and aligned with the aims of the scheme, and IRFs need to be regularly monitored to detect unintended effects, whether financial or non-financial in nature. Relevant

measures could also be collected to aid understanding of the process of change. However, as data collection is time consuming, only data essential for monitoring and assessment should be included (the principle of Occam's Razor).

13. Integration costs: The cost of integration can be substantial and costs may increase in the short term. Integration set-up costs may be high and require considerable upfront investment. Ongoing costs to services need to be sustainable and mechanisms need to be in place to link upstream substitution of programmes to cost savings.
14. Time-frame for evaluation: Outcomes and any cost savings may not occur in the short term. New services take time to become more stable systems of care. There is no robust evidence on whether improved outcomes can be achieved in the longer term. Therefore it may be important to extrapolate outcomes over a longer term time horizon. The outcomes measured should match or be capable of mapping on to those available in longer term observational studies.

Summary

15. The review found tentative evidence that financial integration can be beneficial. However, robust evidence for improved health outcomes or cost savings is lacking. Appropriately designed pilot studies of the IRF may help determine the potential costs and benefits of financial integration in Scotland.

1 INTRODUCTION

- 1.1 In common with many parts of the developed world, Scotland faces significant challenges in ensuring that the provision of health and social care services is effective, cost-effective, affordable and sustainable. Challenges include demographic changes, such as increases in the dependency ratio, technological pressures from expensive new drugs and devices, higher population expectations and increasing budgetary pressures.
- 1.2 ‘Shifting the Balance of Care’¹ is the Scottish policy response to these pressures and provides the context for this research. The policy aim is to improve health and wellbeing by moving resources upstream, targeting health improvement, emphasising preventative care, and ensuring that services are better integrated across the care pathway, without necessarily incurring additional cost. Correspondingly, the focus for providing some aspects of care is to shift resources away from the hospital sector and towards the community and home.
- 1.3 To facilitate the shift in the balance of care, the NHS, Local Authorities (LAs) and the third sector need to work in a more integrated way, as partners. Scottish LAs were granted a greater degree of devolved power in 2007, and although most decisions are taken at the local level, objectives are agreed with central government. A clearer link needs to be made between services and resources invested in and the outcomes generated. The MAISOP (Multi-Agency Inspection of Services for Older People) reports identified poor correlation between spend and outcomes (Social Work Inspection Agency (SWIA), 2007, 2008), similar to findings in the English context (Martin et al., 2007).
- 1.4 Joint working and funding can, in principle, help to achieve several policy objectives. First, it can facilitate “a co-ordinated network of health and social care services” (Audit Commission, 2009), narrowing gaps in provision. Second, it can enhance efficiency, by reducing duplication and achieving greater economies of scale. Third, it can improve the quality of care by adopting a more holistic approach to provision, making services more responsive to users’ needs and views.
- 1.5 The Integrated Resource Framework (IRF) has been developed jointly by the Scottish Government, NHS Scotland and the Convention of Scottish Local Authorities (COSLA), in response to the shared strategic objective to shift the balance of care by working in a more integrated way. It seeks to link resources and budgets spent on populations and to facilitate investment choices. The model builds on work done in the Highland NHS Board which has mapped resource expenditure with patient-level data on activity. The aim is to make integration more effective, to improve people’s experience of services, and to enable better models of care to be provided within existing resources.
- 1.6 The IRF enables Scottish health and social care partners to provide systematic financial and activity information to support service redesign and facilitate re-

¹ <http://www.shiftingthebalance.scot.nhs.uk/initiatives/sbc-initiatives/integrated-resource-framework/>

alignment of resources. A small number of test sites around Scotland are trialling the IRF.

- 1.7 To inform the pilots, the Scottish Government needs information on recent evidence and practice outside Scotland relating to better use of joint resources with a specific focus on financial and resource integration within and across health and adult social care services. Of particular interest are the ways in which better use of joint resources and integration could contribute to the Scottish Government's aim of improving health and social care outcomes for local people and shifting the balance of care.
- 1.8 This report includes a rapid review of the international literature on integrated resource mechanisms (IRMs) used (i) within health care and (ii) across health and social care. Funding models within and beyond Europe are identified and critically appraised from an economic perspective. The review was undertaken between 14th September 2009 and 14th January 2010.

2 OBJECTIVES

- 2.1 To review the international literature on integrated resource mechanisms (IRMs) used (i) within health care and (ii) across health and social care. Funding models within and beyond Europe were identified and appraised critically from an economic perspective.
- 2.2 Key questions specified by the Scottish Government were as follows:
 - Describe the range of tools, techniques, systems and processes that have been used to enable financial integration between health and social care?
 - How and in what circumstances have these tools, techniques, systems and processes been implemented?
 - What does the evidence say about how the effective these tools, techniques, systems and processes are?
 - What are the barriers to implementation?
 - What are the critical success factors?
 - What does the evidence say about effective processes to support changes in organisational and culture to facilitate financial integration?
 - What approaches have been used to successfully evaluate these processes?
 - What are the implications for the IRF test sites in implementing such approaches?
 - What are the implications for the development of the evaluation approach for the IRF?
 - Have others used tariffs to value hospital activity? If not, how have they done this?
 - Do others account separately for Health and Social Care resource?
 - How have programme budgets been operationalised?

3 METHODS

Search strategy

- 3.1 References supplied by the Scottish Government were used to inform discussions of terms for the search strategies. The information specialist (KW) designed the first draft of the strategy for Medline and AM, MG and HW provided feedback. The strategy was refined using an iterative process. The strategy linked terms for 'integration' with terms for 'financing', identified examples of 'chains of care' (an integrated system in Sweden), social health maintenance organisations (S/HMOs) in the US, and health and social care partnerships. The search was limited to articles published in English from 1999 onwards.
- 3.2 The strategy for Medline was adapted as appropriate to run on the following electronic databases. Details of the strategies are reported in Appendix 2.
- ASSIA
 - ECONLIT
 - Conference Proceedings Citation Index
 - HMIC
 - MEDLINE
 - SOCIAL SERVICES ABSTRACTS
 - Zetoc
 - Index to Theses
- 3.3 To identify further literature, particularly grey literature not picked up by the searches of electronic databases, key individuals in the field were contacted by email. Individuals who provided information or advice are named in the acknowledgement section.
- 3.4 Bibliographies of articles meeting the inclusion criteria were hand searched to identify further relevant references and web searches were undertaken as required.

Inclusion and exclusion criteria

- 3.5 Records were screened by two reviewers (AM, HW) and classified as 'yes' 'no' or 'possible'. The inclusion and exclusion criteria that applied to potentially relevant articles and reports are listed in Table 3.1.
- 3.6 Differences on eligibility for inclusion for particular papers were resolved by discussion.

Table 3.1: IRF Evidence Review: inclusion and exclusion criteria

INCLUSION CRITERIA

1. Case studies /examples /reports of financial /resource integration across health & social care
 - a. with or without evaluations / evidence / theoretical analysis
 - b. adults
 - c. outside Scotland (but pick up any Scottish examples to inform recommendations)
 - i. English care trusts, Somerset
 - ii. Overseas – e.g. Sweden, US, Canada
2. Mechanisms for allowing resources to follow patients if applied to either
 - a. Integrated healthcare systems (i.e. not just hospitals) or
 - b. Between health & social care organisations
 - i. E.g. use of prospective payments
 - ii. Use of “transactional payments” (compensation payments) between health & social care bodies e.g. cross charges paid by LA social service departments for delayed discharge from hospitals
 - iii. Financial governance (health & social, including Care Trusts)
 - iv. Implementation of tariffs to move towards financial integration
3. Application of programme budgeting within Care Trusts & other (relevant) settings
4. Use of a framework for evaluation e.g. Programme Budgeting Marginal Analysis (PBMA) if facilitating transfers/comparisons either:
 - a. inter-agency (e.g. health/social care agencies) or
 - b. Within integrated health systems (acute/community).
5. Last 10 years
6. English language

EXCLUSION CRITERIA

1. Reports of systems from developing countries /countries not relevant to Scottish system/transferability issues
2. Clinician/dentists/patient payment reimbursement mechanisms if does not include some form of cost/financial tool
3. Comment/think-piece type articles
4. Affordability/budget-impact analyses

4 RESULTS

Results of the electronic searches

4.1 Table 4.1 shows the results of the electronic searches. In total, the Endnote library contained 1,434 records. Screening by two reviewers (AM, HW) identified 79 potentially relevant references. These references were retrieved from electronic journals or ordered using the interlibrary loan system. In addition, around 40 articles were identified by hand searches or through expert contacts, or provided by the Scottish Government. These references were also screened for eligibility.

Table 4.1: Results of the electronic searches

	Records identified from search	Duplicates removed	Entered into Endnote library	Relevant references identified by screening
ASSIA	178	7	171	14
ECONLIT	67	3	64	1
Conference Proceedings Citation Index	114	3	111	0
HMIC	389	91	298	45
MEDLINE	516	66	450	12
SOCIAL SERVICES ABSTRACTS	120	27	93	3
Zetoc	103	5	98	3
Index to Theses	149	0	149	1
TOTAL	1,636	202	1,434	79

Results from the evidence review

4.2 Findings are presented by summarising the evidence that addresses each of the key questions in the project specification (see paragraph 2.2). First, the tools and techniques used for financial integration are described, and the context for their introduction, their effectiveness and barriers to implementation are outlined. Second, critical success factors and processes to support changes are discussed. Third, potential evaluation approaches and the implications for the IRF test sites are considered. Fourth, the use of tariffs is discussed and its potential relevance for moving towards integrated financing is considered. Lastly, findings from the literature on methods used to account for health and social care resources are presented and the use of programme budgets is discussed.

Tools, techniques, systems and processes used for financial integration

4.3 *Describe the range of tools, techniques, systems and processes that have been used to enable financial integration between health and social care.*

4.4 Details of the different approaches used to enable financial integration are found in Appendix 1 (Appendix Table 1 to Appendix Table 28). Table 4.2 summarises these approaches to financial integration, based on a taxonomy developed by the Audit Commission and using a simple ranking to summarise the level of integration (Audit Commission, 2009). It provides examples of each type of approach; these classifications are indicative rather than robust, because papers often reported insufficient detail of the type of integrative approach adopted. The approach taken in different countries is best understood within the relevant policy context of each country and this is summarised in Table 4.3.

Table 4.2: Types of integration: Funding, management and/or provision

Type of financial integration	Level of integration (1=lowest; 8=highest *)	Definition	Examples / Comments
Grants transferred between health and social care bodies	1	Health (social care) bodies make transfer payments (service revenue or capital contributions) to social care (health) bodies to support or enhance a particular social (health) service. No partnership and no delegation or pooling of functions.	No examples identified outside of Scotland (see Table 3.1). Resource Transfer payments in Scotland, from NHS Boards to Local Authorities for learning disability services, mental illness and care of the elderly services.
Cross charging (transaction payments)	2	System of mandatory daily penalties made by social care bodies to health bodies to compensate for delayed discharges in acute care for which the social care body is solely responsible.	Mandatory in England from 2004. Previously implemented in Sweden and Denmark.
Aligned budgets	3	Partners align resources (identifying their own contributions) to meet agreed aims for a particular service. Spending and performance are jointly monitored but management of, and accountability for, health and social services funding streams are separate. Non-statutory in England : “commonly used but not reported” (Audit Commission, 2009). May be used alongside pooled budgets or with lead commissioning.	Bath and North East Somerset Council and NHS Bath and North East Somerset PCT used aligned budgets where pooled budgets were not practicable (Gulliver et al., 2002b, a, Peck et al., 2002)
Lead commissioning	4	One partner takes the lead (and acts as the host) in commissioning services on behalf of another to achieve a jointly agreed set of aims. May be combined with pooled funding.	Isle of Wight PCT ²
Pooled funds	5	Each partner makes contributions to a common fund to be spent on pooled functions or agreed health or health-related services under the management of a host partner organisation. May be combined with lead commissioning.	Sweden and England have used these.

² <http://www.iow.nhs.uk/Uploads/Trust/AnnRep/2008-09%20Annual%20Report%20-%20Commissioning.pdf>

Type of financial integration	Level of integration (1=lowest; 8=highest *)	Definition	Examples / Comments
Integrated management or provision without pooled funds	6	One partner delegates their duties to another to jointly manage service provision.	Somerset Mental health services (Gulliver et al., 2002a) (England) Isle of Wight Mental health services (Bundred et al., 2001) (England) ³ Rovereto project (Italy) (Johri et al., 2003, Kodner, 2002) Vittorio Veneto project (Italy) (Johri et al., 2003) VNS CHOICE (Fisher and Raphael, 2003)
Integrated management or provision with pooled funds	7	Partners combine (pool) resources, staff and management structures to help integrate provision of a service from managerial level to the frontline. One partner acts as the host to undertake the other's functions.	Programme of Research to Integrate Services for the Maintenance of Autonomy (PRISMA) (Canada) (Hébert et al., 2009, Kodner, 2006) Co-ordinated Care Trials (Australia) (Kodner, 2002, Swerissen, 2002) Systeme de soins Integres pour Personnes Agees (SIPA) (Canada) (Johri et al., 2003, Kodner, 2006) On Lok (US) (Johri et al., 2003) PACE (US) (Kodner, 2006, , 2002, Mui, 2001) S/HMO I, S/HMO II (Newcomer et al., 2000)(Johri et al., 2003)}(Kodner, 2002) Veterans Health Administration (VHA) (Kizer and Dudley, 2009, Oliver, 2008) (Oliver, 2007)
Structural integration	8	Health bodies and social care health-related responsibilities are combined within a health body under a single management. Integrated functions for provision and (sometimes) commissioning.	Care Trusts (England) (Audit Commission, 2009) Northern Ireland (Heenan and Birrell, 2006, Hudson, 2004, Kodner, 2006)

* The level of integration (ranging from 1 to 8) has been derived from the Audit Commission's taxonomy and is a simple ranking rather than a categorical scale.

³ Although there were no pooled budgets in place at the time of the SSI inspection there were proposals for some pooled budgets over the following year.

Table 4.3: Policy context for integrated resource mechanisms

Country	Health and social care systems: overview	Key policies and legislation
Australia	<p>HEALTH CARE National, covers all Australian residents. Funded by universal public health insurance (Medicare) (primary/hospital care/ pharmaceuticals) and voluntary private insurance (inpatient private hospital charges) (Moorin and Holman, 2006).</p> <p>SOCIAL CARE Social care is a responsibility of both Commonwealth and state/territory governments, with services being delivered through a mix of government agencies and non-government organisations. In some jurisdictions, they are funded and planned through a single health and human services government agency, whilst elsewhere it is part of a separate government department.</p>	<p>1995 Council of Australian Government (COAG) reform in Australian health and community service policy. Whole system perspective. Restructuring in terms of organisation, funding and management of health and community services. Explore approaches to improved care within existing resources, by improving the services themselves and through better coordination across the acute (hospital) and primary care sectors. Increase consumer empowerment; Target care coordination at those who are most able to benefit; Develop best practice approaches to disease management and evidence-based protocols for multi-disciplinary care; Demonstrate strategies for developing effective partnerships between general practice and non-medical primary care and community care; Explore and develop flexible funding arrangements.</p>
Canada	<p>HEALTH CARE Mix of public (tax) and private funding. Federal funds distributed between ten provinces and three territories. Publicly funded hospital and physician services. Funding and organisation of community and institutional continuing care do not provide same comprehensive coverage and vary between and within the provinces (Bergman et al., 1997). Publicly and privately funded services (e.g. long-term care, pharmaceuticals). Privately funded (e.g. cosmetic surgery).</p> <p>SOCIAL CARE Three levels of governance for integrated service networks, (i) Ministry of Health and Social Services at the regional level (18 regional agencies) (ii) local level (iii) nine programmes of care. Long-term care and home care is financed at a provincial level and there is wide variation in coverage between and within the provinces in terms of eligibility conditions, covered services and cost-sharing arrangements.</p>	<p>2004 onwards generalised and specialised hospitals, LTC hospitals and local community service centres (CLSCs) in each local territory have been required to merge and to coordinate activities with other providers e.g. community organisations and inter-sectoral bodies such as municipalities.</p>
England	<p>HEALTH CARE Mostly (83%) publicly funded by central taxation. NHS provides comprehensive range of care, generally free at the point of use.</p> <p>SOCIAL CARE Social care services (social work, counselling, home help, meals on wheels, day care, and residential and nursing home care) funded by local authorities from a mixture of central and local taxation. Central government undertakes performance management and inspection regimes, but services remain subject to some local political control (Hultberg et al., 2005).</p>	<p>Care Programme Approach (CPA) is the system which has been used to co-ordinate the care of people under the specialist mental health services since it was introduced in England in 1993. The Health Act 1999 section 31 'flexibilities' – relaxations in normal statutory responsibilities and boundaries – which are permissive rather than compulsory (Hultberg et al., 2005) were replaced and consolidated by the National Health Service Act 2006 (s.75) (Audit Commission, 2009). The flexibilities offer three options for joint working, which may be combined:</p>

Country	Health and social care systems: overview	Key policies and legislation
		<p>(i) budgets may be pooled between NHS and the health-related local authority services;</p> <p>(ii) lead commissioning: one partner takes the lead (and act as the host) in commissioning services on behalf of another to achieve a jointly agreed set of aims;</p> <p>(iii) integrated management/ provision (e.g. care trusts): one partner delegates duties to another to jointly manage service provision; or partners can combine resources to provide health and social care services and employ the appropriate range of staff (Bundred et al., 2001). Partnerships are underpinned by legal agreements to safeguard the probity of the partnership and clarify the partner organisations' respective responsibilities. Care Trusts were created under the Health and Social Care Act 2001 (s.45).</p> <p>The Community Care (Delayed Discharges) Act 2003 (c.5) mandated LAs to pay healthcare bodies for delayed discharge days for which LAs were responsible. Delayed Discharge grant originally funded from £100m transfer from NHS to LA (Henwood, 2006), but is now part of LA allocation. 2003 Act also removed LA discretionary charging powers related to Health Act 1999 flexibilities.</p> <p>2006 National policy to increase joint working between local authorities and NHS as confirmed in the White Paper "Our Health, Our Care, Our Say: A new direction for community services" (Department of Health, 2006a)</p> <p>Local Government and Public Involvement Health Act 2007 placed duty on PCTs and LAs to do Joint Strategic Needs Assessment (JSNA) (Walker, 2008).</p>
Italy	<p>HEALTH and SOCIAL CARE</p> <p>Comprehensive National Health Service (Servizio Sanitario Nazionale; SSN). Financed by general taxation. Most care provided free of charge. State determines 'essential levels of care' and devolves remaining powers to 21 regions, which have almost full control over Local Health Units and independent NHS hospitals.</p> <p>The 1999 reform of the Italian healthcare system stimulated integration, and the design of a coherent policy for quality of care. A 3-fold integration between healthcare and social services was promoted: institutional integration between municipalities and LHUs, managerial integration at the district level for the provision of primary care and non-hospital care, and professional integration between</p>	<p>1992 Health Care Reform Law to control health care expenditure. Focused on regionalisation and financial reform.</p> <p>The 1999 reform of the Italian healthcare system has softened the effects of the 1992 shift to market mechanisms and competition within healthcare by promoting cooperation and partnerships among providers and Local Health Units (LHUs). In addition, it has facilitated the completion of transferring organizational and financial responsibility to the regional governments.</p>

Country	Health and social care systems: overview	Key policies and legislation
	healthcare professionals. (Grilli et al., 2001)	
Northern Ireland	<p>HEALTH and SOCIAL CARE</p> <p>Northern Ireland's health care financing system combines a national health service, funded from general taxation, with voluntary private insurance covering almost 50% of the population. Northern Ireland has one Health and Social Care Commissioning Board (HSCB) and 6 Health and Social Care Trusts, 5 of which provide health and social care services. The sixth Trust is the Northern Ireland Ambulance Service. The Department of Health, Social Services and Patient Safety (DHSSPS) provides guidance to the health board regarding the equitable distribution of the resources between its local commissioning groups (LCGs). This guidance is provided through the regional capitation formula. There are 9 Programmes of Care (PoCs) (care includes health and social care), into which activity and finance data are assigned, so as to provide a common management framework. They are used to plan and monitor the health and social service, by allowing performance to be measured, targets set and services managed on a comparative basis. One new super authority, that is the Health and Social Care Public Health Agency http://www.publichealth.hscni.net/. Health Boards provide residential care and they can but are not obliged to provide community care services e.g. community nursing (by public health nurses), home helps, respite services, day care centres and meals services together with Allied Health Professionals such as physiotherapy, occupational therapy, chiropody and speech therapy. Most long term care is provided by informal carers.</p> <p>http://www.dhsspsni.gov.uk/ & http://www.northerntrust.hscni.net/about/702.htm</p>	<p>Under the amended Health Act 1970 the whole population is eligible for in-patient services, including extended nursing care. Section 52 of the Act requires Health Boards to "make available" in-patient services to eligible persons, although it is not clear how eligibility is defined. Under the Health (Nursing Homes) Act, 1990, Health Boards are empowered to make a contribution ("subvention"), on a means-tested basis, towards the cost of private nursing home care for dependent older people.</p> <p>Section 75 Northern Ireland Act 1998 as part of the Good Friday Agreement.</p> <p>Central to this remit is Section 75 of the Act that requires all public bodies to have "due regard to the need" to promote and sustain equality of opportunity.</p> <p>In 2009 The single Health and Social Care Board (HSCB) for Northern Ireland replaced the four Health and Social Services Boards. The new remit of the HSCB is to focus on commissioning, resource management and performance management and improvement. Previously the Boards had a strong provider role too.</p>
Spain	<p>HEALTH CARE</p> <p>National Health Service, est. 1995 guarantees basic health care to all Spanish citizens.</p> <p>Financed mainly by central taxation, the NHS provides health promotion, inpatient, outpatient and pharmaceutical care, but excludes dental, social and community care.</p> <p>SOCIAL CARE</p> <p>Access and entitlement to social care is discretionary. The transfer of social services to the Autonomous Communities (ACs) was completed by 1997, with inter-regional coordination. AC social services are responsible for social and community care for a variety of vulnerable populations including those with intellectual disabilities, physical disabilities, mental disorders, drug addiction as well as older people.</p>	<p>1986 General Health Care Act determined that health care areas, as well as the regional governments and the central state, should produce their own health plan, through a process of broad social participation.</p> <p>Integration of mental health services within general health care system.</p>

Country	Health and social care systems: overview	Key policies and legislation
Sweden	<p>HEALTH CARE National Health Service system funded through government grants, user charges and national / local taxation. Local income taxes raised by the county councils account for over 70% of health care funding. About 5% of funding received by county councils is from user charges. Decentralised decision making with high levels of autonomy for the 26 county councils, 21 of which are democratically elected.</p> <p>SOCIAL CARE Chains of care (CC), including home care. CCs are condition-specific care pathways that specify the distribution of clinical work between different providers. CCs include all the health care provided for a specific group of patients and involve co-ordinated activities within the health care sector. They are based on clinical guidelines and are developed on a multi-disciplinary, consensual basis. As part of CC, an option is to integrate financing, with a Chain of Care Manager (CCM) responsible for activities, resources and finance. Funding from municipalities with local taxation. Municipalities responsible for social services, nursing and other non-medical healthcare provision. Individual counties fund home nursing and provide for home help services after the requisite needs-assessment. The National health insurance program funds long-term wards. An income-related co-payment is required for home help.</p>	<p>Ädel reform 1990. Reforms on care of the elderly: municipalities became responsible for social services but also for nursing and other non-medical health care provision. Further reforms in 1995 specified the municipalities' responsibilities for housing, employment and care for people with mental health problems. Both reforms transferred responsibilities from the county councils to the municipalities. 1993 Finsam: Aim to improve coordination between health services and sickness insurance. 1998 Frisam: Same aim. Permanent framework for financial coordination came into place. Possibilities for co-financing across authorities. Socsam legislation was in force between 1994 and 2003. It allowed pooling of budgets between health services, social services and social insurances (Hultberg et al., 2005). Since 2004, general and specialised hospitals, LTC hospitals and local community services (CLSCs) in each local territory have been required to merge and to coordinate activities with other providers.</p>
The Netherlands	<p>HEALTH CARE Major reform in 2006 introduced a mandatory private insurance system with regulated market competition. All residents must purchase a basic health plan from a free choice of insurers. Insurers receive risk-adjusted capitation payments funded by government (for under 18s and low-income) and employee contributions. National health insurance based on managed competition in the private sector.</p> <p>SOCIAL CARE Exceptional Medical Expenses Act (AWBZ) covers long-term care and some preventative services funded under a social health insurance scheme.</p>	<p>Health Insurance Act (2006). Mandatory purchase of private health insurance, with a legally prescribed benefit package, from a private insurance company. Contrary to the previous private insurance scheme, insurers are legally obliged to accept each applicant for a basic insurance contract at a community-rated premium and without exclusion of coverage because of pre-existing conditions.</p>
United States	<p>HEALTH CARE The US has a decentralised, multi-payer system with mixture of private and public finance. Around 44% of healthcare funding is from the public sector, with the Centers for Medicare and Medicaid Services (CMS) operating one of the principal public sector schemes. The CMS reimburses part of the cost of care, which is delivered by private insurance plans. Physicians are usually paid by fee-for-service. Private Health Plans vary widely in terms of coverage and cost to the enrollee</p>	<p>Cabinet-level Department of Veterans Affairs established in 1989. The Department of Veterans Affairs administers its health care and social support programs through a number of sub-Cabinet agencies e.g. the Veterans Health Administration and the Veterans Benefits Administration. The Department of Health and Human Services administers its programs through 11 sub-Cabinet agencies (e.g. the Food and Drug Administration, the Centers for Medicare and Medicaid Services, and the Centers for</p>

Country	Health and social care systems: overview	Key policies and legislation
	<p>(premiums, deductibles, cost sharing and conditions of reimbursement). Medicare is federal administered and is a highly medical model insurance programme and does not cover home care or other care.</p> <p>SOCIAL CARE</p> <p>Long-term care is provided in private institutional facilities and by private home care providers. The Department of Veterans Affairs administers its health care and social support programs through a number of sub-Cabinet agencies e.g. the Veterans Health Administration. Medicaid is a state-administered programme and is by law the “payer of last resort”(Ryan and Super, 2003) and services available include long-term care, wrap-around services (as well as some acute care, i.e. outpatient prescription drugs, transportation, dental care and vision and hearing.</p>	<p>Disease Control and Prevention).</p> <p>Government Performance and Results Act of 199. In large part, this was set up to provide for the establishment of strategic planning and performance measurement in the Federal Government.</p>

Implementation context

- 4.5 *How and in what circumstances have these tools, techniques, systems and processes been implemented?*
- 4.6 The context for introducing integrated funding approaches listed in Table 4.2 varies internationally, but some common themes are evident.
- 4.7 First, is the need to provide good quality care for people with complex needs that are not easily met within existing care structures. Subjects include people with high levels of co-morbidity, those with chronic conditions, older people, people with mental health problems and people who need both health and social care. To improve the quality of care, integrated approaches to management and provision are needed; financial integration is a means of enabling integrated care.
- 4.8 Second, there is an increasing recognition that a focus on secondary care, dominated by the medical treatment model, is economically unsustainable in the context of increasing demand and pressures on scarce resources. Efforts to shift investment upstream, refocusing on health and wellbeing, on prevention rather than on treatment, on engaging people in health maintenance, reflect this shift in perspective. By linking health and social services across care pathways, it is hoped that future financial pressures will be eased. It appears that these pressures are particularly keenly felt in regions with below average health outcomes and larger health inequalities (O'Leary, 2004).
- 4.9 In rural areas, these pressures may be especially acute. In the US, in response to the incentives of the Medicare Prospective Payment System (PPS) and other market forces, many rural hospitals have developed or acquired post acute care services, such as home health agencies and/or skilled-nursing facilities, as a strategy for managing their inpatient use and diversifying their revenue base. Some rural hospitals have ventured into the world of long-term care as well, offering assisted living, adult day service programs, and respite programmes or sponsoring meal sites for older persons (Coburn, 2001).
- 4.10 Third, existing financial structures may embody perverse incentives, encouraging over supply and discouraging prevention. There may also be incentives to cost-shift, and few incentives to reduce duplication of effort. Integrated financing approaches seek to address and correct these perverse incentives.

Effectiveness of tools, techniques, systems and processes

- 4.11 *What does the evidence say about how effective these tools, techniques, systems and processes are?*
- 4.12 Integration can be conceptualised as a continuum with particular functions used to define categories within this spectrum (see Table 4.2). However, in practice, few of the approaches reviewed in this report fell neatly within a category and there is a great deal of heterogeneity. This means that it is difficult to provide clear messages about the effectiveness of types of integrative approach. It

may be more meaningful to ask more specific questions that specify the context, population, etc.

- 4.13 For example, the review found evidence on the use of pooled budgets in England and Sweden (Hultberg et al., 2005). In both countries, the financial framework was specified in legislation, but there was local discretion over the choice of the size, scope and services covered. Although national evaluations found little impact on final outcomes, improvements in process measures were observed.
- 4.14 There is little evidence that structural integration is either necessary or sufficient for achieving integration of care and successful partnership working. Some argue that a network approach, '*nested in the partnership imperative*' (p 90) is better able to deal with complex and intractable policy challenges (Hudson, 2004). Given the variation in interagency experience of collaboration, offering choices of different approaches to integration may enable organisations to select the model that is most appropriate for their local needs.
- 4.15 In terms of health outcomes, the evidence is mixed and needs to be interpreted with care. The Audit Commission recently analysed hospital activity data to see whether there was evidence of improved health outcomes in localities where joint financing approaches had been adopted (Audit Commission, 2009). The analysis found no evidence that the use of joint financing was associated with improved health outcomes. However, there are several reasons why these findings should not be interpreted as evidence of an absence of effect. First, details of the analytic approach used were not reported; it is likely that regression analysis was used but details of the functional form, independent variables included and explanatory power remain opaque. More importantly, it is not clear whether the analysis adjusted for underlying trends in the outcomes assessed. In summary, it is unclear whether the analytic approach was appropriate. Second, the analysis compared different localities on the basis of use, or non-use, of financial integration. This may be comparing apples and pears, particularly if – as appears to be the case – localities with worse outcomes are more likely to adopt financial integration. A more meaningful comparison might be the *expected outcomes* for a locality achieved in the absence of financial integration with *actual outcomes* achieved with integration in the same locality. This would assess improvements in outcomes that are attributable to the use of financial integration. Whilst these outcomes might still be lower than those achieved by other localities, they could be better than would have been achieved without financial integration. However, if the Audit Commission model appropriately adjusted for confounding factors, such as geographical variations in deprivation and baseline achievement on outcomes, then findings may be robust.⁴

⁴ The report, "Means to an end: Joint financing across health and social care" Audit Commission (2009) *Means to an end: Joint financing across health and social care*, London, Audit Commission. provides a summary of joint financing across health and social care, including an overview of the research methods used. A technical appendix is not provided online and it was not possible, within the timeframe of this research, to obtain further details of the research methodology.

4.16 There was scant evidence that integrated financing can achieve cost savings. Few studies addressed the issue of cost and still fewer attempted to quantify costs. Therefore, there may be a problem of absence of evidence, rather than evidence of absence. The limited evidence identified suggests that costs may increase initially whilst processes are 'bedded down' (Glendinning et al., 2004). Although reduced levels of hospitalisation were achieved in the Australian Coordinated Care Trials (CCT) (Swerissen, 2002, Kodner, 2002) and the Canadian Système de services intégrés pour personnes âgées en perte d'autonomie (SIPA) experiments (Bergman et al., 1997, Johri et al., 2003, Kodner, 2006), and by the S/HMO experiment (Johri et al., 2003, Kodner, 2006), there was no corresponding reduction in overall costs. Some studies identified cost savings: these were the two Italian experiments, the Rovereto project and the Vittorio Veneto demonstration; the Swedish experience in Jönköping County Council (Baker et al., 2008) and the US 'On Lok' project (Johri et al., 2003). All four systems integrated management and provision for older people with complex needs, but the transferability of findings from these countries to the British setting is unclear. For example, there may have been higher levels of 'waste' than is the case in the NHS and therefore the capacity for cost savings would have been greater. There was anecdotal evidence that one English care trust reduced costs by using pooled funds (Audit Commission, 2009). Further details of the evidence on costs are provided in the following section.

Barriers to implementation

4.17 *What are the barriers to implementation?*

4.18 In general, the barriers to implementation are those the critical success factors seek to address. Barriers to implementation fall into three categories: (i) financial barriers, (ii) organisational barriers and (iii) cultural barriers.

4.19 Financial barriers can include:

- costs of setting up and implementing services
- Barriers and perverse incentives associated with paying for particular services and meeting particular objectives associated with the service
- More widespread impacts on other services.

4.20 Little information was found about the set up costs of these services, but there are likely to be high barriers to entry and considerable sunk costs and consequently a long-term horizon is required in order to see the eventual pay-off from up-front investment. As Leutz comments, '*integration costs before it pays*' (Leutz, 1999). Provision to a niche market can be related to biased enrolment, reflecting problems of 'adverse selection' if providers can cherry pick enrollees. Where services have tight eligibility criteria, sufficient enrollee numbers are required to make the service viable. IRMs such as Social Health Maintenance Organisations (S/HMOs) have had slower enrolment than expected (Newcomer et al., 2000, Johri et al., 2003). As Ramsay et al point out (Ramsay et al., 2009, Ramsay and Fulop, 2008), much of the evidence from

the US suggests integration of care does not necessarily result in increased efficiency. Economies of scope and scale may or may not be realised and can take time to achieve due to the steep learning curve to be climbed in joining up services.

4.21 The nature of the barriers varies according to the type of financing option adopted. In terms of provision, cross-charging can be used as a penalty, such as those paid for delayed discharge on to the community. These can result in inappropriate discharge and can undermine attempts to work in partnership across agencies (Henwood, 2006). Pooled budgets have their own set of challenges. Pooling of budgets can itself be a complex process involving alignment of legal and financial frameworks. Health and social care bodies have different tax regimes, charging, planning and budgetary timetables, financial reporting arrangements, accountability and governance arrangements. In England, many of these are driven by national requirements (Audit Commission, 2009) (para 40). There can also be confusion over reporting and governance arrangements and health and social care bodies may be unaware of the full range of joint financing options available to them (Audit Commission, 2009). Once resources and budgets are pooled they lose their identity as the aim may be to shift the balance of provision rather than to replicate the matching of spend with the level of contribution made. Whilst that can be useful, it can also pose a threat. Short-term ear-marked / targeted grants from central government can be difficult to manage within a pooled budget as they can generate unrealistic expectations about the level of a partner's contribution, which could subsequently be disappointed when a time-limited grant ended. Central government often requires specific accounts of how such resources had been spent, which can mean disaggregating them from the budget pool. In ring-fencing resources, pooled budgets can reduce the overall financial flexibility of the partner organisations' mainstream budgets, e.g. any surplus in a pooled budget may not be used on services outside the pool (Hultberg et al., 2005, Audit Commission, 2009).

4.22 Potential organisational barriers to integration include the initial set up of the service, access to and eligibility for the service, lack of patient retention, lack of links between services along the continuum of care, geographical boundaries and legal complexities of integration. The impact of implementing a new service may be "substantial" and comprise substantial senior management time and front-line staff time adapting to significant structural changes (Glendinning et al., 2004). Once a programme is up and running, the framework for enrolment influences the type of people enrolling in the service. To enrol for the Program for All-Inclusive Care for the Elderly (PACE) for example, patients are required to register with a PACE doctor. Some potential clients are unwilling to give up their personal doctor. PACE relies on voluntary informal carer input and therefore may encounter problems recruiting potential enrolees with carrying out significant activities of daily living. Recruitment of frail elderly people may require reaching out to their caregivers who are outside the referral process. Services will require a critical mass of patients to provide care in order to make the service financially viable. To retain patients and to match provision with need, it seems appropriate to link services provided along the patient care pathway through continual assessment and reassessment and by

promoting efficient referral processes between agencies (Fine et al., 2000). Case-managers or link workers are used in some systems, e.g. chains of care projects in Sweden (Ahgren, 2001), to link tasks and services together to satisfy client needs. If health and social care professionals have no role in ensuring provision of medical services or integration of administrative services, it is unlikely that they will have responsibility or leverage to promote substitution of services to upstream care. IRMs can involve complex legal (and financial) frameworks on which to operate, for example partners contributing to pooled budgets to agree on financial contributions, partnership arrangements and human resource issues (Hultberg et al., 2005, Audit Commission, 2009).

4.23 There are a number of practical difficulties which can arise when staff from different professional backgrounds work in multi-disciplinary teams. For example, the support services can differ as can payment and pension terms and conditions. Some services are not adequately linked up. For example, in an evaluation of S/HMO I (i.e. the first version of Social Health Maintenance Organisations), some doctors were found to be unaware that their clients were S/HMO I members. In addition, the rationale to substitute community-based care for institutional care was not communicated adequately to those responsible for planning and implementing provision of care (Newcomer et al., 2000).

4.24 Across the literature, cultural differences in perspective across workers providing care are reported as a key cause of fragmentation in those services which are aiming at integration. It has been reported that there are very significant challenges involved in bringing organisational cultures together and it has been noted that there are long-term power imbalances between hospital services and community based services which mitigate against integration (Ramsay et al., 2009). Differences in funding streams across agencies, political accountabilities and organisational structures all influence, and are influenced by, the cultures of the different professional groups working in the integrated services. In Sweden there is some report that chains of care were perceived as a threat to clinical autonomy and that the differentiation of clinical functions emerging from sub-specialism can lead to a fragmented system (Ahgren, 2001, Trägårdh and Lindberg, 2004, Ahgren and Axelsson, 2007).

What are the critical success factors?

4.25 Methodologically, it is very difficult to determine which factors are critical to the success of the new funding system. If an experiment is set up with the objective of improving health outcomes, the study is designed to identify whether, not usually why, outcomes are / are not achieved. Therefore, evidence on factors contributing to the success (or otherwise) of an integrated financing approach is often anecdotal and based on participants' perceptions. However, these perceptions may be useful for generating hypotheses that can then be tested empirically.

4.26 One factor often mentioned is the need for good interagency relationships and/or history of joint working. For example, successful engagement of clinical and managerial staff was considered critical in achieving improvements in the quality of care in the Swedish Jönköping County Council {Baker, 2008 #1657}.

This appears sensible: if partners need to work together to pool funds and agree strategies for care, good relationships are essential. As they take time to develop, having a history of successful joint working is likely to be an advantage. Whilst this is difficult to quantify, it may be possible to document any history of joint working and / or relationship problems in an evaluation.

- 4.27 To promote good interagency relationships, a common message was to set realistic expectations given local history and context (Peck et al., 2004). The need for a shared vision was emphasised as a factor enhancing success in the integrated health and social service boards implemented in Northern Ireland (Heenan and Birrell, 2006, Hudson, 2004). The Isle of Wight (IoW) Council's mental health service made use of a joint client information system based on the social services system. This ensures systematic use of the IT system (ACCISS) for caseload management. The system was found to be useful for linking health information and Social services information on day centre users. At the time of the Social Services inspection (SSI) (2001), it was suggested that the system could be used for recording contingency plans and potentially useful for out of hours' team and to prioritise cases for file audit (Bundred et al., 2001).
- 4.28 Inclusiveness was useful for showing the benefits of integration to all individuals involved in providing the service. Vigilance was required to ensure important objectives were not overlooked. Comprehensive health care agreements, such as clearly specified partnership or joint working agreements, focusing on final patient outcomes can provide a strong focus for the provision of care. In some cases, signed agreements on specific services were used to ensure mutual understanding, and clear accountability and governance (Audit Commission, 2009). Service level agreements and contracts are needed for budget monitoring, information sharing and user charges for social care. Legal frameworks should specify management of pooled budgets and staffing issues.
- 4.29 A second factor commonly identified in the literature is the need for a single entry point to care, also known as a gatekeeper or case manager. A single point of entry could be important to link eligibility criteria to assessment, reassessment, and referral pathways of care as well as regular audit including quality assurance and a risk management process. Once the eligible population was defined at the single entry point, these criteria could be used to control the volume of care provided. Client volume is linked to financial stability and efficient operation.
- 4.30 Examples of a single entry point of care include (SIPA) (Canada) and Rovereto (Italy) (Johri et al., 2003). This is an approach that could, in principle, be tested empirically. If two similar systems differ mainly in whether they use (or do not use) a single entry point to care, the difference in outcome could be attributed to the use of this feature. However, the quality of case management is likely to vary and this could confound findings. For example, if a case manager is poorly informed and fails to give clients accurate advice, the study could (misleadingly) detect an association between the use of case management and poorer health outcomes or worse user satisfaction. In this case, it may be necessary to offer training for case managers to ensure they are competent and to ensure that the quality of case management is assessed. This problem was identified in the Somerset mental health trust study, where poor carer

experience was found to be related to individual staff attitudes rather than to systemic failings (Peck et al., 2004)(p. 46).

- 4.31 Third, a flexible approach and/or choice of processes that allow systems to be tailored to local circumstances may be preferable to a mandatory one-size-fits-all system. The flexible approach should give headroom for innovation, allowing localities to select the 'optimal' level of integration for meeting population needs. The optimal level of integration depends on level of differentiation in services provided, population needs, and the agencies' objectives (Ahgren and Axelsson, 2005).
- 4.32 Fourth, support from a central coordinator (in the case of Scotland the Scottish Government) for the implementation of the new system will be vital. For example, when English legislation mandated the use of cross charging for delayed discharges, the system was unpopular and resented; this situation was ameliorated only when the government introduced a support team to help councils reduce the risk of incurring penalties (Henwood, 2006).

Effective processes to support change

- 4.33 *What does the evidence say about effective processes to support changes in organisational culture to facilitate financial integration?*
- 4.34 Central government can support integration in a number of ways. These include practical support, legal and regulatory guidance, guidance on data collections and setting national outcome targets.
- 4.35 Practical support to help partners mobilise resources and integrate funding systems may be valuable. For example, when English legislation mandated the use of cross charging for delayed discharges, the system was unpopular and resented; this situation was ameliorated only when the government introduced a support team to help councils reduce the risk of incurring penalties (Henwood, 2006).
- 4.36 Legal support in the form of providing contract templates may also be helpful (Audit Commission, 2009), as the judicious use of contracts can help to ensure governance and responsibilities are explicit and support good interagency relationships. As health and social care systems may operate under different regulatory systems (e.g. different rules on VAT), aligning systems centrally can facilitate integration.
- 4.37 Government guidance on data collection (perhaps mandating a common dataset), quality assurance and risk management may also help support partnership working.
- 4.38 Partners need a shared vision for integration. Central government can facilitate this by using national outcomes to audit, monitor, and evaluate innovative approaches. This will help ensure that partners retain their focus on improved health outcomes as primary objective, with process measures being a means to that end (Audit Commission, 2009).

Evaluative approaches

4.39 *What approaches have been used to successfully evaluate these processes?*

4.40 Methodologies used to evaluate the models of integration vary widely. Qualitative evaluations typically involve collecting primary data from postal surveys, interviews, focus groups and case studies (Hultberg et al., 2005, Audit Commission, 2009). Quantitative evaluations range from primary research such as randomised controlled trials (e.g. SIPA), (Kodner, 2006) or quasi-experimental studies (e.g. those conducted for the Italian Rovereto project) (Johri et al., 2003) to secondary research of national datasets on activity and expenditure (e.g. those recently undertaken by the Audit Commission) (Audit Commission, 2009)).

4.41 The question of whether these approaches are ‘successful’ is difficult to judge, because important information on study design and analytic approaches is typically not reported. Therefore, the internal and external validity of the studies often cannot be determined.

Implications for IRF test sites: implementation and evaluation

4.42 *What are the implications for the IRF test sites in implementing such approaches? What are the implications for the development of the evaluation approach for the IRF?*

4.43 The Scottish government wants pilot sites to implement and evaluate ‘transactional relationships’ within NHS Scotland and between the NHS and social care partners. Our understanding from the tender document is that existing patterns of resource use and activity have already been mapped for partnership populations.

4.44 In the context of the IRF, attribution of effect is problematic: it is difficult to establish “what works”. Each site is developing its own approach and therefore it is difficult to know the counterfactual: *what* would have happened in the absence of adopting financial integration. Approaches are complex and multifaceted and methodological guidelines developed for evaluating complex interventions may be pertinent (Craig et al., 2008).

4.45 The role of a comparison group may be the key for measuring effects, but it is unclear if non-participating sites are also contributing data.

4.46 Establishing a common dataset for all (pilot and non-pilot) health and social care bodies should allow analyses to adjust for confounding factors, e.g. using difference-in-difference analysis and/or multilevel modelling. The common dataset should include key resource use, activity and outcomes data at baseline, with data collected and reported in a timely, regular and consistent fashion. Relevant measures could also be collected to aid understanding of the process of change. However, as data collection is time consuming, only data essential for monitoring and assessment should be included (the principle of Occam’s Razor).

- 4.47 Integration takes time to achieve (Glendinning et al., 2004), with benefits not expected to occur until three to five years after implementation. Moreover, the implementation period may be associated with higher levels of expenditure due to set-up costs and contractual costs (Hultberg et al., 2005), increased levels of duplication whilst responsibilities are in the transition phase (Audit Commission, 2009) and lower levels of staff, user and carer satisfaction (Peck et al., 2004). Therefore, study endpoint and follow up duration should be adequate, given that outcomes may not be evident in the short term.
- 4.48 Centralised data analysis may detect trends, effects and unintended consequences that are not observable at more disaggregated (local) levels.
- 4.49 Schemes will create both intentional and unintentional incentives for integration and incentives may be financial or non-financial in nature. The greater the degree to which incentives are well-aligned with the aims of the scheme, the more powerful they will be in encouraging appropriate behaviour among those involved. To help detect unintended consequences of the new system, evaluations should therefore systematically monitor a broad range of process and outcome measures.

The use of tariffs

- 4.50 *Have others used tariffs to value hospital activity? If not, how have they done this?*
- 4.51 The use of tariffs to reimburse hospital activity is common throughout Europe (Joint Improvement Team, 2009). In England, activity-based funding (Payment by Results; PbR) currently covers 45% of all secondary healthcare purchased by PCTs (personal communication, Department of Health). Tariffs are fixed prices, based on national average costs and adjusted for unavoidable differences in cost due to variations in local input prices. The 'currency' for tariffs is the Healthcare Resource Group (HRG), which is a group of clinically similar treatments and care that requires similar levels of healthcare resource; version 4 currently contains around 1,400 HRGs. The aim is to ensure that funds follow the patient to facilitate patient choice of hospital, where choice is based on the quality of care rather than on cost.
- 4.52 PbR currently applies only to acute hospitals: psychiatric hospitals and Care Trusts are reimbursed differently. However, hospital tariffs should, in principle, also provide incentives for commissioners (PCTs) to reduce admission rates by improving preventative, primary and social care (Department of Health, 2006a) (para 1.38). Options for refining the tariff to encourage partnership working and integrated care are to be explored (ibid; para 5.45) and efforts are underway to change the costing approach away from average costs and towards best (cost-effective) practice costs (ibid, para 6.77). Best practice tariffs are planned for a small number of HRGs in 2010/11.
- 4.53 Previous evaluations of the English PbR have considered the benefits and costs of the policy (Marini and Street, 2006, Miraldo et al., 2006, Farrar et al., 2007, Farrar et al., 2009, Audit Commission, 2008) and its incentive and disincentive effects (Mannion et al., 2008). Despite teething problems

(Department of Health and Lawlor, 2006), PbR has been rolled out as the funding mechanism that covers most NHS inpatient care in England. Concerns that PbR would lead to unintended consequences and up-coding have proved largely unfounded and large increases in tariff-funded hospital activity have not materialised. This implies that PbR has not caused widespread financial instability amongst purchasers. Overall, PbR is associated with a modest increase in hospital activity, improved efficiency with no apparent deterioration in the quality of care. However, as PbR was introduced alongside other policy interventions, the attribution of observed changes is problematic.

4.54 Our review identified no evidence on the application of tariffs under joint financing arrangements or on its impacts on the use of preventative, primary and social care. The review found examples of psychiatric hospital activity commissioned using pooled budgets with PCTs and councils in partnership (Audit Commission, 2009). However, the PCT was usually the host responsible for commissioning and used block contracts for hospital activity (since tariffs for mental health are not yet available). In other words, usual commissioning patterns were adopted for hospital services.

4.55 Although not identified by our review, there are two innovative tariff systems we are aware of that may be relevant for developing a tariff for moving towards integration for health and social care. First, a tariff system for long-term, community based mental health care was introduced in the Netherlands in 2008 (there is a separate tariff system for inpatient medical care)(Mason and Goddard, 2009). The tariffs vary according to client characteristics, setting characteristics (e.g. sheltered accommodation) and by the expected number of hours of care needed per week. We understand that evaluations are ongoing.

4.56 Second, the West Midlands Strategic Health Authority has introduced mandatory tariffs in public health to incentivise provision of preventative services. The tariffs cover lifestyle risk management services such as health trainers, smoking cessation clinics, and expert patient programmes. Transition payments are available (to reduce the risk of short term financial instability), and auditable codes of conduct are written into contracts. The English Department of Health will review the results of the regional experiment in the West Midlands to see if outcomes are applicable nationally (Department of Health, 2007).

Do others account separately for Health and Social Care resource?

4.57 In England, health and social care bodies have different VAT regimes, charging, planning and budgetary timetables, financial reporting arrangements, and accountability and governance arrangements. Many of these are driven by national requirements (Audit Commission, 2009) (para 40).

4.58 Details of the accounting systems used within integrated approaches were not specified in the literature reviewed here. If the issue is important for the Scottish government, focussed web searches on particular systems could help identify this information. This process would, however, be time consuming and is outside the scope for a rapid review.

How have programme budgets been operationalised?

4.59 In England, the use of programme budgets to inform prioritisation is becoming widespread. Programme budgeting (PB) data⁵ is a mandatory return for all PCTs and is collected centrally by the Department of Health as part of the annual accounts process. The National Programme Budget Reports⁶ aim *'to develop a source of information, which can be used by all bodies, to give a greater understanding of where the money is going and what we are getting for the money we invest in the NHS.'* The level of expenditure on 23 programmes of care⁷ is calculated by each PCT. These programmes include a category for healthy individuals, problems of learning disability, social care needs and mental health problems.

4.60 The Yorkshire and Humber Public Health Observatory (YHPHO)⁸ is leading a project to provide a PB factsheet for every PCT in England. This will include the development of a health outcome and expenditure comparison tool which will enable PCTs to analyse spend and outcomes across all 23 PB categories, in the form of a quadrant analysis, on one chart. PCTs will be able to see the per capita spend for a particular PCT and the comparative ONS cluster and compared to the PCT average.

4.61 To develop the ability of the NHS to commission healthcare services, the Department of Health has recently implemented the World Class Commissioning (WCC) initiative (Darzi, 2008). Part of the initiative involves enhancing organisational competencies for 'world class' commissioning by introducing support and prioritisation tools to aid the commissioning process. One competency, competency 6, suggests applying PB to key priority care pathways/disease groups to help prioritise investment choices to improve population health now and to plan improvement in population health in the future.

4.62 Similarly, PB is explicitly mentioned in the Efficiency Appendix of the Department of Health's Operating Framework. PCTs are called to:

'use programme budgeting information to review the relationship of expenditure to outcomes in their highest spending commissioning categories (typically Mental Health, CVD and Cancer) and identify opportunities for improved value for money.'

4.63 Alongside this, PCTs are also requested to focus on upstream services by continuing

'to implement Care Closer to Home...and review opportunities to improve the efficiency and quality of intermediate care services and community services' (Department of Health, 2008a).

⁵ PB involves identifying the total resources/funds available & the services these funds are currently being spent on. It can be used as a planning tool to inform future investment decisions.

⁶ <http://www.dh.gov.uk/>

⁷ The 23 healthcare programmes are linked to the World Health Organisation's International Classification of Disease (ICD10).

⁸ <http://www.yhpho.org.uk/>

- 4.64 PB is sometimes used with Marginal Analysis to undertake Programme Budgeting Marginal Analysis (PBMA).⁹ For example, PBMA was used to explore changes in the use of resources from the introduction of GP-led integrated care for stroke patients in the Nairn and Ardersier Total Purchasing Pilot Site. PBMA was conducted combining practice data for the 'before' period and data from the literature to model the 'after' period (Henderson and Scott, 2001). The study aimed to shift treatment of patients from the acute trust to the community hospital. The study found that care of stroke patients in a GP-led community hospital is likely to reduce the use health care resources. Initial evidence suggested that health outcomes remained unchanged due to early hospital discharge but it was unclear whether those outcomes were sustained over time.
- 4.65 Yorkshire and Humber Public Health Observatory (YHPHO) recently undertook a study in which PBMA was piloted in three English Regions (Newcastle, Norfolk and Hull).¹⁰ The pilot was used to determine the current programme budget, to identify the options for service change (including growth and resource release), to identify and value benefits and costs of options, to evaluate options and make recommendations for change. PBMA was useful as a mechanism for identifying changes in service provision once it was linked to the commissioning redesign process.
- 4.66 Participatory budgeting can be used as part of the PB/PBMA framework to give local people a say in how resources are allocated. It directly involves local people in making decisions on spending and priorities for a defined public budget.¹¹ For example, a pilot project called 'Your Health, Your Community, Your Vote' was undertaken in Thornhill, Southampton in 2008. Participatory budgeting was used by Thornhill's Community Health Group, comprising residents and agency representatives from Southampton City Council, Southampton City PCT and Thornhill Plus You,¹² to oversee an annual funding stream provided by the PCT to tackle health inequalities in Thornhill. The project was evaluated by Thornhill Plus You and it was deemed a success in meeting key programme objectives to test new ways of involving communities in managing resources and empowering local groups to bid for money and manage health-related projects.

⁹ PBMA involves 2 component parts, Programme Budgeting (PB) & Marginal Analysis (MA). MA focuses on making choices across interventions/programmes at the margins. It is used to examine the benefit gained from an additional unit of resources or benefit lost from having one unit less. PBMA is used as a pragmatic, priority-setting aid to identify how resources are being spent prior to exploring potential changes in service provision at the margin, to maximize benefit & minimize cost.

¹⁰ <http://www.yhpho.org.uk/resource/item.aspx?RID=10049>

¹¹ <http://www.participatorybudgeting.org.uk/>

¹² 'Thornhill Plus You' is a ten-year government funded New Deal for Communities (NDC) programme in Thornhill, Southampton. The organisation includes volunteers from the local community who offer to be involved in making decisions on the regeneration of Thornhill.

5 DISCUSSION

Summary

- 5.1 This report reviews the international literature on mechanisms for financial integration mechanisms used within health care and across health and social care. It reports a broad overview of different types of integration, presenting examples outside Scotland. The report draws out lessons to be learnt in linking the varied sources of money spent on populations, many of whom have complex needs, and provides recommendations on the design and evaluation of financial mechanisms to support the seamless provision of care. Where empirical evaluations were identified, the effectiveness and costs of the IRMs and barriers to implementing them were documented. Each IRM was critically appraised to develop understanding about the benefits, incentives and unintended consequences associated with their implementation. Factors critical to the successful implementation of IRMs were identified, highlighting effective processes to enhance the integration of care.
- 5.2 Full structural integration of health care or health and social care is rare and there is little evidence to suggest that this approach is necessary or sufficient to achieve successful partnership working. Different forms of integration are appropriate in different settings and contexts. Partnerships and other forms of integration have to work within distinct administrative, regulatory and governance structures and it is vital that any innovative approaches to integration take account of these factors.
- 5.3 To date, the evidence on effectiveness and cost-effectiveness of IRMs is limited. Few details of robust evaluations have been reported and the evidence which is available is mixed and should be interpreted carefully. However, absence of evidence should not be interpreted as evidence of absence. The majority of evaluations in the review explore effectiveness of IRMs in terms of process measures such as reductions in hospital admissions or level of community care use rather than by endpoint outcomes such as health status or wellbeing. Information on resource use patterns and costs is even more limited.
- 5.4 There is anecdotal evidence that upstream substitution to community-based care can impact favourably on rates of institutionalisation and costs but the evidence is tentative. It is essential to consider the transferability of findings from one evaluation setting to another in order to compare like with like.
- 5.5 Future evaluations require clear descriptions of the IRM models for evaluation. Mixed-method evaluation is likely to be useful, incorporating quantitative and qualitative techniques. The identification of what works, how it works and at what cost is complex. To undertake robust effectiveness and cost-effectiveness analyses will require thoughtful and methodologically advanced approaches to the evaluative design and analysis of IRMs.

Limitations of the review

- 5.6 Some integrated models have not been covered by our review. One of these is the 16 Integrated Care Pilots that are currently underway in England to test innovative approaches to integration of health and social care service provision and funding (Department of Health, 2008b). The pilots vary in their focus: for example, some are developing new approaches to the management of long-term conditions, and others supporting patient choice for end of life care. Pilot sites are working across primary, secondary, community and social care services, public and third sector organisations to forge new partnerships, systems and care pathways. The two-year programme will be evaluated over three years, using a set of national and local measures and a more detailed evaluation of six sites is also planned. The English Department of Health may be able to provide details of the evaluation methodology, which could be useful for informing the Scottish IRF test sites.
- 5.7 There is only limited information available on another innovative English approach, the Partnerships for Older People Projects (POPPs) (Department of Health, 2006b). Twenty-nine Local Authority led pilots have developed innovative approaches to seek to bring about a sustainable shift in resources and culture away from institutional and hospital-based crisis care for older people, and towards earlier, targeted interventions within their own homes and communities. The final report is expected to be published in early 2010 (personal communication).
- 5.8 This report is a rapid review which was undertaken using the equivalent of 0.4 WTE researcher time for four months. Within these resource constraints, the comprehensiveness of the review is necessarily limited.

Gaps identified in the evidence base

- 5.9 Three types of gap in the evidence base were identified. These related to the quality of studies; the outcomes assessed; and reporting of the model for financial integration.
- 5.10 *The quality of studies:* the evidence was characterised by a lack of long term evaluations. Although the Audit Commission looked at 'longer term' outcomes, their analytic approach is unclear and so the reliability for findings cannot be determined. As outcomes may not materialise until the longer term, the lack of longer-term studies is an important shortcoming in the evidence base and may lead to a false conclusion that integrative approaches are ineffective, confusing absence of evidence with evidence of absence. Some studies used mixed methods (combining quantitative and qualitative approaches) (Audit Commission, 2009, Peck et al., 2004). This is likely to be the most fruitful approach because financial integration models are complex, and evaluations need to measure effects and determine causal pathways.
- 5.11 *The outcomes assessed:* in general, studies focused on improving the process of integration rather than on health outcomes. Although understanding processes is important, it is not a substitute for the evaluation of outcomes (Craig et al., 2008). Resource use and cost data (e.g. set up costs) were

“rarely assessed” (Audit Commission, 2009). Unintended consequences were often not measured but were sometimes reported on an anecdotal basis.

5.12 *Reporting of the model for financial integration:* studies lacked detailed reporting on some approaches for financial integration: identified reviews of systems, rather than original research. For example, details of the accounting approaches used to manage health and social services are rarely reported. In many papers, the way in which resources were pooled was not clearly specified – sometimes, the approach was even found to have been mislabelled (Audit Commission, 2009). Equally, the extent to which structural integration achieved was often poorly specified and it was not possible to classify these models reliably.

Lessons from the review

5.13 The review of empirical studies of IRMs identified several factors critical for the success of the Integrated Resource Framework (IRF). It also highlighted methodological challenges that provide lessons for evaluating the IRF.

5.14 *Clear, joined-up vision:* The goals driving integration need to be made explicit to all those involved in providing the service. Full structural integration is rare. Recognition of different perspectives on key issues such as client risk, financial constraints and accountability is vital if the partnership is to flourish. Financial and non-financial incentives and organisational processes may be used to help align aims of the IRM with the appropriate behaviours and actions of those involved. The use of common objectives would help to support integrated care on the front line. All programme staff need to see how integration benefits them and their work. Use of a central co-ordinator or team may be useful for driving change and supporting staff within the integrated system. It is important that there is agreement from providers on a key set of data to be recorded routinely and uniformly.

5.15 *A one-size-fits-all approach to integration should be avoided:* The type and degree of integration should reflect programme goals and local circumstances. Approaches to integration require some flexibility, adapting to stakeholder views including those of front-line staff, users and managers. The evaluation process can be useful for identifying successes and challenges and in supporting change. Allowance for a local approach within the framework of central/national guidance may be appropriate.

5.16 *Assessment of schemes:* Assessing the effectiveness and cost-effectiveness of financial integration systems across health and social care poses substantial methodological challenges, particularly in terms of obtaining unbiased estimates of effect. Whilst RCTs are a key source of evidence on relative effectiveness, few experimental studies have been conducted in the field. Where RCTs cannot be undertaken, natural experiments and non-experimental data can be used to fill gaps in the evidence base. Statistical techniques may be useful to analyse observational data. Non-equivalent group designs can be used if a common set of data are collected from pilot and non-pilot sites.

- 5.17 *The need for data collection:* Establishing a common dataset, with key resource use, activity, process and outcomes data, to which all health and social care bodies contribute, will enable analyses to adjust for confounding factors. Potential incentives and disincentives should be clearly identified and aligned with the aims of the scheme, and IRFs need to be regularly monitored to detect unintended effects, whether financial or non-financial in nature. Relevant measures could also be collected to aid understanding of the process of change. However, as data collection is time consuming, only data essential for monitoring and assessment should be included (the principle of Occam's Razor).
- 5.18 *Integration costs:* The cost of integration can be substantial and costs may increase in the short term. Integration set-up costs may be high and require considerable upfront investment. Ongoing costs to services need to be sustainable and mechanisms need to be in place to link upstream substitution of programmes to cost savings.
- 5.19 *Time-frame for evaluation:* Outcomes and any cost savings may not occur in the short term. New services take time to become more stable systems of care. There is no robust evidence on whether improved outcomes can be achieved in the longer term. Therefore it may be important to extrapolate outcomes over a longer term time horizon. The outcomes measured should match or be capable of mapping on to those available in longer term observational studies.

6 REFERENCES

- Ahgren B (2001) Chains of care: a counterbalance to fragmented health care. *Journal of Integrated Care Pathways*, 5, 126-132.
- Ahgren B and Axelsson R (2005) Evaluating integrated health care: a model for measurement. *International Journal of Integrated Care*, 5, 31 August.
- Ahgren B and Axelsson R (2007) Determinants of integrated health care development: chains of care in Sweden. *International Journal of Health Planning and Management*, 22, 145-157.
- Audit Commission (2008) *The Right Result? Payment by Results 2003-07*, London.
- Audit Commission (2009) *Means to an end: Joint financing across health and social care*, London, Audit Commission.
- Baker GR, et al. (2008) Jönköping County Council - Småland, Sweden. *High Performing Health Care Systems: Delivering Quality By Design*. Toronto, Longwoods Publishing.
- Bergman H, et al. (1997) Care for Canada's frail elderly population: fragmentation or integration? *CMAJ Canadian Medical Association Journal*, 157, 1116-21.
- Bundred K, Owens C, Chidgey b and Department of Health. Social Services Inspectorate. South Inspection Group (2001) *Inspection of mental health services: Isle of Wight Council: 26 February - 9 March 2001*, London
- Coburn AF (2001) Models for integrating and managing acute and long-term care services in rural areas. *Journal of Applied Gerontology*, 20, 386-408.
- Craig P, et al. (2008) Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*, 337, a1655.
- Darzi A (2008) *High quality care for all: NHS next stage review final report*, London, Department of Health.
- Department of Health (2006a) *Our Health, Our Care, Our Say: A new direction for community services.*, London, Department of Health.
- Department of Health (2006b) *Partnerships for Older People Projects (POPP) grant 2006-08: round 1 POPP pilots*, [Leeds], Department of Health.
- Department of Health (2006c) *Partnerships for Older People Projects: Making the shift to prevention*, London, Department of Health.
- Department of Health (2007) *Options for the Future of Payment by Results: 2008/09 to 2010/11*, Leeds, Department of Health.
- Department of Health (2008a) *Efficiency Appendix to NHS Operating Framework*, London.
- Department of Health (2008b) *Integrated Care Pilot Programme: Prospectus for potential pilots*, London, Department of Health.
- Department of Health and Lawlor J (2006) *Report on the tariff setting process for 2006/07*, London, Department of Health.
- Department of Health. Health and Social Care Joint Unit (2002) *Reducing delayed discharges: regulatory impact assessment*, London, Department of Health.
- Farrar S, et al. (2007) *National Evaluation of Payment by Results*, Aberdeen, University of Aberdeen.
- Farrar S, et al. (2009) Has payment by results affected the way that English hospitals provide care? Difference-in-differences analysis. *BMJ*, 339, b3047.
- Fine M, Pancharatnam K and Thomson C (2000) *Coordinate and integrated human service delivery models*, The University of New South Wales.
- Fisher HM and Raphael TG (2003) Managed long-term care: care integration through care coordination. *Journal of Aging and Health*, 15, 223-45.

- Fletcher P (2008) Strategic commissioning for older people: connecting up social care, healthcare and housing with a wider wellbeing approach. *Journal of Care Services Management*, 2, 154-166.
- Freeman T and Peck E (2006) Evaluating partnerships: a case study of integrated specialist mental health services. *Health and Social Care in the Community*, 14, 408-417.
- Glendinning C, Hudson B, Hardy B and Young R (2004) *The Health Act 1999 section 31 partnership 'flexibilities'*.
- Grilli R, Donatini A and Taroni F (2001) Healthcare Reform and Disease Management in Italy: Promoting the Effectiveness and Appropriateness of Health Service Use *Disease Management and Health Outcomes*, 9, 441-449.
- Gulliver P, Peck E and Towell D (2002a) Evaluation of the integration of health and social services in Somerset: part one: final results. *MCC : building knowledge for integrated care*, 10, 32-37.
- Gulliver P, Peck E and Towell D (2002b) Evaluation of the integration of health and social services in Somerset: part two: lessons for other localities. *MCC : building knowledge for integrated care*, 10, 33-38.
- Hébert R, Tourigny A and Raïche M (2009) *Volume II: Integration of Services for Disabled People: Research Leading to Action*.
- Heenan D and Birrell D (2006) The integration of health and social care: the lessons from Northern Ireland. *Social Policy and Administration*, 40, 47-66.
- Henderson LR and Scott A (2001) The costs of caring for stroke patients in a GP-led community hospital: an application of programme budgeting and marginal analysis. *Health and Social Care in the Community*, 9, 244-54.
- Henwood M (2006) Effective partnership working: a case study of hospital discharge. *Health and Social Care in the Community*, 14, 400-407.
- Hudson B (2004) Care trusts: a sceptical view. In Glasby J and Peck E eds. *Care trusts: partnership working in action*. London, Radcliffe Medical Press.
- Hultberg E-L, Glendinning C, Allebeck P and Lonroth K (2005) Using Pooled Budgets to Integrate Health and Welfare Services: A Comparison of Experiments in England and Sweden. *Health and Social Care in the Community*, 13, 531-541.
- Johri M, Beland F and Bergman H (2003) International experiments in integrated care for the elderly: a synthesis of the evidence. *International Journal of Geriatric Psychiatry*, 18, 222-35.
- Joint Improvement Team (2009) *International Use of Tariffs for Hospital Reimbursement: research study*.
- Kickham NTM (1994) Inter-sectoral collaboration and the World Health Organisation's Health for All initiative; a study of five projects in Eastleigh, Hampshire. Southampton.
- Kizer KW and Dudley RA (2009) Extreme makeover: Transformation of the veterans health care system. *Annual Review of Public Health*, 30, 313-39.
- Kodner DL (2002) The quest for integrated systems of care for frail older persons. *Aging-Clinical and Experimental Research*, 14, 307-13.
- Kodner DL (2006) Whole-system approaches to health and social care partnerships for the frail elderly: an exploration of North American models and lessons. *Health and Social Care in the Community*, 14, 384-390.
- Landi A, et al. (2001) A new model of integrated home care for the elderly impact on hospital use. *Journal of Clinical Epidemiology*, 54, 968-970

- Lees L and Temple M (2004) Must get out more often. *Health Service Journal*, 114, 22-23.
- Leutz WN (1999) Five laws for integrating medical and social services: lessons from the United States and the United Kingdom. *MILBANK QUARTERLY*, 77, 77-110.
- Lewis R and Glasby J (2006) Delayed discharge from mental health hospitals: results of an English postal survey. *Health and Social Care in the Community*, 14, 225-230.
- Mannion R, Marini G and Street A (2008) Implementing payment by results in the English NHS: Changing incentives and the role of information. *Journal of Health Organization and Management*, 22, 79-88.
- Marini G and Street A (2006) *The administrative costs of payment by results*, York, Centre for Health Economics.
- Martin S, Rice N and Smith PC (2007) *The Link Between Health Care Spending and Health Outcomes: Evidence From English Programme Budgeting Data*, York, University of York.
- Mason A and Goddard M (2009) Payment by Results in Mental Health: A Review of the International Literature and an Economic Assessment of the Approach in the English NHS. *CHE Research Paper 50*, 71.
- Miraldo M, Goddard M and Smith PC (2006) *The incentive effects of payment by results*, London, Dr Foster Intelligence.
- Moorin R and Holman C (2006) Does federal health care policy influence switching between the public and private sectors in individuals? *Health Policy*, 79, 284-295.
- Mui AC (2001) The Program of All-Inclusive Care for the Elderly (PACE): an innovative long-term care model in the United States. *Journal of Aging and Social Policy*, 13, 53-67.
- Newcomer R, Harrington C and Kane R (2000) Implementing the second generation social health maintenance organization. *JOURNAL OF THE AMERICAN GERIATRICS SOCIETY*, 48, 829-34.
- O'Leary L (2004) The Northumberland experience. In Glasby J and Peck E eds. *Care trusts: partnership working in action*. London, Radcliffe Medical Press.
- Oliver A (2007) The Veterans Health Administration: an American success story? *MILBANK QUARTERLY*, 85, 5-35.
- Oliver A (2008) Public-sector health-care reforms that work? A case study of the US Veterans Health Administration. *The Lancet*, 371, 1211-1213.
- Peck E, Gulliver P and Towell D (2004) The Somerset story: the implications of care trusts of the evaluation of the integration of health and social services in Somerset. In Glasby J and Peck E eds. *Care trusts: partnership working in action*. London, Radcliffe Medical Press.
- Peck E, Gulliver P, Towell D. Centre for Mental Health Services Development (2002) *Modernising partnerships: an evaluation of Somerset's innovations in the commissioning and organisation of mental health services: final report*, London Institute for Applied Health and Social Policy.
- Ramsay A and Fulop N (2008) *Integrated Care Pilot Programme: The Evidence Base for Integrated Care*, London, Department of Health.
- Ramsay A, Fulop N and Edwards N (2009) The evidence base for vertical integration in health care. *Journal of Integrated Care*, 17, 3-12.

- Rummery K (1999) The way forward for joint working? Involving primary care in the commissioning of social care services. *JOURNAL OF INTERPROFESSIONAL CARE*, 13, 207-18.
- Ryan J and Super N (2003) Dually eligible for Medicare and Medicaid: two for one or double jeopardy? *Issue Brief/National Health Policy Forum*, 1-24.
- Secker J, Davies P and Howell V (2000) Joint commissioning for mental health services between primary health care and social care in Wales. *Primary Health Care Research and Development*, 1, 179-190.
- Social Work Inspection Agency (SWIA) (2007) *Multi-agency inspection: Collaborative working across services for older people in Tayside*, Edinburgh, Social Work Inspection Agency.
- Social Work Inspection Agency (SWIA) (2008) *Multi-agency inspection: Collaborative working across services for older people in Forth Valley*, Edinburgh, Social Work Inspection Agency.
- Swerissen H (2002) Toward greater integration of the health system. *AUSTRALIAN HEALTH REVIEW*, 25, 88-93.
- Trägårdh B and Lindberg K (2004) Curing a meagre health care system by lean methods - translating "chains of care" in the Swedish health care sector. *International Journal of Health Planning and Management*, 19, 383-398.
- Walker N (2008) Joining the dots: the case for joint commissioning. *Journal of Care Services Management*, 2, 239-252.

GLOSSARY

Adverse selection: The inability of health care providers in some markets to assess whether potential enrollees are at high risk or low risk of requiring (expensive) health care services.

Barriers to entry: Economic or technical factors which make it difficult/prevent providers entering a market and competing with existing providers. For example, the existence of large economies of scale may mean that a new provider would have to invest large sums and provide on a larger scale in order to compete on price.

Chains of Care (CC): Condition-specific care pathways that specify the distribution of clinical work between different providers. CCs include all the health care provided for a specific group of patients and involve co-ordinated activities within the health care sector. They are based on clinical guidelines and are developed on a multi-disciplinary, consensual basis. As part of CC, an option is to integrate financing, with a Chain of Care Manager (CCM) responsible for activities, resources and finance.

Confounding: Confounding is the spurious association between two variables, caused by another variable (the confounder) which is correlated with the other two.

Difference in difference analysis: An econometric technique applied to non-experimental (non-randomised) data used to measure the change induced by a treatment or service at a particular time-point. The change in the affected group is assessed relative to the change in an unaffected (control) group. This enables the analysis to control for exogenous effects, such as policy changes.

Economies of scale: Factors which cause the average cost of producing a commodity/service to fall as output of the commodity/service rises.

Economies of scope: Factors which make it cheaper to produce a range of related products/services than to produce each product/service separately.

External validity: This refers to the generalisability of the results to alternative settings.

Healthcare Resource Group (HRG): Similar to the Diagnostic Related Group (DRG), this term used in the English NHS to define a group of clinically similar treatments and care that requires similar levels of healthcare resource.

Integrated Resource Framework (IRF): An approach which seeks to link resources and budgets spent on populations to outcomes and to facilitate investment choices. IRF was developed jointly by the Scottish Government, NHS Scotland and the Convention of Scottish Local Authorities (COSLA), to shift the balance of care by working in a more integrated way.

Integrated Resource Mechanisms (IRMs): A generic term to label the approaches used outside of Scotland to link resources and budgets spent on populations to outcomes and to facilitate investment choices. See Table 4.2 for different types of IRMs and definitions of terms.

Internal validity: To infer estimates of the efficacy or relative efficacy of the treatments / services (the effect of the intervention). RCTs often have greater internal validity than other designs as their results are less likely to be biased and less subject to the effects of confounding than e.g. non-experimental studies.

Long term Care (LTC): This is a generic term for a range of services which may be used to help meet the medical and non-medical need of people who are unable to care for themselves for long periods of time. People with disabilities and chronic conditions can fall into this category.

Multilevel modelling: A statistical technique applied to observational data which has a nested/multilevel/hierarchical/clustered structure. For example, level one could relate to patients and level two could relate to the IRM/locality. In this way, between-IRM variance (i.e. different locality) and within-IRM variance (i.e. at the level of the patient) could be analysed is obtained.

Natural experiment: To investigate the effect of a naturally occurring event.

Program for All-Inclusive Care for the Elderly (PACE): A US based programme for 55+ year olds who are eligible for nursing home admission and who are financed by capitation payments from Medicare and Medicaid. PACE provides adult day health care centres offering social and respite services, among other services.

Propensity score: A predicted probability of group (unit of analysis) membership based on observed predictors, usually obtained from a logistic regression.

Randomised controlled trial (RCT): The most reliable experimental design for evaluating the effect of an intervention is the RCT. Patients are randomly assigned to receive the interventions that are being compared.

Social Health Maintenance Organisation (S/HMO): A US approach to providing care for all older people of 65+ and which focuses on providing care for those with chronic conditions. The capitated programme provides standard Medicare coverage for hospital and physician services, medications and expanded care benefits (e.g., personal care, homemaker, adult day care, respite care, home modification, and personal emergency response systems) intended to support social needs. Its underlying rationale is that social services will ultimately improve medical care. It is financed through Medicare and Medicaid, private premiums and copayments.

Sunk Costs: These costs are fixed in that, once incurred they cannot be recovered. Typically, when a new programme is implemented, there are considerable upfront costs incurred, even before the programme is up and running and reaping any rewards to the investment.

APPENDIX 1: Data extraction tables

Table key: Long Term Care = LTC, Intervention Group – IG, Control Group – CG

Appendix Table 1: Australia: Coordinated Care Trials

Country	Australia
Name/type	Coordinated Care Trials (CCT), Australia (Swerissen, 2002, Kodner, 2002). Focuses on first round trials 1997 – 2000. Additional second round trials have taken place 2002 – 2005.
Description	CCT are regional pilots to test whether coordination of multi-disciplinary care for people with complex needs through care coordination and pooling of funds from Commonwealth and state programmes would result in improved client health and wellbeing within current resource levels. <u>Scope:</u> Health and social care. <u>Care setting:</u> Community-based.
Study design	National evaluation and local evaluations. Nine trials, 4 focusing on 65+ year olds with complex needs and / or multiple services. Experimental design, geographic control group design, mixed design.
Types of integrated resource mechanism	Care coordination, pooled funds and doctor involvement in comprehensive care planning. Integrated management and provision with pooled funding.
Key findings	<u>Effectiveness</u> Qualitative evidence to suggest participants experienced an increased sense of wellbeing due to access to care coordination, some empowerment of clients and family caregivers. <u>Service use and costs</u> Some trials (i) provided care coordination within existing resources and (ii) reduced hospitalisation. Overall increase in community based services, though inconsistent pattern across trials. Some service substitution, but did not reduce costs. Enhance flexibility of service but did not enhance efficiency. Effective design and use of protocols to assist with budget decisions. <u>Barriers</u> Lack of specificity in eligibility criteria. Lack of training.

Appendix Table 2: Canada: Système de services intégrés pour personnes âgées en perte d'autonomie (SIPA)

Country	Canada
Name/type	Care for frail elderly, Système de services intégrés pour personnes âgées en perte d'autonomie, SIPA. Montreal Regional Health Board, Canada, (Bergman et al., 1997) (Johri et al., 2003, Kodner, 2006). Evaluations; 1995/6, 1999/2000 stage I (Johri et al., 2003), 2000/1 stage II (Johri et al., 2003).
Description	<p>Several acute care hospitals and centres locaux de services communautaires (CLSCs) in the Montreal area had formally submitted joint requests to act as SIPA centres. Under SIPA, all public and social services would be integrated and the organisation would be responsible for all costs incurred for the population served, i.e. 64+, moderate disability and willingness of carer(s) to participate. Universal access, publicly managed health care system. Patients referred by hospitals, doctors, outreach and existing home care clients. Government payer. It was decided that SIPA would not become a permanent programme. Quebec government to incorporate elements of the model into province's existing health and social service system.</p> <p><u>Scope</u> Primary and secondary health care and social care and community care including prevention, some respite, rehabilitation, medication technical aids and long-term care (LTC) – but not for specialised services e.g. transplantation. One SIPA per region.</p> <p><u>Care setting</u> Community-based primary care system.</p>
Study design	<p>Descriptive only. Authors' state next step is to organise demonstration projects. Funding based on funds currently allocated to care for the target population. SIPA would be able to ask patients to reimburse a % of the cost of certain services. Governance on organisational activity with e.g. CLSC or a consortium of public institutions including hospitals.</p> <p>Johri et al, 2003 report on initial results of experimental trial after 5 months of operation. IG (intervention group) vs. CG (control group). 1,230 frail elderly persons (and their carers) recruited from 2 sites and randomly allocated to programme or conventional care.</p>
Types of integrated resource mechanism	<p>Integrated management and provision, lead commissioner, pooled funding.</p> <p>Consolidated model of case management provided by multidisciplinary team. SIPA organises and provides most community services. Contracted services (e.g. acute care in hospital or LTC institutions) SIPA maintains financial responsibility for costs incurred and shares clinical responsibility. SIPA organisations publicly funded and managed and responsible to its board, the regional health board and the ministry.</p>
Key findings	<p><u>Effectiveness</u> Empowerment and choice, respecting dignity and preferences of elderly people and their carers. SIPA has to assure that the person has a choice of care providers. Significant increase in influenza and pneumococcus vaccination rate (IG: 75% vs. CG: 45%) for 65+ year olds. Overall no difference in health status across groups, IG trend to decreased mortality.</p> <p><u>Service use and costs</u> IG vs. CG: Trend towards lower use of hospital emergency services. Costs regarding emergency doctor fees estimated to be 23% less. No observed increase in out-of-pocket costs for IG. Trend in greater use of community services and technical aids.</p> <p><u>Barriers</u> Challenges of using a capitation prepayment to allocate project funds. Difficulty of determining an appropriate capitation rate in a publicly funded system.</p> <p><i>Context:</i> Because of their universal and comprehensive mandate and funding, acute hospitals are expected to resolve all medical and social problems.</p>
Implementation issues / critical success factors	<p>Community system based on single entry access point, primary care which is responsible for full range of health and social services, responsible for a defined population. Define eligible population. Eligible if (i) have severe disability in 1 of the following areas, or mild to moderate disability in (ii) activities of daily living, instrumental activities of daily living, mobility, mental status of consciousness.</p> <p>Multidisciplinary team comprising health and social service professionals, including person's family doctor.</p> <p>Provide case management with clinical responsibility for the entire range of services provided. Funded on a prepayment basis based on capitation with financial responsibility and leverage across the full range of services.</p> <p>Independent and regular review of the programme to evaluate (i) impact on elderly within its population, including clientele, (ii) quality of care, (iii) its administrative operations.</p>

Appendix Table 3: Canada: Programme of Research to Integrate Services for the Maintenance of Autonomy (PRISMA)

Country	Canada
Name/type	Programme of Research to Integrate Services for the Maintenance of Autonomy (PRISMA), Canada (Kodner, 2006) 1997 – 2003 (Hébert et al., 2009).
Description	Aim to integrate service delivery to ensure clients' functional autonomy. <u>Scope</u> 65+ year olds who present with moderate to severe disabilities, show good potential for staying at home, need 2+ health care or social services and live in the service area. <u>Care setting</u> Community-based.
Study design	First pilot in Bois-Francs region of Quebec. Quasi-experimental study. Before and after study measurement. Measurement 12 months prior to implementation (time 1) and at 12 months (time 2) and 24 months (time 3) post implementation. Quasi-experimental study (3 experimental and 3 comparison areas).
Types of integrated resource mechanism	Coordinated model of integrated care. Integration management and provision with pooled resources (see http://www.prismaquebec.ca).
Key findings	<u>Effectiveness</u> Reduction in institutionalisation, lower client preference to be institutionalised, more frail elderly clients maintained at assessed functional autonomy levels at time 1 and time 2. Effect disappeared at time 3. Positive effect on carer burden but not on mortality. <u>Service use and costs</u> Overall use of services did not change.

Appendix Table 4: England: Care Trusts

Country	England, UK
Name/type	Care Trusts (Audit Commission, 2009), England.
Description	<p>NHS and council health-related responsibilities are combined within an NHS body under single management. Formed from an existing NHS trust or from a PCT (in which case the PCT is both commissioner and provider). There are currently 10 care trusts, 5 based on the PCT model and 5 based on Mental Health (MH) NHS Trusts. Arrangements vary geographically.</p> <p><i>NE Lincolnshire</i>: council hosts joint public health and integrated children’s services; Care Trusts hosts adult social care, mental health and learning disability.</p> <p><i>Solihull</i>: adult social care integrated with PCT and department of public health (DPH) jointly appointed with council.</p> <p><i>Torbay</i>: health and social care co-ordinators as first point of contact for users, with teams commissioning.</p> <p><u>Scope</u> Joint planning, commissioning and delivery of health and social care services.</p> <p><u>Care setting</u> Geographically defined areas.</p>
Study design	Mixed methods (qualitative and quantitative) used by Audit Commission’s national evaluation (Audit Commission, 2009). Primary research [national questionnaire survey (LA and PCT auditors); workshops /interviews (NHS and LA staff) with data collection]. Secondary research [policy/ literature review; analysis of national expenditure and activity datasets].
Types of integrated resource mechanism	Fully integrated funding, planning, commissioning and delivery.
Key findings	<p><u>Effectiveness</u> Analysis of national routine data found no evidence of improved health outcomes or of greater efficiency in Care Trusts. Local evaluations typically identified improvements in process measures rather than user outcomes; the latter were rarely assessed or adequately specified (e.g. aiming for ‘seamless’ provision).</p> <p><u>Service use and Costs</u> Little evidence identified. Anecdotal report that one care trust (NE Lincolnshire) reduced costs by using pooled funds for continuing care for older people. The Trust commissioned specialist MH services to inform care home placement (Audit Commission, 2009) (Box 3). Implementation costs may be “substantial” and comprise senior management time and front-line staff time adapting to structural and cultural changes (Glendinning et al., 2004).</p> <p><u>General barriers</u> Local relationships a driving factor for choice of integration approach: lack of relationship with neighbouring PCTs means that NHS bodies may be more likely to join forces with local councils. Practical difficulties may arise if Care Trust staff operate under different pay, pension or human resources support (e.g. if staff are transferred from the council to the care trust) (Hudson, 2004).</p>
Implementation issues / critical success factors	<p>Integration of resources and delivery can be achieved without the structural change needed to be a Care Trust (Hudson, 2004, Audit Commission, 2009).</p> <p>History of good interagency relationships important for Northumberland and Somerset (similar model, but not care trust) (O’Leary, 2004, Peck et al., 2004). Northumberland’s rationale for adopting care trust status was complex but driven by below average health outcomes and above average health inequalities (O’Leary, 2004).</p>
Implications for IRF/IRF evaluation	<p>Performance measures (including user outcomes) need to be agreed, assessed at baseline and systematically monitored at agreed intervals (e.g. annually). They may be linked to national outcome agreements, where appropriate.</p> <p>Possible outcome measures include:</p> <ul style="list-style-type: none"> • Avoidable admission rates (e.g. falls-related admissions in older people) • Emergency admission rates • Rates of delayed transfers of care • User satisfaction surveys <p>Standard legal document from government useful (para 53).</p>

Appendix Table 5: England: Cross Charging

Country	England, UK
Name/type	Cross charging (Audit Commission, 2009, Department of Health. Health and Social Care Joint Unit, 2002, Henwood, 2006, Lees and Temple, 2004, Lewis and Glasby, 2006) England.
Description	<p>System of mandatory daily penalties made by local authorities to health bodies to compensate for delayed discharges in acute care for which the LA is solely responsible. NHS bodies have a duty to notify LAs of inpatients' community care needs.</p> <p>Sweden had used the system; the Wanless 2002 report suggested that the government examine its merits (Henwood, 2006).</p> <p><u>Scope</u> Health and social care.</p> <p><u>Care setting</u> Acute and intermediate care. Does not apply to mental health or non-acute settings.</p>
Study design	<p>National evaluation study (Henwood, 2006).</p> <p>Local pilot case studies (no formal evaluations identified) (Lees and Temple, 2004). Innovative approaches included developing an accurate measure of estimated discharge date; community-based urgent care team to prevent avoidable admissions; commissioning of additional step-down housing; additional hospital-based occupational therapy; and the integration of secondary and intermediate care teams (both included health and social care staff).</p>
Types of integrated resource mechanism	Cross charging (transaction payments)
Key findings	<p><u>Effectiveness</u> Evidence that charges accelerated the rate of decline of delayed discharges. However, the proportion of discharges to permanent nursing / residential homes from hospitals increased; rates of emergency readmissions and readmissions within 30 days also rose (Henwood, 2006).</p> <p>Southwark council put the discharge grant funding towards a pooled budget with a local hospital trust. Monies were used to fund schemes to reduce avoidable admissions and reduce discharge delays, with some anecdotal success (Lees and Temple, 2004).</p> <p><u>Service use and Costs</u> Delayed Discharge grant funded from £100m transfer from NHS to LA. In 2006, charge was £100-120/day (Henwood, 2006). Now funded as part of LA baseline allocation.</p> <p><u>General barriers</u> Cross charging may have perverse incentives (e.g. to discharge inappropriately) and could undermine partnership working (Henwood, 2006).</p>
Implementation issues / critical success factors	<p>Investment in a 'Change Agent Team', responsible for providing practical support to tackle delayed discharges, had a positive impact on local implementation efforts (Henwood, 2006).</p> <p>To reduce delayed discharges, multiple and co-ordinated approaches are needed (Lees and Temple, 2004).</p>
Implications for IRF/IRF evaluation	<p>A bespoke support service for LAs and health bodies appears to improve implementation and prevent inappropriate 'solutions'.</p> <p>Community and home-based preventative services may need to be increased (Henwood, 2006).</p> <p>Adequate transition period is essential.</p> <p>Options for health and social care bodies to use pooled funds to develop schemes to reduce delays and avoid admissions could be introduced alongside cross charging policies.</p> <p>Schemes need to be clearly specified, use an appropriate balance of rewards and sanctions and performance should be audited (Henwood, 2006)</p>

Appendix Table 6: England: Darlington Pilot

Country	England, UK
Name/type	Darlington UK (Johri et al., 2003) 1985/6
Description	Aim of pilot to keep select group of individuals discharged from long-stay hospital in the community. Use of case managers to promote integrated care delivery via a geriatric speciality, multidisciplinary team. Cost containment goals fostered through devolved budget. Patient doctors involved in care team. Service managers allocated budgets for caseload of approximately 20 clients. <u>Scope</u> Health and social care for physically frail elderly who would otherwise require LTC. <u>Care setting</u> Community-based model of care.
Study design	Quasi-experimental IG with a CG of similar patients identified in a long-stay ward of an adjacent health district. 101 patients in the pilot study. 3 groups of carers, (i) IG (those in the Darlington project), (ii) CG carers for hospital care, (iii) carers for community dwelling elderly receiving regular health and social care services.
Types of integrated resource mechanism	Integrated management and provision; lead commissioner. Case managers play an extensive role in assessment, care, planning, monitoring and review. Each service manager allocated budgets for caseload of approximately 20 patients.
Key findings	<u>Effectiveness</u> Assessed quality of life and stress level of carers. Statistically significant improvement in patient satisfaction and morale and reduction in depression. All patients discharged from hospital were initially placed within community living arrangements. IG patient at 6 months 2/3 were living at home, at 1 year, 1/2 were still at home. Over the duration of the study, on average, IG patients spent 137 out of 182 days at home. The CG spent an average of 12 days at home. Higher mortality in IG at 6 months, no difference across groups at 12 months. <u>Service use and costs</u> Explored use of services. Increase social services costs but lower overall costs to society than long stay hospital. Reduction in institutionalisation costs in IG and increase number of days at home, increase use and appropriate use of community services. Model thought to be capable of providing more effective care for elderly at same or lower cost.
Implementation issues / critical success factors	<i>Case management, geriatric assessment and a multidisciplinary team:</i> Teams are an important channel of clinical responsibility, linking medical and social care and financial responsibility to facilitate upstream substitution as appropriate. Link evaluation of geriatric care to control of LTC management. <i>Single entry point:</i> Some control over volume of care provided. Client volume linked to financial stability and efficient operation. Can select people on the basis of medical need and focus societal resources in this way. <i>Financial levers:</i> Promote upstream substitution of services. Link clinical and financial responsibility. To enhance efficiency, development of relative prices among caseworkers/ team while constructing care plans.
Implications for IRF/IRF evaluation	Selection of patients based on hospital discharge. This group tend to be short term patients who will retain accommodation since they could be more readily discharged. Model likely to be more appropriate for frail elderly with extensive social support or for socially isolated elderly with only a moderate degree of dependency.

Appendix Table 7: England: Health Eastleigh Initiative

Country	England, UK
Name/type	Eastleigh, Hampshire, (Kickham, 1994) 1999 - 2004
Description	<p>Aim to assess the impact of 5 separate, multi-agency projects in Hampshire as part of the Health Eastleigh Initiative.</p> <p>(i) <i>Community participation project</i>: Involve local agencies (i.e. in health, local authorities, education, police, housing, community development), fieldworkers and community to identify, plan and implement initiatives to meet local health needs. Limited resources include the time of the Health for All Co-ordinator and administrative costs to support the initiative. Time provided by all local agencies.</p> <p>(ii) <i>Healthy shopping scheme</i>: To highlight healthy, low-priced food available and to encourage food suppliers locally to stock healthy foods.</p> <p>(iii) <i>Inter-sectoral smoking prevention programme</i>: To prevent the uptake of smoking, education and motivational approaches to encourage cessation, advice from health care workers, provision of smoke-free environments.</p> <p>(iv) <i>Health promotion group</i>: Accident prevention, physical activity, healthy eating, dental health, smoking prevention, cancer prevention, HIV AIDS.</p> <p>(v) <i>Shared information project</i>: To assist in local planning of services</p> <p>The initiative followed the 1988 World Health Organisation's Health for All Project which aimed, among other things, to redirect the focus of health from the hospital, towards primary health care in the community and the European Health for All Initiative.</p> <p><u>Scope</u> Health promotion.</p> <p><u>Care setting</u> Community-wide model.</p>
Study design	Self-completed postal questionnaires, interviews with stakeholders, participant observation.
Types of integrated resource mechanism	Inter-sectoral collaboration. Investment in project co-ordinators but few other resource investments.
Key findings	<p><u>Effectiveness</u> Benefits of joint working across 5 projects included; broadens perspective, importance of following skills for joint working; honesty, clear focus, strong leadership, trust, communication, understanding and appreciating people's roles, responsibility, listening, joint ownership, commitment from all partners, regular contact, negotiation.</p> <p><u>Barriers</u> Lack of resources including money and time to be able to devote to the initiatives. Staff participating were given no additional time to support their involvement therefore the work was in addition to their existing workload.</p>
Implementation issues / critical success factors	Features for effective joint working include official sanction and management support including investment in resources, interagency involvement in planning and implementation, knowledge about mix of skills of individuals involved in a programme, shared vision and commitment, network awareness and the formalisation of collaboration.

Appendix Table 8: England: Hertfordshire Integrated specialist mental health service

Country	England, UK
Name/type	Integrated specialist mental health service, Hertfordshire County Council and its NHS partners. (Freeman and Peck, 2006) 2002 - 2004
Description	Partnership set up under Section 31 of the Health Act 1999. Comprising mental health, learning disability, drug and alcohol, and child and adolescent mental health services (CAMHS). <u>Scope</u> Health and social care for those with mental health problems. <u>Care setting</u> Community-based model of care.
Study design	Case study, multi-method. Evaluated the perceived impact of partnership working in integrated specialist mental health provision from the user, carer, service manager and front-line staff perspective. Focus groups undertaken with users and carers who had contact with the new specialist team/s and prior contact with generalist provision. Semi-structured interviews with each specialist and generalist team manager. Self-completed questionnaires of each member of staff within the specialist teams and the generalist Community Mental Health Teams pre and post provision of the new specialist service.
Types of integrated resource mechanism	County-wide pooled commissioning and provision budgets and joint commissioning arrangements, together with integrated service provision via Hertfordshire Partnership NHS Trust. Services commissioned jointly by 8 Hertfordshire Primary Care Trusts (PCTs) and the County Council. Decision making taking place at the Joint Commissioning Partnership Board.
Key findings	<u>Effectiveness of specialist service</u> User perspective, positive aspects; sensitivity and trustworthiness, provision of social care, liaison with other services and responsiveness to changing need. User perspective, negative aspects; some users preferred hospital inpatient services to e.g. assertive outreach teams as service perceived to be more established. Potential lack of continuity regarding staff involved in service provision. Carer perspective, positive aspects; Sensitivity and trustworthiness, responsiveness and dignity, social activities, reassurance and easing of carer burden, sensitivity to carers. Carer perspective, negative aspects; anxiety over losing a service, potential loss of the sanctuary of inpatient stay, ambivalence over potential tensions between client and carer wishes. Questionnaire responses; Job satisfaction and role clarity scores showed moderate to good levels of achievement, including perceived team effectiveness associated with the new service in 2004 compared to the old service in 2002. Note considerable differences across 5 localities. <u>Service use and costs</u> Not available. <u>Barriers</u> Pressures for fragmentation and integration. Distinct areas of interest by new teams and pressures to manage potential service overlaps. Impact of reconfiguration of services and concerns over recruitment and retention.
Implementation issues / critical success factors	Not available.
Implications for IRF/IRF evaluation	Authors note the challenges involved in evaluating the impact of complex service interventions on user, carer and staff perceptions of quality. Highly heterogeneous local contexts and dynamic national policy makes evaluation complex.

Appendix Table 9: England: Oxfordshire pooled budgets/ lead commissioning

Country	England, UK
Name/type	Oxfordshire County Council and PCTs pooled budget and lead commissioning 2001 - 2006
Description	The County Council became the lead commissioner for the services purchased. One of the 5 PCTs in Oxfordshire County Council became the lead organisation on behalf of the other PCT, based on a service level agreement. <u>Scope</u> Health and social care. <u>Care setting</u> Community based focus.
Study design	Observational data.
Types of integrated resource mechanism	Pooled budgets and lead commissioning for significant County Council Social and Community Services and PCT budgets to purchase primarily bed-based services for older people.
Key findings	<u>Effectiveness</u> Authors state, appropriate blurring of health and social care boundaries, streamlined payment service, thus reducing costs and bureaucracy, improved residential and nursing care purchasing, increased capacity for long-term placements, broader range of beds (e.g. intermediate care, respite beds etc). Sustained reduction in number of delayed transfers of care not achieved. <u>Service use and costs</u> Cost per capita data on residential and nursing care for older people for 2003/4 given and benchmarked against England average, similar authorities and Shire Counties. <u>Barriers</u> Financial pressures can cause a particular strain on relationships between partner organisations.
Implementation issues / critical success factors	A level of trust had to be developed between the organisations during the process to pool budgets. A process called "sloping shoulders scenario" was used in which the partners described their anxieties about the potential negative effect of one partner's difficulties on the other. In identifying and trying to resolve these issues, understanding improved, as well as genuine partnership working. External facilitators were used to raise questions and to obtain robust answers and to enhance the decision making process e.g. around the management of risk, especially financial risk.
Implications for IRF/IRF evaluation	Seek clarity and consensus at the outset on operational management, governance, performance management, exit strategies and reporting arrangements. Clear set of objectives required and communicated to all levels. Importance of annual review.

Appendix Table 10: England: Pooled budgets

Country	England, UK
Name/type	Pooled budgets England (Hultberg et al., 2005, Audit Commission, 2009). 1990s onwards
Description	<p>Pooled budgets are the most popular of the Health Act 1999 flexibilities used singly or combined with other flexibilities. Partnerships are underpinned by legal agreements between NHS body (PCT) and local authority (council). Aim to improve efficiency, reduce duplication and fragmentation, increase flexibility in use of resources to allocate them for maximum impact, regardless of organisational boundaries, improve coordination of front-line services. Project aims vary with local objectives and priorities.</p> <p>Pooled budgets considered most useful for fully integrated services with common objectives / strategies.</p> <p><u>Scope</u> Health and social care: typically applied to limited range of services (learning disability, community equipment and mental health services; rarely for older people's services).</p> <p><u>Care setting</u> Usually acute and community.</p>
Study design	<p>Qualitative evaluation of first 32 localities to use the flexibilities (Hultberg et al., 2005). Postal survey (all notifications) at baseline and 18 months. Case studies (10 partnerships selected on basis of range of services, budget size, organisational complexity and combinations of flexibilities). In-depth studies (3 sites where flexibilities considered most far reaching). Stakeholder interviews (managers, politicians, service user representatives).</p> <p>Mixed methods (qualitative and quantitative) used by Audit Commission's national evaluation (Audit Commission, 2009). Primary research [national questionnaire survey (LA and PCT auditors); workshops /interviews (NHS and LA staff) with data collection]. Secondary research [policy/ literature review; analysis of national expenditure and activity datasets]</p>
Types of integrated resource mechanism	Pooled budgets.
Key findings	<p><u>Effectiveness</u> Focus locally and nationally has been on process rather than outcome measures, which are rarely quantified or monitored. (Audit Commission, 2009). Qualitative evaluations suggest more of a whole system approach and greater recognition of interdependencies. Greater transparency, better understanding and use of expenditure data and potential for reductions in duplication. Opportunities to access new external sources of finances through the partnership. Useful for people requiring complex packages of local services (Hultberg et al., 2005). Analysis of national data found use of pooled budgets had little impact on per capita spend, no impact on emergency bed days when used for intermediate care, and no significant effect on delayed transfers of care. (Audit Commission, 2009)(para 15, 64, 68). Effect of pooled funds on efficiency or quality of care is unclear. Pooled budgets may encourage accountability, and clarity of objectives / constraints.</p> <p><u>Service use and costs</u> Costs "rarely quantified" (Audit Commission, 2009)(para 53). Greater access to equipment, building and staff. Potential high set up costs. Savings on out of area expenses as able to provide within partnership (Hultberg et al., 2005). Categories of cost include administrative and legal time (e.g. agreeing financial contributions, partnership arrangements and human resource issues); potential duplication of processes (para 53). Savings from operating costs (e.g. joint appointments) rarely reported (para 54) (Audit Commission, 2009).</p> <p><u>Barriers relating to pooled budgets</u> Resources and budgets identity is lost once pooled. Not required to spend budget in the same proportion as they were contributed, thus offering opportunities to shift the balance of provision. Can pose a threat. Change to pooled budgets potentially destabilising and takes time to reap any benefits. Ownership and commitment required by staff to make a success.</p> <p><i>Complexity</i>: of legal and financial frameworks to set up pooled budgets. Health and social care bodies have different VAT regimes, charging, planning and budgetary timetables, financial reporting arrangements, and accountability and governance arrangements. Many of these are driven by national requirements (para 40). Confusion over reporting and governance arrangements more common in health bodies; both health and social care bodies unaware of full range of joint available financing options and often misreported them</p>

	<p>(Audit Commission, 2009).</p> <p><i>Different perspectives:</i> Differences in funding streams across agencies, political accountabilities, organisational structures, professional cultures.</p> <p><i>Short-term ear-marked / targeted grants from central government:</i> difficult to manage within a pooled budget as “they generated unrealistic expectations about the level a partner’s contribution, which could subsequently be disappointed when a time-limited grant ended. Central government also usually required specific accounts of how such resources had been spent, which meant disaggregating them from the budget pool. Finally, pooled budgets effectively ring-fenced resources and therefore reduced the overall financial flexibility of the partner organisations’ mainstream budgets, e.g. any surplus in a pooled budget could not be used on services outside the pool.</p>
Implementation issues / critical success factors	<p>Good relationships are essential (Audit Commission, 2009).</p> <p>Signed agreements on specific services help ensure mutual understanding, and clear accountability and governance. (Audit Commission, 2009). Service level agreements and contracts aid budget monitoring, information sharing and user charges for social care. Legal frameworks should specify management of pooled budgets and staffing issues.</p> <p>Local frameworks to manage expenditure and services need to be appropriate to the size and objectives of the services involved</p> <p>Budget alignment may be useful interim stage to ‘test the waters’ for pooling (Audit Commission, 2009).</p>
Implications for IRF/IRF evaluation	<p><i>Self selection:</i> The flexibilities are permissive, not compulsory.</p> <p>Manage change: There is a need to manage inter-organisational working and inter-professional working. Some initial resistance to change may arise.</p> <p>Availability of voluntary budget-pooling can introduce new inequities. Consider impact within pooled budget provision, across agencies with pooled budgets and areas not covered by pooled budgets.</p> <p>Variations mandatory financial regimens for health and social care need to be addressed at national level to facilitate joint financing and joint working.</p> <p>Guidance, performance monitoring and data returns requirements need to be consistent across health and social care.</p> <p>In England, there is a move towards a single national indicator set.</p>

Appendix Table 11: England: Somerset mental health services

Country	England, UK
Name/type	Somerset Mental health services (Gulliver et al., 2002a, b, Peck et al., 2002, Peck et al., 2004). 1999 – 2001.
Description	Joint commissioning through the Joint Commissioning Board (JCB). Combined provision, integrating mental health and social care, including co-location. Budgets not pooled but aligned (“parallel”). Prototype for subsequent care trusts. Around 120 social care staff transferred to NHS Trust (p. 41) (Peck et al., 2004). <u>Scope</u> Health and social care (mental health). <u>Care setting</u> Acute and community care.
Study design	Partners commissioned a before and after study. Follow up was 1 and 2 years post implementation. Methods included structured interviews (96 service users, use of Lancashire Quality of Life Questionnaire, Camberwell Assessment of Need scale, Verona Service Satisfaction Scale); semi-structured interviews (senior managers of health and social services); focus groups (service users and their carers), staff surveys; workshops; non-participant based observation of Joint Commissioning Board meetings.
Types of integrated resource mechanism	Integrated management and provision with aligned budgets.
Key findings	<u>Effectiveness</u> <i>Prior to integration:</i> Service users generally happy with service received, though some concern about communication with staff members. Dissatisfied with inpatient services. Staff saw benefits in integration. <i>1 year post integration:</i> Little impact for service users, slight reduction in satisfaction with services received, staff appeared to be busier, staff had more paperwork. Increased appreciation by staff of roles of other disciplines. <i>Post integration evaluation by service users:</i> Many improvements in self-reported mental health status by service users (Peck et al., 2002). They reported there was more on offer to them, increase in % positive with self-concept, better coordination. A smaller number of service users reported engagement with service increased their independence. Negotiation of care plans not consistent practice. Concern about attitude and availability of staff. <i>Post integration evaluation by carers:</i> Some evidence of perceived improvements in service delivery, although these were not uniform. Changes in user satisfaction scores were not statistically significant (Peck et al., 2002). Poor carer experience was apparently related to individual staff attitudes; the problem was not systemic (Peck et al., 2004)(p. 46). <i>Post integration evaluation by staff members:</i> Evaluation of process measures suggested that restructuring was associated with short-term reductions in staff job satisfaction, morale and role clarity (p. 44) (Peck et al., 2004). Initial worsening of all quantitative measures of job satisfaction, followed by stabilisation and some report of minor improvements. Workload increased and concern about pressure on team managers. Concerns about representation by small disciplines at Trust management level. <i>Agencies involved in joint commissioning and combined provision of services:</i> Primary care representatives uncertain about role in JCB. Some user and carer members of the JCB questioned their role in the decision making process. <u>Service use and costs</u> Not reported. One study author noted that “financial savings are rarely attained” by joint financing (Peck et al., 2004) (p. 47).
Implementation issues / critical success factors	Staff identified key factors: organisational identity, role clarity and inter-disciplinary working, and leadership and management. Messages emerging from Somerset included setting realistic expectations given local history and context, care regarding culture and clarity to prevent staff anxiety about roles, creativity in support for managers and teams, inclusiveness showing benefits of integration to all providers, vigilance to ensure important objectives are not overlooked. Integration facilitated by existing good relations between senior health and social care management and by co-terminosity (Peck et al., 2004).
Implications	<u>Realism:</u> history and context of interagency relationships affects potential for integration; restructuring will

for IRF/IRF evaluation	inherit, not resolve, long-standing interagency problems. <u>Patience:</u> changes may take “three to five years to start to bear fruit” (p. 49). Things may get worse before they get better. <u>Focus:</u> integration is a means not an end; objectives need to be explicit and to actively inform decisions.
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Appendix Table 12: England: Isle of Wight mental health services

Country	England, UK
Name/type	Mental health services Isle of Wight (IoW) Council, UK (Bundred et al., 2001) Integrated Governance Strategy for the Isle of Wight NHS Primary Care Trust, 2007.
Description	Reports Social Services Inspectorate (SSI) of IoW Council's mental health services. Implementation of national and local objectives i.e. (i) responding to the new flexibilities and the mental health national service framework, (ii) appointment of a joint commissioner and a joint manager across health and social care and (iii) an assertive outreach team in place within health services had recently become a joint team with the appointment of an approved social worker. <u>Scope</u> Health and social care. <u>Care setting</u> 2001: Mental health care. 2007: Across primary, secondary and tertiary care setting.
Study design	Observational analysis from perspective of Social Services Inspectorate. Evaluation included IoW own evaluation, service data IoW submitted to Department of Health, survey of all mental health fieldworkers, analysis of 100 active cases, detailed examination of 20 case files, survey of 80 service users, 22 known carers and documentation by the council and partner agencies relevant to mental health services.
Types of integrated resource mechanism	2001: Mental health services (MH) joint commissioning and management with some joint provision. 2007: IoW PCT is unique. As well as commissioning services, it is also the main provider of care for Acute Care, Mental Health, Ambulance and Community Services. See http://www.iow.nhs.uk/index.asp?record=626
Key findings	<u>Effectiveness</u> MH: Evaluating national priorities and strategic objectives, effectiveness of service delivery and outcomes, quality of services for users and carers, fair access, cost and efficiency and management and resources. <u>Service use and costs</u> Not stated. <u>Local barriers/requirements</u> MH inspection: SSI stated that there was a need for health and social services to develop a framework for performance management. <u>Barriers</u> <i>Context:</i> Geographical i.e. potential issues if services managed from different locations.
Implementation issues / critical success factors	MH set programme goals, undertake regular audits. Include quality assurance and risk management process. Social services had identified unit costs of adult mental health services. Budgets well managed. Further integration, including pooled budgets, deemed possible when health service costing more reliable. Developing use of a joint client information system based on the social services system. Ensure systematic use of IT system (ACCISS) for caseload management. System useful for linking health information and SSD information on day centre users System could be used for recording contingency plans and potentially useful for out of hours team and to prioritise cases for file audit. Comprehensive training programme to support staff from SSD and NHS Trust. Included integration of care management, Care Programme Approach and sessions looking at sharing and developing core values and skills across the 2 agencies.
Implications for IRF/IRF evaluation	There are unique challenges for integrating care, provision and funding on the island.

Appendix Table 13: England: Pilot of Partnerships for Older People Projects (POPP)

Country	England, UK
Name/type	Pilot of Partnerships for Older People Projects (POPP)(Department of Health, 2006c)
Description	<p>The Department of Health's Social Care, Local Government and Care Partnerships Directorate is leading the 'Partnerships for Older People Projects' (POPP) programme. The aim of POPP programme is to deliver and evaluate (through 29 Local Authority led pilots), locally innovative approaches, aimed at creating a sustainable shift in resources and culture away from institutional and hospital-based crisis care for older people towards earlier, targeted interventions within their own homes and communities.</p> <p><u>Scope</u> Health and social care.</p> <p><u>Care setting</u> Across primary, secondary and tertiary care setting.</p>
Study design	<p>The Department of Health has funded a national evaluation of the POPP programme. Although interim reports of progress are available, the evaluation is ongoing and further final findings were due to be reported in Autumn 2009 according to the Department of Health website. http://www.dh.gov.uk/en/SocialCare/Deliveringadultsocialcare/Olderpeople/PartnershipsforOlderPeopleProjects/index.htm. Personal communication: the final report will be confidential until 18/01/10: its' official launch date. The POPP programme has been evaluated through 29 Local Authority led pilots. The national evaluation of POPP uses a three phase multi-method approach. The final phase brings the empirical and theoretical work together to explore, through stakeholder consensus workshops, how specific partnership and financial models can be integrated within other care groups.</p>
Types of integrated resource mechanism	<p>A range of resource transfer mechanisms will be used including; joint commissioning, local area agreements, Health Act Flexibilities, systems redesign, Care Trust as lead commissioner, payment by results, new tariff, practice-based commissioning and building on innovations forum work. Fletcher (Fletcher, 2008) gives an example of the Rochdale POPPs programme. Its Building Healthy Communities for Older People initiative is built on partnerships between older people in the 4 townships within the borough. The partnerships, made up of older people, the borough council and local agencies, plan to devolve development funding to commission services that older people themselves have identified as key to sustaining wellbeing and independence.</p>
Key findings	<p><u>Effectiveness</u> Findings not yet available (report expected early 2010, personal communication).</p> <p><u>Service use and costs</u> Key findings to date: POPP pilot sites have a significant effect on reducing emergency bed-day use when compared with non-POPP sites. The results show that for every £1 spent on POPP, an average of £0.73 will be saved on the per-month cost of emergency bed-days, assuming the cost of a bed-day to be £120. Users also reported that their health related quality of life improved in five key domains (mobility, washing/dressing, usual activities, pain and anxiety), following their involvement in the POPP projects. An analysis of those sites where data are currently available (11 out of 29 sites) appears to demonstrate the cost-effectiveness of POPP projects. There is an intention to sustain just under half of the projects and over the next year, further mainstreaming will be carried out. The POPP programmes also appear to be associated with a wider culture change within their localities. Generally, there seems to be a greater recognition of the importance of including early intervention and preventative services focused toward well-being. Older people as volunteers are providing almost half of the staffing across the POPP programme. However, their involvement in local programme design decision making and evaluation is more limited.</p>

Appendix Table 14: England / Northern Ireland: commissioning models for social care

Country	England and Northern Ireland
Name/type	Three models of primary care involvement in commissioning social care services; (i) locality/area-level commissioning (Easington, Durham and North Down, Northern Ireland), (ii) practice-based commissioning (Bromsgrove, Worcestershire and Arley, Warwickshire and (iii) commissioning for individuals (Malmesbury, Wiltshire, Lyme Regis, Dorset and Castlefields) (Rummary, 1999).
Description	The aim of the study was to identify different models of primary care involvement in commissioning social care services.
Study design	A review of the literature was undertaken to identify locations where there was significant primary care involvement in the commissioning of social care services. Sites were included if they involved commissioning of services and were not overwhelmingly similar to a site already chosen for the study. Interviews were undertaken with key health and social care stakeholders at each site.
Types of integrated resource mechanism	<p>(i) Locality/area-level commissioning: GPs involved in commissioning <u>all</u> the health and social care services within a given locality. Members of the Primary Health Care Team (PHCT) involved in mainstream joint commissioning process (i.e. Easington). Alternatively, the GP representative holds a real / nominal budget for health and social care for patients on behalf of PHCT (e.g. North Down Total Purchasing Pilot).</p> <p>(ii) Practice-based commissioning: Commissioning takes place for patients of one particular practice or a group of practices. Only <u>some specific</u> health and social care services are commissioned within the locality (e.g. Bromsgrove, Worcestershire and Arley, Warwickshire).</p> <p>(iii) Commissioning for individuals: Most common model. The focus is on improving access to services for a practice's population, rather than commissioning services. (e.g. Malmesbury, Wiltshire, Lyme Regis, Dorset and Castlefields). The 'attached' care managers of integrated teams are not part of the PHCT.</p>
Key findings	<p><u>Effectiveness and barriers</u></p> <p>Locality / area-level commissioning is likely to offer the greatest potential for commissioning service developments in social care. Within this model, concerns were raised about the ability of the PHCT to act as a team, involving all team members in the commissioning process. In terms of the practice-based commissioning model, the authors suggested that some control over the budget would appear to be necessary to be able to shift contracts and change service provision. The commissioning for individuals model appeared to offer the least power to leverage the social services planning and purchasing.</p> <p>All sites reported improvements in <i>interprofessional working</i>. The locality/area-level commissioning model gives GPs the opportunity to learn about social service provision. However, it does not offer frontline practitioners the chance to work together and it excludes providers. Differences in perspective between members of the PHCT and social care professionals. Social services are concerned with <i>equitable</i> access to services for groups of people, whereas PHCT concerned with equitable access to services for individuals. The locality/area level commissioning approach offers the best approach. <i>Professional accountability</i> was experienced differently by health and social care professionals. Professional accreditation within health used to maintain professional standards. Social service practitioners do not have a comparable accreditation system. Professionally qualified line manager used to ensure professional standards are maintained. <i>Organisational accountability</i> also differs with social care professionals accountable to local electorate for purchasing decisions, whilst within health professional are not directly accountable to local citizens. This impacts on working style and is a barrier to joint working.</p>

Appendix Table 15: Italy: Roverto

Country	Italy
Name/type	Rovereto project (Johri et al., 2003). 1995/6
Description	Introduced 1990s. Integrated programme of health and social care managed as a continuum of care through case management including services integrated with social care. Services for frail elderly, > 65 with multiple geriatric conditions who were receiving conventional home care services. Government payer. Patients identified and referred through agency home health agency records. Single entry point system. <u>Scope</u> Health and social care including home health agency. <u>Care setting</u> Community-based geriatric care.
Study design	Two studies (i) an experimental trial with patients randomised to IG (intervention group) or CG (control group, conventional care). One year follow up, (ii) a quasi-experimental before and after study.
Types of integrated resource mechanism	Limited details available. Integrated management and provision.
Key findings	<u>Effectiveness</u> Pattern of outcomes for IG variable, CG functional outcomes deteriorated. Overall, health outcomes judged to be better for IG but further information not provided. <u>Service use and costs</u> IG vs. CG: less home support, fewer GP visits, significantly fewer acute hospital admissions, fewer cumulative days in acute hospital, trend towards lower rates of admission to nursing home, almost have the number of cumulative days in nursing homes. Estimated total cost savings per person per year was Lire 1,125 (1998).
Implementation issues / critical success factors	Case management, geriatric assessment and a multidisciplinary team, single entry point, financial levers.
Implications for IRF/IRF evaluation	The transferability of these findings to the Scottish setting is unclear.

Appendix Table 16: Italy: Vittorio Veneto

Country	Italy
Name/type	Vittorio Veneto demonstration (Johri et al., 2003, Landi et al., 2001) 1997/8
Description	Participates in Italy's Silver Network project. Single entry point, care for frail older people living in the community. The Community Geriatric Evaluation Unit composed of a multi-disciplinary group of professionals. Geriatric assessment and case management. Government payer. Referral by doctors (72%), families (19%), hospitals (9%). <u>Scope</u> Health and social care including home health agency. <u>Care setting</u> Community-based.
Study design	Quasi-experimental study. 6 month follow-up. Before and after study. Hospital admissions for same patients compared 6 months prior to implementation of programme and 6 months following the programme.
Types of integrated resource mechanism	Integrated management with lead commissioner. Integrated programme of health and social care managed as a continuum of care through case management.
Key findings	<u>Effectiveness</u> New programme positive impact on several functional measures. <u>Service use and costs</u> IG vs. CG: statistically significant reduction in rate of acute hospitalisation, in number of acute bed days per patient and reduction in length of stay per treatment episode. Reductions in rates of institutional LTC use. 29% cost reduction in IG with estimated cost savings of 1,260 Lire. Savings due to reduction in inpatient care. Programme deemed cost-effective. <u>General barriers</u> Not available.
Implementation issues / critical success factors	Case management, geriatric assessment and a multidisciplinary team, single entry point, financial levers.
Implications for IRF/IRF evaluation	The transferability of these findings to the Scottish setting is unclear.

Appendix Table 17: Northern Ireland: Integrated Health and Social Services Boards

Country	Northern Ireland
Name/type	Integrated Health and Social Services Boards. Northern Ireland (Heenan and Birrell, 2006, Hudson, 2004)
Description	Developed in 1970s. Key principles of the service include holistic working through programmes of care (PoCs), and integrated management. PoC are basis for resource procurement and allocation. Integration differs across programmes with mental health and learning disability being the most and childcare the least integrated. Single budget per programme. Client had access to key worker to help them navigate the array of services available. <u>Scope</u> Health and social care. <u>Care setting</u> Community based but includes secondary and tertiary care.
Study design	Qualitative evaluation (Heenan and Birrell, 2006) Semi-structured interviews (N= 24 senior managers from 4 health and social services boards, the 11 community health and social services trusts).
Types of integrated resource mechanism	Structural integration of health and social services functions (management and provision). Single agency, one vision, shared aims and objectives, single funding source.
Key findings	<u>Effectiveness</u> Care coordinated, avoiding duplication of services. One point of entry. Negotiation of appropriate packages of care and regular review of needs achieved through PoCs. Cultural gap apparently overcome through professional forums run by each community trust. <u>Service use and costs</u> Not reported. <u>Barriers</u> <i>Professionalism</i> : Training was dominated by professional issues and identities. <i>Hegemony of health</i> : Dominance of health over social care. Perception that cutting community services easier than cutting hospital services.
Implementation issues / critical success factors	PoCs: Activity and finance are assigned to the 9 PoCs. They provide a management framework. They operate on a multi-disciplinary basis using integrated management. Multi-disciplinary training to support multi-disciplinary working. Benefits of a single assessment system where patients needs are the priority. Could help prevent cost and responsibility-shifting. Need for a shared vision.

Appendix Table 18: Sweden: Chains of Care

Country	Sweden
Name/type	Chains of Care (Ahgren, 2001, Trägårdh and Lindberg, 2004, Ahgren and Axelsson, 2007) 2004/5
Description	Chains of Care (CC) developed in late 1990s and based on Total Quality Management (TQM) approach. CCs are condition-specific care pathways that specify the distribution of clinical work between different providers. May be developed by a multidisciplinary consensual process. Option for integrated financing, with Chain of Care Manager (CCM) responsible for activities, resources and finance. <u>Scope</u> Health care. <u>Care setting</u> Community based but includes secondary and tertiary care.
Study design	Think piece (Ahgren, 2001): describes how CC could deliver more patient-centred care and the potential for cost savings and integrated funding. Survey compared 3 health authorities with successful CC and 3 with unsuccessful CC development. Success was defined in terms of functional integration. (Ahgren and Axelsson, 2007): Group and individual interviews undertaken with project leaders and health care managers. Project reports were reviewed and qualitative analysis undertaken.
Types of integrated resource mechanism	Integrated management and provision Purchasers (usually county councils) arrange cost and volume contract with CCM, including quality standards. This should encourage efficiency. Rationale for use of CC includes use to (a) represent a large population/large expenditure and (b) involves a number of providers across care pathway.
Key findings	<u>Effectiveness</u> No empirical evidence: in theory, patient choice drives process (although patients not involved in consensus meetings). Ahgren, and Axelsson, 2007 (Ahgren and Axelsson, 2007) explored (i) development conditions comprising development focus and development opportunities and (ii) organisational circumstances comprising organisational structure and organisational culture. Found similarities in characteristics of successful vs. unsuccessful CC. Three major determinants of integrated health care (i) professional dedication, (ii) legitimacy i.e. compatible with the values of the organisation and (iii) confidence in the individuals and organisations involved. <u>Service use and costs</u> No empirical evidence. Consensus process for developing CC estimated to involve around 40 hours input from each stakeholder. <u>Barriers</u> <i>Decentralisation</i> : Little central co-ordination of clinical decision makes care disintegrated. Lack of management systems to run clinical networks. Reform towards integration initiated in a top-down fashion. <i>Professionalism</i> : Clinical autonomy may be threatened by CC and /or moves towards evidence-based care. <i>Sub-specialism</i> : Differentiation of clinical functions leads to fragmented system. <i>Set up costs</i> : Quotes Leutz, 1999 (Leutz, 1999) "integration costs before it pays".
Implementation issues / critical success factors	(Ahgren, 2001, Ahgren and Axelsson, 2007) Aim: focus on comprehensive health care agreements and final patient outcomes. Professional dedication and trust between participants. Strong, dedicated local leaders, including doctors in particular, to drive change. Strong communication across multiple providers. Multi-disciplinary project group with a multi-functional composition including the "brightest and the best" to meet, exchange knowledge to focus on meeting patients' needs. Manage the interface between different providers to create seamless care. CCM to have equal power to those of managers in the vertical structure and provide sufficient resources to support change.
Implications for IRF/IRF evaluation	Devising care pathways can be time consuming and labour intensive. Adapting existing clinical guidelines or service frameworks may offer a useful starting point. To make pathways more patient-focused, patients could be involved in designing pathways and /or provide feedback (e.g. using patient surveys).

Appendix Table 19: Sweden: Jönköping County Council

Country	Sweden
Name/type	Jönköping County Council (Baker et al., 2008) 1990s to current
Description	<p>Jönköping County Council serves a population of less than 340,000. It ranks highly amongst Swedish councils in terms of performance on quality measures such as efficiency, safety, equity and effectiveness. The Council leadership has a strong commitment to continuous quality improvement, engaging and educating clinical and managerial staff in a range of quality improvement initiatives.</p> <p>Three important initiatives are: the 'Esther project', a hypothetical persona used as the basis for designing care pathways for older people to integrate care; 'Passion for life', which helps older people to self-manage their health; and 'Pursuing Perfection', a US initiative that identifies optimal care pathways for chronic conditions such as asthma and influenza.</p> <p><u>Scope</u> Health care only</p> <p><u>Care setting</u> Primary and secondary health care</p>
Study design	Review / overview based on interviews with relevant staff and stakeholders
Types of integrated resource mechanism	Integrated management and provision.
Key findings	<p><u>Effectiveness</u> Reported reductions in hospital admissions, length of stay and waiting times.</p> <p><u>Service use and costs</u> Cost savings at hospital level, with resources reportedly redeployed to the community. Later, financial incentives were offered to hospital leaders for quality achievements (equivalent to 5% of salary) and cost savings could be reinvested (rather than being redeployed).</p> <p><u>Barriers</u> Local champions for quality improvement found to be insufficient: "there was a need for more strategic guidance, support and coordination of these initiatives" (p. 129) (Baker et al., 2008)</p>
Implementation issues / critical success factors	Engagement of clinical and managerial staff is perceived as the key to success, but this has been very time consuming. The transferability of these achievements is unclear: NHS staff, particularly clinical staff, may be unable or unwilling to commit to this level of training and engagement in learning new management practices. In addition, reductions in admission rates or achievement of cost savings may not be feasible in systems where existing practice and funding is substantially different from that of Sweden in the 1990s.
Implications for IRF/IRF evaluation	Potential for engaging clinical and managerial staff in quality improvement initiatives may be a significant barrier and should be monitored accordingly.

Appendix Table 20: Sweden: Local Health Care (LHC)

Country	Sweden
Name/type	Local Health Care (LHC) (Kungsbacka) (Ahgren and Axelsson, 2005). 2000/1
Description	Integrated delivery of primary and hospital care Joint delivery by healthcare providers ('county councils') and local authorities ('municipalities') LHCs focus on common conditions. <u>Scope</u> Health care. <u>Care setting</u> Primary, secondary and tertiary care.
Study design	Application of instrument to 'measure' integration within and between units of a LHC. Scale range: 0 (full segregation) to 100 (full integration).
Types of integrated resource mechanism	Integrated management and provision.
Key findings	Amongst the 20 LHC units, horizontal integration averaged 15 (range: 3 to 30); vertical integration scores averaged 14 (range: 1 to 32).
Implications for IRF/IRF evaluation	Optimal level of integration depends on level of differentiation in products, needs, objectives and context. Functional integration: clinical, data, financial. Model should include: <ul style="list-style-type: none"> • Structural • Behavioural (not defined).

Appendix Table 21: Sweden: Pooled budgets

Country	Sweden
Name/type	Pooled budgets (Hultberg et al., 2005) 1990s onwards
Description	<p>Three laws finsam, frisam and socsam introduced new opportunities for joint financing across agencies. Socsam allowed health care, social insurance and social services to move some of their budgets to a pooled budget. Representatives from each agency formed a joint political board with a financial governance role.</p> <p><u>Scope</u> Collaboration between social services, social insurance, primary health care and labour offices.</p> <p><u>Care setting</u> Pooled budgets and joint political management across health and social care.</p>
Study design	Socsam trial legislation was evaluated at the national level and local evaluations of 8 trial areas were also undertaken. Legislation is voluntary. Interviews, questionnaire data, descriptive reports and data from patient/ client registers and local evaluation reports were analysed. Like for like data collected to aid comparison. Within trial comparison and compared to controls.
Types of integrated resource mechanism	Pooled budgets. Local and national trials quite narrowly focused on measurable targets.
Key findings	<p><u>Effectiveness</u> Aim to improve efficiency (e.g. reduce number of adults out of work due to long-term sickness), reduce duplication and fragmentation, increase flexibility in use of resources to allocate them for maximum impact, regardless of organisational boundaries, improve coordination of front-line services. Key aim of Socsam is to improve health and welfare for all. However, the key group were individuals at risk of, or already in receipt of public benefits such as unemployment benefit. Comparing success across sites required allowing for differences. For example, trial areas differed in size. The proportions of the budget contributed by the different authorities reflected the size of the trial area. The size of the trial area also impacted on their application of the financial framework with larger models not implementing full pooling of budgets whereas smaller localities did so. In time, exchange of information improved in the trial healthcare centres as compared to the controls. Strengthened horizontal relationships, broader whole system perspective.</p> <p><u>Service use and costs</u> Unclear impact on expenditure on social insurance on long term sick clients. Possible increase in operating costs.</p> <p><u>Barriers relating to pooled budgets</u> Resources and budgets identity is lost once pooled. Not required to spend budget in the same proportion as they were contributed, thus offering opportunities to shift the balance of provision. Can pose a threat. Potential high set up costs.</p> <p><u>General barriers</u> <i>Complexity</i>: of legal and financial frameworks to set up pooled budgets. <i>Different perspectives</i>: Differences in funding streams across agencies, political accountabilities, organisational structures, professional cultures. <i>Short-term ear-marked / targeted grants from central government</i>: difficult to manage within a pooled budget as “they generated unrealistic expectations about the level a partner’s contribution, which could subsequently be disappointed when a time-limited grant ended. Central government also usually required specific accounts of how such resources had been spent, which meant disaggregating them from the budget pool. Finally, pooled budgets effectively ring-fenced resources and therefore reduced the overall financial flexibility of the partner organisations’ mainstream budgets, e.g. any surplus in a pooled budget could not be used on services outside the pool. Role of politicians on the joint management did not map neatly onto party political interests. Local boards tended to achieve consensus around trial activities.</p>
Implementation issues / critical success factors	<p>Legal frameworks, management of pooled budgets and staffing issues, whole system perspective.</p> <p>The local frameworks to manage expenditure and services need to be appropriate to the size and objectives of the services involved.</p>

<p>Implications for IRF/IRF evaluation</p>	<p><i>Self selection:</i> The Socsam experiment was implemented in areas where local organisations were committed to participation and actively volunteered.</p> <p><i>Narrow focus on targets:</i> easier to assess outcomes. Note the concern that a focus on targets might impact on service performance where targets are not applied.</p> <p><i>Initial resistance to change.</i></p> <p><i>Availability of voluntary budget-pooling can introduce new inequities.</i> Consider impact within pooled budget provision, across agencies with pooled budgets and areas not covered by pooled budgets.</p> <p><i>Consider local political accountability and use of local democratic scrutiny.</i></p>
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Appendix Table 22: US: Evercare Choice

Country	US
Name/type	Evercare Choice (Ryan and Super, 2003). Established 1993. The original Evercare Medicare demonstration project was approved
Description	Evercare Choice built on PACE. Designed to provide integrated care to serve the dual-eligible population, i.e. either fully eligible for Medicare and Medicaid or Medicare beneficiaries with incomes too high to qualify for full Medicaid but too low to afford private health insurance. Offers care for elderly individuals who are living independently, as well as individuals who reside in assisted living facilities and nursing homes. Provides case management for nursing home residents. <u>Scope</u> Health, social care, housing and transportation. <u>Care setting</u> Main goal is to provide case management to nursing home residents.
Study design	Descriptive review.
Types of integrated resource mechanism	Integrated management, provision and funding. Funding integrated using Medicare, Medicaid and private contributions.
Key findings	<u>Effectiveness</u> Authors state the evaluations have shown that quality of care and health outcomes have improved at the same time that hospitalisations have decreased significantly. Evidence not provided.

Appendix Table 23: US: On Lok

Country	US
Name/type	On Lok (Johri et al., 2003). Established in 1971. Data collection 1979 to 1981.
Description	Programmes aim to maintain frail elderly in the community for as long as possible thus avoiding premature institutionalisation. Risk-based financing targeting an exclusively nursing home certifiable population. Medicare, Medicaid and private premiums. Staff driven model of care. <u>Scope</u> Health, social care, housing and transportation. <u>Care setting</u> Emphasis on community residence and participation of informal caregivers.
Study design	Quasi-experimental design based on matched pairs. Controls were institutionalised and community dwelling elderly matched on age, sex, primary diagnosis and living arrangements. Two year long follow up with data collection every 6 months.
Types of integrated resource mechanism	Integration through consolidation of provision – most services provided through own staff at day health centres. Contracts with e.g. specialist services. Consolidate care management by the multidisciplinary team. Team manages cases and dispenses services. Patient gives up their personal doctor upon joining the programme. Funding integrated using Medicare, Medicaid and private contributions. The programme assumes financial risk.
Key findings	<u>Effectiveness</u> Significant differences regarding functional independence, favouring IG. <u>Service use and costs</u> IG received more outpatient services for medical, therapeutic and supportive needs and less use of skilled nursing facility than control group. CG received more personal care and homemaker input. No statistically significant difference in acute hospital use though trend to less use by IG. Costs lower by 21% per patient in IG. Costs of inpatient care (hospital and skilled nursing) IG = 35.3% vs. CG = 81.4%.
Implementation issues / critical success factors	Case management, geriatric assessment and a multidisciplinary team, financial levers.
Implications for IRF/IRF evaluation	The transferability of these findings to the Scottish setting is unclear.

Appendix Table 24: US: Program for All-Inclusive Care for the Elderly (PACE)

Country	US
Name/type	Program for All-Inclusive Care for the Elderly (PACE) (Johri et al., 2003, Kodner, 2006, , 2002, Mui, 2001). 2003
Description	<p>Same as for on Lok programme. On Lok was established in 1971 and extended to PACE through additional funding. Enrolment voluntary. Eligibility – 55+ year olds who are eligible for nursing home admission and are financed by capitation payments from Medicare and Medicaid.</p> <p><u>Scope</u> Health, social care, housing and transportation.</p> <p><u>Care setting</u> Adult day health centre central offering social and respite services. Functions as a geriatric outpatient clinic. Emphasis on community residence and important role of informal caregivers. Housing is a core component for those without family support.</p>
Study design	<p>Johri, 2003 reports on evaluation based on quasi-experimental design. PACE refusers were the original controls. Some evidence to suggest that PACE serves a significantly impaired population and that it is able to reduce inappropriate hospitalisations. Impact on rates of institutionalisation not yet available (2003). Kodner, 2006 reviewed a qualitative evaluation and a quantitative evaluation.</p>
Types of integrated resource mechanism	<p>Integrated management, provision and funding. Funding integrated using Medicare, Medicaid and private contributions. Extension of on Lok. Financing through Medicare and Medicaid. Complete control over all programme expenditure. Risk-based capitation. Authority to use prepaid, capitated funds flexibly. Case management by a multidisciplinary team. Focus on prevention, rehabilitation and other clinical and system efficiencies.</p>
Key findings	<p><u>Effectiveness</u> Kodner's, 2006 review found that PACE offered highly personalised care and effective and clinical coordination and continuity. Client health status was favourable and overall they were satisfied with the care arrangements. Results in physical functioning were inconsistent. No statistically significant differences in quality of life were observed between comparison groups.</p> <p><u>Service use and costs</u> Programmes expensive to implement and are especially capital intensive. IG - less use of specialist doctor care, comparable rate of acute care hospital bed days to general Medicare population even though much sicker clientele. Medicaid agencies estimates of cost savings = 5-15% over standard fee for service care, more appropriate prescription drug utilisation. Monthly Medicare capitation payment for PACE programmes was \$877 to \$1,775 per participant (1998). Kodner, 2006 review found enrolment in PACE was associated with a large decrease in hospital use, reduced institutionalisation and substantial increases in utilisation of outpatient medical care and therapies.</p> <p><u>Barriers</u> Barriers to entry to provide care include high set up costs. Small sized centres do not benefit from economies of scale. Some potential clients do not enrol as unwilling to give up their personal doctor. PACE programmes rely on voluntary participation by informal carers and therefore may encounter problems recruiting potential enrollees with many ALD limitations. Recruitment of frail elders may require reaching out to their caregivers.</p>
Implementation issues / critical success factors	<p>No single point of entry. Existence of competition can enhance efficiency but pressure to distinguish service offered from competitor's services. Enrolment slower than expected. Marketing and advertising important for patient recruitment. Provision of a niche market can be related to biased enrolment.</p> <p>Financial administration: The capitation rate for PACE is based on summing funds from Medicaid and Medicare. PACE sites have widely varying incomes for the capitation payment from of the Medicare component. If the Health Care Financing Administration (HCFA) changes the funding rate to a more flexible formula this could have a large impact on PACE funding.</p> <p>Case management, geriatric assessment and a multidisciplinary team, financial levers.</p>
Implications for IRF/IRF evaluation	<p>Slow enrolment growth, likelihood of favourable selection. PACE sites much larger than original on Lok site and expanded one (1,400 sq. miles vs. 10 sq. miles to 2.5 sq. miles). Take time to change a system. Whole system/multi-sector perspective as developed through multi-disciplinary teams highly beneficial in achieving favourable medical and psychosocial outcomes of the frail elders. Upfront costs of implementing a programme for long term gain.</p>

Appendix Table 25: US: Social Health Maintenance Organisations

Country	US
Name/type	Social Health Maintenance Organisations (S/HMO I). Note that the second generation of S/HMOs, S/HMO II introduced in 1996 (Newcomer et al., 2000) (Johri et al., 2003))(Kodner, 2002) 1985/9.
Description	<p>Aims to produce more effective health spending and prevention of premature institutionalisation. Providing care for all older people, 65+, focusing on chronic care. Target LTC benefits for those define as frail. Federally funded. Medicare, Medicaid, private premiums and copayments. Benefits are restricted compared to PACE. Primary doctor services are the medical gatekeeper.</p> <p>S/HMO II built on S/HMO I and attempted to develop a geriatric, model, offering additional services, integrated into primary care and a screening and assessment process focused directly on healthcare risk factors. Included risk-based capitation, broadened eligibility criteria for expanded care benefits, low copayments for these and no caps on the expanded care benefits expenditures.</p> <p><u>Scope</u> Health and limited package of LCT benefits.</p> <p><u>Care setting</u> Community-based.</p>
Study design	<p>Quasi-experimental study. Matched controls obtained from people aged 65+ and Medicare fee-for-service clients in the areas of 4 sites.</p> <p>Newcomer et al, 2000 report on case study of S/HMO II first year of implementation, 1999. Review of administrative reports and charts and interviews with administrators and clinicians.</p>
Types of integrated resource mechanism	<p>Integrated management, provision and funding. Funding integrated using Medicare, Medicaid and private contributions. Combines Medicare HMO coverage of hospital and doctor services with limited package of LTC benefits. Cap on LTC per annum benefits of \$6,250 to \$12,000 (year not noted). Co-payments for home care.</p> <p>Coordinated care comprising primary care staff, nurse/ social worker care coordination and management for persons receiving or at risk of S/HMO community or expanded care benefits and care coordination across hospital, nursing home, home health and group home recipients. Use of care plans.</p>
Key findings	<p><u>Effectiveness</u> Outcomes adequate for healthy and acutely ill patients in IG and CG. Patients with chronic impairments and a variety of LTC outcomes suggest IG served less well than CG. No formal evaluation of S/HMO II.</p> <p><u>Service use and costs</u> Hospital rates for S/HMOs lower than predicted. No evidence of cost control or reduction. Each site stated losses in at least some years for acute and basic care but not LTC.</p> <p><u>Barriers</u> Ability to achieve positive substitution between acute, LTC and preventive services undermined because LTC benefits capped, copayments levied for many home services and freedom to disenroll at any time. Case-managers responsible for satisfying client needs and determining eligibility for LTC benefits and whether clients were nursing home certifiable. However had no role in ensuring provision of medical services or integration of administrative services. Therefore no responsibility or leverage to aid upstream substitution of services. Weak or absent geriatric services and no multi-disciplinary team. Lack of communication: Under-developed geriatric medicine teams. Integration of patient doctors into the team not successful. Some doctors unaware that their clients were S/HMO I members. Rationale to substitute community-based care for institutional care was not linked to those responsible for planning and implementing provision of care. Not a staff-model of care – unlike on Lok and PACE.</p>
Implementation issues / critical success factors	<p>Incentives/organisational set-up to promote positive substitution across services.</p> <p>S/HMO II designed to overcome some of barriers to success encountered by S/HMO I.</p> <p>S/HMO II provision of risk-adjusted reimbursement and 5% supplement to the normal Medicare capitation payment are sufficient incentives to focus on retaining and serving populations at risk of high expenditures.</p> <p>No single point of entry. Existence of competition can enhance efficiency but pressure to distinguish service offered from competitor's services. Enrolment slower than expected. Marketing and advertising important for patient recruitment. Provision of a niche market can be related to biased enrolment.</p> <p>Strong geriatric model of care. Case management, geriatric assessment and a multidisciplinary team</p> <p>Financial levers: Programmes received 100% of the average adjusted per capita cost for Medicare beneficiaries (AAPCC) and received the nursing home cell rate for the AAPCC for all members who met the</p>

	nursing home certifiability.
Implications for IRF/IRF evaluation	Integrate ownership, control and accountability so that staff focus on achieving key objectives.

Appendix Table 26: US: Veterans Health Administration (VHA)

Country	US
Name/type	Veterans Health Administration (VHA) (Kizer and Dudley, 2009, Oliver, 2008) (Oliver, 2007) 1994 – 2005.
Description	VHA is the biggest, fully integrated health care system in the USA. It is centrally administered and funded and operated by the federal government. Established post World War I and underwent system re-engineering between 1995 and 1999. <u>Scope</u> Veteran specific health care service. <u>Care setting</u> Across the health care system. Some residential care facilities.
Study design	Oliver, 2008 reports on 3 studies (i) Asch et al, 2004 (compared 348 process quality indicators across 26 conditions and a number of inpatient and outpatient services. Compared VHA vs. national sample of non-VHA providers), (ii) Jha et al, 2003 (assessed change in quality of VHA care 1994 – 2000 and VHA performance improved substantially. Also compared VHA care vs. fee-for-service Medicare 1997 – 2000) and (iii) a VHA study, 2005. Quasi-experimental designs.
Types of integrated resource mechanism	Integrated management, provision and funding. IRF Veterans Integrated Service Networks (VISN) regionally financed health care planning bodies. Uses a capitated budget based on number of patients and past and projected workloads. VISN objectives to budget and plan health care delivery for veterans over a particular geographic area and with overseeing development of primary care and down-sizing of hospital care. VHA offered access to outpatient pharmaceuticals. Used National Pharmacy Benefits Management programme (VAPBM) to bargain with pharmaceutical companies. 5 VHA missions: (i) specialise in care to meet veterans particular health concerns, (ii) provides training to medics, e.g. 2/3 of American-trained doctors have received some training at a VA facility, (iii) conducts research to improve veteran care, (iv) provide contingency support to military health care system, (v) serve the homeless as about 1/3 of adult homeless men are veterans.
Key findings	<u>Effectiveness</u> Asch et al, 2004: VHA patients tended to receive better overall care, chronic care and preventative care. Acute care quality did not differ significantly across groups. VHA had slightly fewer acute conditions compared to national sample. Jha et al, 2003 found VHA performed better on 12/13 quality indicators that were common to both programmes. VHA was found to outperform the commercial health care provider, Medicare and Medicaid on 13/15 indicators where comparison was possible. Value equation (Kizer and Dudley, 2009) to drive re-engineering is a function of technical quality, access to care, patient functional status and service satisfaction all divided by cost/price of care. All factors in the numerator were linked to a menu of standardized performance measures that were the same as those used in the private sector, where possible. <u>Service use and costs</u> Reduction in use of hospital care, provision of more community-based outpatient clinics, reduced waiting times, reduction in bureaucracy. <u>Barriers</u> Recent focus on primary care sector may be at the expense of the hospital sector.
Implementation issues / critical success factors	<i>Performance management</i> to drive quality. VISN directors and hospital managers accountable for driving up quality. Financial and non-financial incentives aligned to improve performance and outcomes based on these criteria. Decentralisation of operational decision making e.g. delegated to VISN. Focus on primary care. Clear allocation of resources e.g. Veterans Equitable Resource Allocation (VERA) to categorise care for veterans and to provide a national per patient price. <i>Mandatory national electronic health record system</i> i.e. Computerised Patient Record System and the Veterans Health Information Systems and Technology Architecture (CPRS/VistA). System is highly accessible and integrates information across provision. <i>VHA's 20 year investment in research and technical capacity development</i> provided evidence used to link process indicators of quality to health outcomes and to develop the electronic record system.

Appendix Table 27: US: NY Visiting Nursing Service (VNS)

Country	US, New York state
Name/type	Visiting Nursing Service (VNS) CHOICE (Fisher and Raphael, 2003) 1998 - 2001
Description	<p>Managed long-term care demonstration programme for frail elderly population. Serve Medicaid-eligible adults at a nursing home level of impairment, some of whom are also eligible for Medicare.</p> <p><u>Scope</u> Package covers long-term care benefits including personal emergency response systems, home-delivered meals, medical and social care, chore service and housekeeping, home modifications and assistive devices, medications, a number of AHP services e.g. optometry, audiology and podiatry. Coordinates medical and physician care and acute care. The plan sub-contracts all clinical and patient care services.</p> <p><u>Care setting</u> Home, community and institutional long-term care services. Home is the hub of service delivery.</p>
Study design	Pilot case study of managed long-term care model, VNS CHOICE. Basic operational data were collected, consistent with regulatory requirements and to support evaluation of population health and functional status and service use patterns.
Types of integrated resource mechanism	Integrated care without integrated finance. Capitated Medicare long-term care benefit. Paid on a monthly capitated rate and is at full risk for all covered services. The rates are case-mix adjusted based on enrollee level of impairment, age and country of residence. Services are provided by multi-disciplinary teams.
Key findings	<p><u>Effectiveness</u> No comparative analysis provided.</p> <p><u>Service use and costs</u> Data on % of population admitted and length of stay for different services provided and coordinated.</p> <p><u>Barriers</u> Challenges of managing a complex service and keeping focus on broad, programme-wide perspective.</p>
Implementation issues / critical success factors	The scope of benefit package and capitation financing can enable the managed, long-term care plan to utilize a broad array of services and to offer flexibility and choice to enrollees and their families. The key building block is the integrated approach to assessment and care planning.
Implications for IRF/IRF evaluation	To sustain and build on the programme, it needs to continue as a work in progress.

Appendix Table 28: Wales: Joint commissioning of mental health services

Country	Wales, UK
Name/type	Joint commissioning of mental health services (Secker et al., 2000) 1997 - 1998
Description	Joint commissioning of mental health services. <u>Scope</u> Mental health services in primary health care and social care. <u>Care setting</u> Health care, social care and voluntary care.
Study design	Based on a mapping exercise of commissioners in mental health, in the health authority, social services and in GP commissioning groups, three mental health services in Wales were selected as case studies (i) a locality commissioning group in a valleys area, (ii) a Go commissioning group in an urban area and (iii) a locality commissioning group covering a rural area.
Types of integrated resource mechanism	Joint commissioning.
Key findings	<u>Effectiveness</u> The mapping exercise suggested that true commissioning of mental health services did not exist at that time. Two out of the three agencies were drawing up joint plans. However, there was no evidence that the commissioning cycle was complete. <u>Service use and costs</u> Not available. <u>Barriers</u> Health authorities, trusts and social services led the process with primary health care services mainly on the periphery. Conflicts noted with, on the one hand a policy drive towards a primary care-led NHS, and on the other towards a specialist mental health service.
Implementation issues / critical success factors	Aligning policy on primary care led and specialist mental health care. Engaging successfully with GPs in the commissioning mental health services process, perhaps with incentives to encourage greater involvement.
Implications for IRF/IRF evaluation	Establishing clear roles and responsibilities between primary health care team and specialist service and the voluntary sector to provide a holistic approach to provision of care.

APPENDIX 2: Search strategies

Databases searched

MEDLINE:	516 records
ASSIA	178 records
HMIC	389 records
ECONLIT:	67 records
SOCIAL SERVICES ABSTRACTS	120 records
Conference proceedings Citation index	114 records
Zetoc	103 records
Index to Theses	149 records

Search strategies

MEDLINE search strategy

MEDLINE(R) <1996 to October Week 2 2009>

Via OvidSP

Search date 20th October 2009

-
- 1 pooled budget\$.ti,ab. (3)
 - 2 total budget\$.ti,ab. (58)
 - 3 single budget.ti,ab. (2)
 - 4 lead commission\$.ti,ab. (1)
 - 5 lead contract\$.ti,ab. (3)
 - 6 (integrat\$ & (activity adj2 funding)).ti,ab. (0)
 - 7 (integrat\$ & (activity adj2 finance\$)).ti,ab. (0)
 - 8 ((integrat\$ & activity) adj2 payment\$).ti,ab. (1)
 - 9 (integrat\$ & capitation payment\$).ti,ab. (15)
 - 10 (integrat\$ & (case adj2 payment\$)).ti,ab. (5)
 - 11 (integrat\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (100)
 - 12 (join\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (34)
 - 13 (shared adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (15)
 - 14 (unified adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (11)
 - 15 (whole system\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (0)
 - 16 (partner\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (90)
 - 17 (chains adj2 care).ti,ab. (9)
 - 18 ((care adj2 package\$) & (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (29)
 - 19 (S/HMO or shos).mp. (176)
 - 20 social health maintenance organi?ation\$.ti,ab. (23)
 - 21 social HMO\$.mp. (24)
 - 22 (social adj2 health adj2 maintenance organi?ation\$).ti,ab. (23)

- 23 (health adj2 social care partnership\$.ti,ab. (3)
- 24 or/1-23 (582)
- 25 delivery of health care, integrated/ (5494)
- 26 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$.ti.
(12070)
- 27 25 & 26 (110)
- 28 24 or 27 (686)
- 29 asia/ or africa/ or south america/ (16520)
- 30 28 not 29 (684)
- 31 limit 30 to (english language & yr="1999 -Current") (516)

ASSIA search strategy

Via CSA Illumina

Search date 20th October 2009

(TI=((pooled budget*) or (total budget*) or (single budget*)) or AB=((pooled budget*) or (total budget*) or (single budget*)) or TI=((lead commission*) or (lead contract*)) or AB=((lead commission*) or (lead contract*))) or((activity within 2 funding) or (activity within 2 finance*) or (activity within 2 payment*) or (capitation within 2 payment*) or (case within 2 payment*)) or((integrat* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (join* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (shared within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (unified within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or ((whole system) within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (partner* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*))) or(chains within 2 care) or((care package*) within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or(S/HMO* or (social health maintenance organisation*) or (social health maintenance organization*) or (social HMO*) or (health within 2 social care partnership*))

EconLIT search strategy

Via OvidSP

Search date 20th October 2009

- 1 pooled budget\$.ti,ab. (0)
- 2 total budget\$.ti,ab. (38)
- 3 single budget.ti,ab. (3)
- 4 lead commission\$.ti,ab. (0)
- 5 lead contract\$.ti,ab. (3)
- 6 (integrat\$ & (activity adj2 funding)).ti,ab. (0)
- 7 (integrat\$ & (activity adj2 finance\$)).ti,ab. (2)
- 8 ((integrat\$ & activity) adj2 payment\$.ti,ab. (5)
- 9 (integrat\$ & capitation payment\$.ti,ab. (2)
- 10 (integrat\$ & (case adj2 payment\$)).ti,ab. (1)
- 11 (integrat\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (1482)
- 12 (join\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (39)

- 13 (shared adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (3)
- 14 (unified adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (17)
- 15 (whole system\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (0)
- 16 (partner\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (47)
- 17 (chains adj2 care).ti,ab. (0)
- 18 ((care adj2 package\$) & (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (2)
- 19 (S/HMO or shos).mp. (3)
- 20 social health maintenance organi?ation\$.ti,ab. (2)
- 21 social HMO\$.mp. (1)
- 22 (social adj2 health adj2 maintenance organi?ation\$).ti,ab. (2)
- 23 (health adj2 social care partnership\$).ti,ab. (0)
- 24 (health or social or care).ti,ab. (77176)
- 25 or/1-16 (1635)
- 26 25 & 24 (92)
- 27 21 or 26 or 17 or 20 or 22 or 18 or 19 or 23 (100)
- 28 africa.ct. (3732)
- 29 asia.ct. (4025)
- 30 28 or 29 (7615)
- 31 27 not 30 (99)
- 32 limit 31 to (yr="1999 -Current" & english) (67)

HMIC search strategy

Via OvidSP

Search date 20th October 2009

HMIC Health Management Information Consortium <September 2009>

Search Strategy:

-
- 1 pooled budget\$.ti,ab. (24)
 - 2 total budget\$.ti,ab. (21)
 - 3 single budget.ti,ab. (8)
 - 4 lead commission\$.ti,ab. (14)
 - 5 lead contract\$.ti,ab. (1)
 - 6 (integrat\$ & (activity adj2 funding)).ti,ab. (0)
 - 7 (integrat\$ & (activity adj2 finance\$)).ti,ab. (3)
 - 8 (integrat\$ & activity adj\$ payment\$).ti,ab. (0)
 - 9 (integrat\$ & capitation payment\$).ti,ab. (1)
 - 10 (integrat\$ & (case adj2 payment\$)).ti,ab. (2)
 - 11 (integrat\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (117)
 - 12 (join\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (373)
 - 13 (shared adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (23)

- 14 (unified adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (36)
- 15 (whole system\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (4)
- 16 (partner\$ adj2 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (106)
- 17 (chains adj2 care).ti,ab. (11)
- 18 ((care adj2 package\$) & (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$)).ti,ab. (83)
- 19 (S/HMO or shos).mp. (61)
- 20 social health maintenance organi?ation\$.ti,ab. (9)
- 21 social HMO\$.mp. (2)
- 22 (social adj2 health adj2 maintenance organi?ation\$).ti,ab. (9)
- 23 (health adj2 social care partnership\$).ti,ab. (29)
- 24 or/1-23 (867)
- 25 (commissioning or financ\$ or budget\$ or funding or reimburse\$ or payment\$).ti. (6726)
- 26 integration.sh. (584)
- 27 25 & 26 (11)
- 28 27 or 24 (874)
- 29 limit 28 to yr="1999 -Current" (389)

Social Services Abstracts search strategy

Via CSA Illumina

Search date 20th October 2009

(TI=((pooled budget*) or (total budget*) or (single budget*)) or AB=((pooled budget*) or (total budget*) or (single budget*)) or TI=((lead commission*) or (lead contract*)) or AB=((lead commission*) or (lead contract*)) or((activity within 2 funding) or (activity within 2 finance*) or (activity within 2 payment*) or (capitation within 2 payment*) or (case within 2 payment*)) or((integrat* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (join* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (shared within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (unified within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or ((whole system) within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or (partner* within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or(chains within 2 care) or ((care package*) within 2 (commissioning or financ* or budget* or funding or reimburse* or payment*)) or(S/HMO* or (social health maintenance organisation*) or (social health maintenance organization*) or (social HMO*) or (health within 2 social care partnership*))

**Conference Proceedings Citation Index Social Sciences & Humanities
Via ISI Web of Science
Search date 20th October 2009**

#1 TS=(pooled budget*) or TS=(total budget*) or TS=(single budget) or TS=(total budget*) or TS=(lead commission*) or TS=(lead contract*)

Databases=CPCI-SSH Timespan=All Years

#2 TS=(integrat* SAME (activity funding))

Databases=CPCI-SSH Timespan=All Years

#3 TS=(integrat* SAME (activity finance))

Databases=CPCI-SSH Timespan=All Years

#4 TS=(integrat* SAME (activity payment*))

Databases=CPCI-SSH Timespan=All Years

#5 TS=(integrat* SAME (capitation payment*))

Databases=CPCI-SSH Timespan=All Years

#6 TS=(integrat* SAME (case payment*))

Databases=CPCI-SSH Timespan=All Years

#7 TS=(integrat* SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#8 TS=(join* SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

#9 TS=(shared SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#10 TS=(unified SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#11 TS=((whole system) SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#12 TS=(partner* SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#13 #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1

Databases=CPCI-SSH Timespan=All Years

#14 TS=health

Databases=CPCI-SSH Timespan=All Years

#15 #14 & #13

Databases=CPCI-SSH Timespan=All Years

#16 TS=(chains SAME care)

Databases=CPCI-SSH Timespan=All Years

#17 ts=((care package*) SAME (commissioning or financ* or budget* or funding or reimburse* or payment*))

Databases=CPCI-SSH Timespan=All Years

#18 TS=(S/HMO* OR social health maintenance organisation* or social health maintenance organization* or social HMO* or (health SAME social care partnership*))

Databases=CPCI-SSH Timespan=All Years

#19 #18 OR #17 OR #16 OR #15

Databases=CPCI-SSH Timespan=1999-2009

Zetoc

Search date 21st October 2009

Search strategy

"integrated health care" limited to 1999 onwards

Index to Theses

Via Proquest

Search date 21st October 2009

yr 1990 OR 1991 OR 1992 OR 1993 OR 1994 OR 1995 OR 1996 OR 1997 OR 1998
OR 1999 OR 2000 OR 2001 OR 2002 OR 2003 OR 2004 OR 2005 OR 2006 OR
2007 OR 2008 OR 2009 & commissioning OR finance OR budgets OR funding OR
reimburse OR payments & health & social

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