The Integrated Resource Framework (IRF) has been developed jointly by the Scottish Government, NHS Scotland and the Convention of Scottish Local Authorities (COSLA). It was developed in response to the shared strategic objective to shift the balance of care, moving resources upstream emphasising health improvement and preventative care, by working in a more integrated way. This review aimed to inform an evaluation of the IRF by assessing the international literature on financial and resource mechanisms to integrate care i) within health care and ii) across health and social care.

Main Findings

- Many organisers of health and social care systems, both internationally and within the UK, are endorsing partnership working in order to design provision around users' needs.
- Different models of integrated resource mechanisms (IRMs) have been implemented including models of financial governance, models of organisational governance and whole system approaches.
- Although the context for introducing IRM approaches differs, common drivers for new models of integration are evident, including the need to improve the quality of care for people with complex needs, the recognition that a focus on secondary care is economically unsustainable and the need to address perverse incentives within existing financial structures.
- IRM models vary widely, which makes it difficult to provide clear messages about their effectiveness. Evidence on health outcomes is sparse and provides mixed messages; its validity is often unclear because studies' methodological rigour cannot be determined, because adequate and consistent information on study design and analytical approach is rarely reported. Evidence that IRMs can deliver cost savings is weak.
- Evidence on critical success factors tends to be anecdotal. The literature highlights the need for good interagency relationships, a single entry point of care, a flexible approach and choices of processes and support from a central coordinator. Barriers to the implementation of IRMs are those the critical success factors seek to address and are financial, organisational and cultural in nature.
- The use of tariffs to reimburse hospital activity is common in Europe and evaluations suggest that they may improve efficiency without undermining quality of care in the acute sector. Although the review found no evidence on the use of tariffs applied under joint financing arrangements, some innovative tariff systems may provide informative lessons for the development of a tariff for integrated health and social care.
- The literature highlights several important lessons for evaluating the IRF. Choice of study design is of primary importance in ensuring that observed effects can be reliably attributed to the IRF. The selection of an appropriate comparator(s) is therefore critical. The development of a common dataset, to which all Health Boards can contribute, is essential for the purposes of analysing different models of IRF and performance monitoring of new/existing models.
- Integration takes time to achieve. Study timescales should be appropriate for evaluating longer term impacts. Potential incentives and disincentives of the IRF need to be carefully aligned with the aims of the scheme. A range of processes and outcome measures should be monitored to detect unintended consequences.
Introduction

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. Internationally, many approaches have been utilised to enhance the integration of health care, and health and social care provision, but their effectiveness is unclear.

Shifting the balance of care is a strategic objective of the Scottish Government. Moving resources upstream, emphasising health improvement and preventative care, and working in a more integrated way are key elements of this.

The IRF has been developed in Scotland 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.

Aims and methods

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.

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. IRMs were identified based on searches of electronic databases, hand searches and contacts with experts, and assessed from an economic perspective.

Findings

Internationally, many organisers of health and social care systems endorse partnership working to help design provision around users’ needs. The IRMs identified include models of financial governance such as pooled budgets in England and Sweden, models of organisational governance, such as Chains of Care in Sweden\(^1\), and whole system approaches such as Care Trusts in England and the veterans’ health care system administered by the U.S. Department of Veterans Affairs.

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. There was weak evidence that IRFs could achieve cost savings, and the transferability of findings to the Scottish setting was unclear.

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

Limitations of the review

This report is a rapid review and, given the resource constraints, the comprehensiveness of the review cannot be guaranteed.

An integrated model not covered in the review is the English Department of Health’s 16 Integrated Care Pilots. An evaluation to test innovative approaches to integration of health and social care service provision and funding is underway. Details of this evaluation methodology, could usefully inform the Scottish IRF test sites.

Only limited information is available on another innovative English approach, the Department of Health’s Partnerships for Older People Projects (POPPs). The final report is expected to be published in early 2010.

Gaps in the evidence base

Three key gaps in the evidence base were identified relating to i) the quality of the studies, ii) the outcomes assessed and iii) reporting of the model for financial integration.

The quality of studies: the absence of firm evidence relates mostly to the lack of robust methods used in many studies published to date. There was also a lack of long-term evaluations. As outcomes may not materialise until the longer term, this 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). This is likely to be the most fruitful approach to

\(^1\) Condition-specific care pathways that specify the distribution of clinical work between providers. Finance may be integrated within a Chain of Care.
evaluation because financial integration models are complex, and evaluations need to measure effects and explore causal pathways.

The outcomes assessed: most studies focused on improving the process of integration rather than on health outcomes, and the limited evidence provided mixed findings. Many studies did not report resource use and cost implications. Unintended consequences were often not assessed, but were sometimes reported on an anecdotal basis.

Reporting of the model for financial integration: studies rarely reported adequate information on the approaches used to achieve financial and structural integration.

Lessons from the review

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

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.

A one-size-fits-all approach 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.

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. The aim is to obtain unbiased estimates of effect. 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.

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, only data essential for monitoring and assessment should be included in line with the principle of parsimony2.

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.

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

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.

2 “When competing hypotheses are equal in other respects, the principle recommends selection of the hypothesis that introduces the fewest assumptions and postulates the fewest entities while still sufficiently answering the question.”
This document, “Financial Integration across Health and Social Care: Evidence Review” along with the full research report of the project, and further information about social and policy research commissioned and published on behalf of the Scottish Government, can be viewed on the Internet at: [http://www.scotland.gov.uk/socialresearch](http://www.scotland.gov.uk/socialresearch). If you have any further queries about social research, please contact us at socialresearch@scotland.gsi.gov.uk or on 0131-244 7560.