INTEGRATION, CO-ORDINATION & MULTIDISCIPLINARY CARE IN AUSTRALIA: GROWTH VIA OPTIMAL GOVERNANCE ARRANGEMENTS

Jackson C.L
Nicholson C
Doust J
O’Donnell J
Cheung L

September 2006
ACKNOWLEDGEMENTS

Jackson, C.L.\textsuperscript{1}, Nicholson, C.\textsuperscript{2}, Doust, J.\textsuperscript{1} O’Donnell, J.\textsuperscript{2} & Cheung, L.\textsuperscript{1}

\textsuperscript{1} University of Queensland, Brisbane, Australia
\textsuperscript{2} Mater Health Services, Brisbane, Australia

We would like, in particular, to thank the following people who gave generously of their time and knowledge as part of the Key Informant Interviews - David Ashbridge, Kate Carnell, Anthony Critchley, Rob Curry, Martin Cutter, Phillip Davies, Richard Eccles, Irene Fisher, Adair Garrett, Sue Golley, Mukesh Haikerwal, John Kastrissios, Catherine Katz, Geoff Kiel, Naomi Kubina, Ann Marie Liddy, Lenora Lipman, Robyn Mason, Terry Mehan, Julia Nesbitt, Deb Odgers, Di O’Halloran, Rob Pegram, Andrew Podger, Prue Power, Iolanda Principle, Catherine Stoddart, Tori Wade, Robert Wells, Renee Williams and Andrew Wilson.

We would also like to acknowledge the support provided by Professor Nicholas Glasgow and the APHCR\textsuperscript{i} team at the Australian National University, Canberra, and the Commonwealth Department of Health & Ageing for the funding support for the project.

The research reported in this paper is a project of the Australian Primary Health Care Research Institute, which is supported by a grant from the Australian Government Department of Health and Ageing under the Primary Health Care Research, Evaluation and Development Strategy. The information and opinions contained in it do not necessarily reflect the views or policies of the Australian Government Department of Health and Ageing.
ACKNOWLEDGEMENTS ................................................................................................................................. 2

1. CONTEXT .......................................................................................................................................................... 4

2. IMPLICATIONS OF RESULTS FOR POLICY ........................................................................................................... 6

GOVERNANCE OPTIONS ........................................................................................................................................ 6

3. APPROACH ....................................................................................................................................................... 8

INCLUSION/EXCLUSION CRITERIA ............................................................................................................................. 8
SEARCH METHODS ................................................................................................................................................... 8
DATA EXTRACTION .................................................................................................................................................. 9
QUALITY ASSESSMENT .......................................................................................................................................... 9

4. RESULTS ........................................................................................................................................................... 10

SYSTEMATIC REVIEW ............................................................................................................................................. 10
Description of Included Studies ..................................................................................................................................10
Quality assessment .................................................................................................................................................... 21
Enablers and Barriers ............................................................................................................................................... 21
DISCUSSION OF SYSTEMATIC REVIEW RESULTS .................................................................................................. 23
Perceived advantages ................................................................................................................................................ 23
Description and scope of integrated governance ........................................................................................................23
Variety of models described ..................................................................................................................................... 24
Initiatives promoting integration ................................................................................................................................24
Difficulty sustaining integration .................................................................................................................................. 24
Human component of integration ................................................................................................................................25
Barriers and enablers ................................................................................................................................................ 25
Limitations of research ............................................................................................................................................ 25
KEY INFORMANT INTERVIEWS .................................................................................................................................. 26
Examples of Australian models of integrated governance..................................................................................................26
Northern Territory ...................................................................................................................................................... 26
New South Wales .................................................................................................................................................... 26
South Australia ........................................................................................................................................................ 26
Victoria ...................................................................................................................................................................... 27
Queensland ............................................................................................................................................................... 27
Enablers- now and into the future .................................................................................................................................... 28
• Shared purpose, clear goals...................................................................................................................................... 28
• Flexible partnership structures: ............................................................................................................................. 28
• Common clinical tools: ....................................................................................................................................... 28
• Appropriate financing: ........................................................................................................................................ 29
• Clinician input in decision-making: ..................................................................................................................... 29
• Suitable infrastructure: ..................................................................................................................................... 29
• A team-based approach to service delivery: ......................................................................................................... 29
• Client or community focused: ............................................................................................................................. 29
• Effective communication across the continuum.................................................................................................. 29
Barriers .................................................................................................................................................................... 29
• Communication: ............................................................................................................................................... 29
• Cultural: .......................................................................................................................................................... 29
Determining future policy directions.................................................................................................................................. 30

5. IMPLICATIONS FOR RESEARCH .......................................................................................................................... 31

6. REFERENCES ....................................................................................................................................................... 32

7. APPENDICES ..................................................................................................................................................... 36
1. CONTEXT

“(Health care) governance is like a greased watermelon—slippery and hard to grasp. It provides few opportunities for clear conceptual and empirical assessment”. (Alexander in Savage et al, 1997)

Australian governments, communities and health professionals are looking to new ways of delivering high quality health care services to the Australian public as traditional fragmented models struggle to deliver appropriate accessible care to their communities. One way in which the health system could be improved is by improving the integration of the system (COAGa, June 2005).

Integrated care shifts the focus of health care delivery away from the care delivered by separate units, such as individual general practices, community health centres or hospitals, to the care that can be provided across organisations for a regional community or a group of patients. This shift in the delivery of care needs to be matched by a commensurate shift in organisational management and governance. According to Dwyer (2002) “safe, appropriate and cost effective health care delivery must embrace a continuum of care involving patients and their primary care physician, community health services and hospitals [who are] willing to be partners in health care governance to improve the situation”. It requires general practices, hospitals, community services and consumer organisations to form effective long-term working relationships and to move beyond the current fragmented approach to acute and community care. The success of integrated care is dependent upon these previously separate institutions developing united management structures and methods of governance that are sustainable and effective. The question is not whether state or regional authorities do better in health care governance - but 'which governance structures do better at integrating care' (Dwyer 2004).

Integrated governance describes the formal relationship between organisations which allows them to manage deliverables, risk and process through collaborative business approaches. Integrated structures may exist between government agencies, across levels of government (local, State and Commonwealth) and/or the non-government sector (IPAA, 2002). A key challenge for partnerships is managing the interaction between different modes of governance (which at some points generate competition and at others, collaboration) (Lowndes & Skelcher, 1998), which lead to inherent difficulties in sustaining successful relations among diverse partners (Mitchell & Shortell, 2000). What makes integration different from collaboration and partnership is the recognition that the individual systems must change to accommodate the integration (Holtom, 2001) to provide dynamic and flexible solutions (IPAA, 2002).

The aim of this review is to provide the best available evidence on how the principles of integrated governance may be applied to the future delivery of health care in Australia.
The objectives of the review are to:

1. outline the models of integrated governance frameworks for health care delivery that have been described in the literature;

2. describe the results of evaluations of models of integrated governance for achieving
   a) sustainable and effective governance and
   b) improved clinical outcomes; and

3. describe the barriers and facilitators for achieving sustainable and effective integrated governance models in health care that may be applied in the Australian context.
2. IMPLICATIONS OF RESULTS FOR POLICY

a. This is an emerging field and there is limited reported outcome-based research in this area within the international literature. However, a number of robust models have been described internationally, which have a ‘fit’ with the Australian health care context.

b. Emerging local examples identified from the key informant interviews, such as the Integrated Primary Mental Health Service in North East Victoria (p.27) and the Advanced Community Care Association SA in South Australia (p.26), have demonstrated a link between strengthened integrated governance vehicles and improved local clinical/ service outcomes.

c. Both the review and interviews identify local communities with the vision, leadership and commitment to extend health service integration as the logical starting point for more ambitious integrated governance regionally.

d. A clear separation between governance and operational management is also a continuing theme in both systematic review and Key informant interviews. The governance vehicle needs to set priorities for strategic goals (align environmental forces, organisational strategies and capabilities), choose membership composition, obtain and manage resources, and provide measures of accountability to maximise success (Mitchell & Shortell, 2000).

e. Careful measurement of the process, impact and outcomes of such activities is of key importance and often overlooked.

GOVERNANCE OPTIONS

The project identified three options for integrated health care governance with a demonstrated ability to be sustained effectively in the medium. These include:

i. The creation of an incorporated body, with governance responsibility shared across integrating organisations, and with resource allocation capability for a given population or region - Sunrise (NT)(p.26) and North Wyong (NSW)(p.26).

ii. An incorporated body, established by integrating organisations with its own funding pool, with responsibility for defined areas of common business overlap (Peck et al, 2002) - Advanced Community Care Association (SA)(p.26).

iii. A formal and agreed governance arrangement between organisations to ‘share’ resources in delivering services across a finite geographical area (Bingham,1996; Campbell, 1996) - Brisbane South Collaboration for Health Service Integration (Qld) (p.27) and Integrated Primary Mental Health Service (Vic.) (p.27). Key elements of this model, including regional purchasing arrangements, risk management of sub-populations and the publication of performance reports, have been proposed and discussed by Podger (2006).
Clear key enablers common to all models, were also both in the literature (p.21) and key informant interviews (p.28). Clearly, important success factors are:

- involving the ‘right people’- effective leadership, demonstrated commitment and engagement of the key stakeholders;
- demonstrating a commitment to local client and/or community;
- having a clear vision that is evident through clear roles and responsibilities and organisational alignment;
- providing flexible partnership structures;
- addressing clinical governance across the continuum;
- developing appropriate financing mechanisms;
- ensuring clinician input in decision-making;
- providing suitable infrastructure;
- focusing on a team-based approach to service delivery; and
- collecting consistent data for evaluation and review.

Additionally, both interviews (p.22) and evidence from the literature (p.29), identified a common set of barriers to integrated governance structures which include:

- a lack of communication between organisations and professions;
- structural barriers such as the commonwealth/state funding mechanism which promotes/creates silo’s, varying business drivers, inadequate resources and financial restrictions;
- cultural barriers such as a lack of trust, limited time and protection of territory;
- a lack of accountability; and
- incomplete data collection to report outcomes.

Applying any model to the Australian context needs to be considered in light of the existing local structures, cultural fit and financing arrangements.
3. APPROACH

Using the methodology developed by Oliver (2005) we conducted a systematic review of the evidence and key informant interviews in an integrative process. The first stage in the review was to identify and describe models of integrated governance for health care delivery that had been described and evaluated in the health care literature. We targeted those examples that had demonstrated an ability to be sustainable in the medium term by being established for a minimum of 12 months. The second stage identified the Australian health care framework into which the evidence must be applied via key informant interviews.

We identified those models that are most applicable to the Australian setting by prioritising the search strategy to identify, in order:

- models developed in Australia
- models developed in UK, New Zealand and Canada
- models developed in Europe other than UK
- models developed in United States
- models developed in other countries

The protocol for the review was circulated to key stakeholders for comment.

INCLUSION/EXCLUSION CRITERIA

We included:

- all models of health care delivery where the governance requires a sharing of management, funding and integrated service delivery across 2 or more institutions;
- where there is evidence that the governance framework is sustainable by having been in place for 12 months or more.

A range of evidence was included in the review, including randomised controlled trials, controlled clinical trials, time series analyses, before and after studies and post-intervention evaluations.

SEARCH METHODS

The search strategy for the review is shown in Appendix 1. The citations retrieved by the search strategy were assessed for relevance to the review by two reviewers. Where there was doubt about possible relevance, the citation was assessed by a third reviewer.

All available records were scanned and the abstracts of those relevant to the subject were read. Articles appearing to contain information pertinent to the review were obtained and examined. Reference lists of those articles, and of relevant review articles were also checked for further sources of applicable information.

Key stakeholders and main authors in the area were also contacted for further references.
DATA EXTRACTION

Data extraction tools were developed using measures of integration described by Simoen and Scott’s “Taxonomy of integration in primary care” (1999). These measures included the degree, level and duration of integration; mode of control; treatment location, type of health professional delivering care and the transfer of information.

The primary outcomes of interest included:

- the number of health care services delivered through the integrated model;
- the composition of health care services delivered through the integrated model;
- the governance structure or contractual relationship that exist between parties;
- the structures that govern decision-making and/or shared accountability;
- the clarity of purpose of collaboration that exists within the integrated model;
- extent of shared resources to support the services or functions;
- existence of management structures that control the integrated service, with particular relevance to accountability; and
- the complexity of organizational structures impacting on service delivery.

New methods of health care delivery are ultimately important in terms of improving the impact on patient outcomes and their experience of health care. Where possible, we also sought to document the effect of models of care on:

- patient health outcomes;
- quality of care;
- patient satisfaction;
- provider satisfaction;
- costs including cost-effectiveness, opportunity costs; and
- harmful consequences.

In order to assess the evidence synthesised in terms of its relevance to policy and practice, we used the barriers and facilitators identified by the research as a starting point and sought current government policy initiatives that could address them, and then examined whether there was any evidence to support their effectiveness.

QUALITY ASSESSMENT

The included studies were assessed for the potential freedom from bias using the Cochrane criteria developed by Higgins (2005) (Appendix 2).

Qualitative studies were assessed using the methods developed by the Epi-centre in London (Harden et al, 2005) (Appendix 2).
4. RESULTS

SYSTEMATIC REVIEW

The search strategy identified a total of 3145 abstracts and titles. A total of 16 studies described a model that had been sustained for more than one year and were selected for inclusion in the review (Appendix 3). Two other studies provided important theoretical value to the review which is incorporated in the discussion section. Appendix 1 outlines the systematic review process used in the submission.

A list of the studies that were thought possibly relevant but excluded on reading the full text is attached (Appendix 4) and references provided (Appendix 5).

Description of Included Studies

After review, sixteen studies were identified that described a model of integrated governance that had been sustained for more than one year, nine case studies and seven qualitative studies (Table 1).

Table 1: Types of studies

<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlled clinical trial</td>
<td>0</td>
</tr>
<tr>
<td>Case studies: Bergin, Dubbs, Boul, Gamm, Campbell, Bingham, Navein, Jarvis, Wilson</td>
<td>9</td>
</tr>
<tr>
<td>Qualitative studies: Willcocks, Lowery, Glendinning, Peck, Weiner, Gardner, Holtom</td>
<td>7</td>
</tr>
<tr>
<td>Total studies</td>
<td>16</td>
</tr>
</tbody>
</table>

The 16 models of integrated governance in healthcare were retrieved from four countries, Australia, Canada, the United Kingdom and the United States of America. This review includes four models from Australia, two models from Canada, five models from the United Kingdom and seven models from the United States of America. A brief description of each of the 16 models of care is shown in Table 2.
<table>
<thead>
<tr>
<th>Models from Australia (n=4)</th>
<th>Bergin, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve access to emergency and acute inpatient services for urban residential aged-care clients</td>
<td></td>
</tr>
<tr>
<td>Gardner, 2002</td>
<td>The evaluation of a co-coordinated care trials conducted to provide integrated primary and secondary healthcare services for clients with complex needs</td>
</tr>
<tr>
<td>Jarvis, 2002</td>
<td>To provide ambulatory care through a formal network of services including a rural public hospital and community health service and the local Division of General Practice</td>
</tr>
<tr>
<td>Wilson, 2001</td>
<td>To provide an integrated Ambulatory Care service based on shared responsibility between the patient, the carer, the general practitioner and a hospital specialist team in a rural community.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Models from Canada (n=2)</th>
<th>Bingham, 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide multidisciplinary care partnership between ER and the home for people who need intensive and urgent services which can be offered at home.</td>
<td></td>
</tr>
<tr>
<td>Campbell, 1996</td>
<td>The establishment of a health maintenance organisation as a joint venture between the competitors to provide primary and secondary care services from a shared facility.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Models from the United Kingdom (n=5)</th>
<th>Holtom, 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>To identify organisational and cultural obstacles to effective joint working between health and social services</td>
<td></td>
</tr>
<tr>
<td>Glendinning, 2003</td>
<td>To integrate care for elderly in partnership with a primary care trust, general practitioners and community health services</td>
</tr>
<tr>
<td>Navein, 2003</td>
<td>To develop a Community Emergency Care Service involving the ER, residential nursing homes, primary care trust and secondary critical care services</td>
</tr>
</tbody>
</table>
A more detailed description of each of the included studies is shown in Table 3.
### Table 3: Description of individual included studies.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Bingham, P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>1996</td>
</tr>
<tr>
<td>Citation</td>
<td>Strategic alliances: partnership in action. Leadership. May/June 1996: 23-24</td>
</tr>
<tr>
<td>Country</td>
<td>Canada</td>
</tr>
<tr>
<td>Participants</td>
<td>Ministry of Health, Hospital Society and Regional Care</td>
</tr>
<tr>
<td>Time of project</td>
<td>1988-1996</td>
</tr>
<tr>
<td>Design</td>
<td>Case study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 0/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To create a Quick Response Team - multidisciplinary care between ER and home for people who need intensive and urgent services which can be offered at home</td>
</tr>
<tr>
<td>Main findings</td>
<td>The partnership is based on many characteristics of strategic alliances: commitment to a shared vision, open and honest communication, formal decision-making processes and mutual trust and respect. In this study the integration is governed by a formal process managed to two standing committees. Firstly, the CRD/GVHS Patient Care committee comprises senior management and medical representation. It has the mandate to co-ordinate the development, implementation and evaluation of community health programs and services, and to maintain effective continuity of care for people transferring between the community and hospital. It reports directly to the Liaison Committee. Secondly, the liaison committee is comprised of hospital vice-presidents and the Regional Medical Officer and has the mandate of determining priorities for joint programs and services to ensure that policies and resource allocations facilitates the continuity of care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authors</th>
<th>Campbell, S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>1996</td>
</tr>
<tr>
<td>Citation</td>
<td>Healthcare competitors co-operate to create health campus in Shakopee. Healthcare Strategic Management October 1996:14:10</td>
</tr>
<tr>
<td>Country</td>
<td>Canada</td>
</tr>
<tr>
<td>Participants</td>
<td>Primary and secondary care provided on a single campus</td>
</tr>
<tr>
<td>Time of project</td>
<td>1993-1996</td>
</tr>
<tr>
<td>Design</td>
<td>Case study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 0/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>This study describes a joint venture between three corporate competitors to provide a combined facility.</td>
</tr>
<tr>
<td>Main findings</td>
<td>This study describes a joint venture between three Health Maintenance Organisations. Primary and secondary healthcare services are delivered from a shared campus and shared services account for 18% of activity. Contracts include covenants that regulate who build certain facilities and who performs certain services with the intention of avoiding duplicated services/activity.</td>
</tr>
</tbody>
</table>
Integrated governance is based on a two-tier structure. A participation committee with representation from each parent company must agree to decisions by consensus. If consensus cannot be reached, the Board refers the matter to a policy review committee. Operations are not stalled by waiting for decisions as all operational issues are managed by another committee that oversees the arrangements of shared services. This committee agrees to decisions made on a majority vote, with voting power weighted according to the space the organisation occupies on the campus.

<table>
<thead>
<tr>
<th>Author</th>
<th>Peck, E., Gulliver, P. and Towell, D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2002</td>
</tr>
<tr>
<td>Citation</td>
<td>Governance of partnership between health and social services: the experience in Somerset. Health and Social Care in the Community. 2002:10(5):331-338</td>
</tr>
<tr>
<td>Country</td>
<td>England</td>
</tr>
<tr>
<td>Participants</td>
<td>Mental Health Social Care</td>
</tr>
<tr>
<td>Time of project</td>
<td>1999-2001</td>
</tr>
<tr>
<td>Design</td>
<td>Case Study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>Low (Harden scale score 5/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To examine the role of Joint Commission Boards (JCB) in the governance arrangements for health and social partnerships</td>
</tr>
<tr>
<td>Main findings</td>
<td>This study concluded that the JCB plays an important role in the governance of a partnership, as a symbol of interagency partnership and as a vehicle for sustaining commitment to projects. However, the Board is not proactive in setting priorities and policies. Empirical evidence highlights that the role of non-executive directors and councilors is usually overlooked in examining the factors impacting on governance arrangements in health and social partnerships. If this case stands the author suggests that one board with the responsibility of both commissioning and overseeing the provision of services may be an effectively approach to governance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Dubbs, N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2002</td>
</tr>
<tr>
<td>Citation</td>
<td>Organisational design consistency: the PENNCare and Henry Ford Health System. Journal of Healthcare Management 2002:47(5):307-319</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Participants</td>
<td>Health maintenance organisations</td>
</tr>
<tr>
<td>Time of project</td>
<td>1996-1998</td>
</tr>
<tr>
<td>Design</td>
<td>Case Study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 1/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To compare two different approaches to integrated healthcare organisations: PennCARE (a virtually integrated service) with the Henry Ford Health System (a vertically integrated, tightly controlled model)</td>
</tr>
<tr>
<td>Main findings</td>
<td>Regardless of which approach is adopted, negotiating an integrated</td>
</tr>
</tbody>
</table>
Approach to care must develop a consistent approach to a number of dimensions of organisational design—governance structure, organisational culture, strategic planning process and decision making procedures.

The current healthcare environment can offer opportunities for tightly controlled models of governance as well as looser arrangements. Executives charged with designing organisational design need to ensure that their configuration is consistent with their aims, their markets and the capacity and resources available to them.

### Author
Gamm, L.D., Rogers, J.H. and Work, F.

### Year
1998

### Citation

### Country
USA

### Participants
Hospital, child health services, immunisation clinics, ambulatory care, case managed mental health

### Time of project
1992-1994

### Design
Case study

### Risk of bias
High (Higgins scale score 1/7)

### Main findings
When creating partnerships to improve community health, leaders need to consider and respond to four key dimensions of accountability: political, commercial, clinical/patient, and community accountability. The 3 case studies reported in this study of community partnerships led by hospitals all fell short of their goals and were ultimately fragmented by competition.

---

### Author
Weiner, B.J. and Alexander, J.A.

### Year
1998

### Citation

### Country
USA

### Participants
Projects undertaken under the Community Care Network demonstration initiative

### Time of project
1998-2002

### Design
Qualitative research

### Quality
High (Harden scale score 3/7)

### Purpose
To provide a qualitative perspective of the challenges governing public and private community health partnerships

### Main findings
Public-private community partnerships may require new models of governance that depart from those used by traditional health care organisations.

Partnerships possess several distinctive features including voluntary participation, multi-sectoral demography, varying levels of effort and resource commitment that pose significant challenges.

Every approach to governing a partnership will possess inherent tradeoffs and potential downside risks. A list of strategies to weight
Tradeoffs is included in this research.

<table>
<thead>
<tr>
<th>Author</th>
<th>Willcocks, S. and Conway, A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2002</td>
</tr>
<tr>
<td>Citation</td>
<td>Managing the seamless service: Primary Care Groups in the new NHS. Health Services Management. 2002:15:106-115</td>
</tr>
<tr>
<td>Country</td>
<td>England</td>
</tr>
<tr>
<td>Participants</td>
<td>Primary Care Trust</td>
</tr>
<tr>
<td>Time of project</td>
<td>1999-2000</td>
</tr>
<tr>
<td>Design</td>
<td>Qualitative research</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>Low (Harden scale score 4/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To identify the perceived importance of relationships in delivering seamless care in the NHS</td>
</tr>
<tr>
<td>Main findings</td>
<td>This case study assessed how well trusts build collaborative relationships in the health sector. Key findings: prior experience of Board Members is important; Trusts need to build relationships with practices locally; the importance of developing working relationships with medical and lay board members; possible conflicts of interest that may occur in relationships with both the Health Authority and the hospital Trust, problems of lack of available information; complications that arise due to local authority involvement; difficulties experienced gaining public involvement in the decision making process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Glendinning, C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2003</td>
</tr>
<tr>
<td>Citation</td>
<td>Breaking down barriers: integrating health and care services for older people in England. Health Policy 2003:65:139-151</td>
</tr>
<tr>
<td>Country</td>
<td>England</td>
</tr>
<tr>
<td>Participants</td>
<td>Primary Care Trust, General Practitioners, Community Health service</td>
</tr>
<tr>
<td>Time of project</td>
<td>2000-2002</td>
</tr>
<tr>
<td>Design</td>
<td>Qualitative research</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>Low (Harden scale score 5/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To integrate care for elderly in partnership with a primary care trust, general practitioners and community health services</td>
</tr>
<tr>
<td>Main findings</td>
<td>Structural integration can transform preoccupations over narrow sectarian responsibilities and boundaries to &quot;whole systems approach to service delivery and planning. However internal barriers include professional domains and identities, differential power relationships between integrated services and professionals. Success in integrating social and health care for the elderly has been mixed. Integration has been encouraged by the NHS including degrees of flexibility in terms of: authorising pooled budgets for specific services; delegating responsibilities for services to a single &quot;lead&quot; organisation which commissions services on behalf of stakeholders; and integrating health and social services within a single organisational, managerial and employment framework. An urgent priority is to establish clearly what clients want from integration and to devise methods for assessing whether patterns of</td>
</tr>
</tbody>
</table>
funding and organizing services can actually deliver on these objectives.

<table>
<thead>
<tr>
<th>Author</th>
<th>Lowery, K., Shi, L., Weiner, J.P. and Patow, C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>1999</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Participants</td>
<td>Hospital, community nursing, family, primary health care</td>
</tr>
<tr>
<td>Time of project</td>
<td>1997-2002</td>
</tr>
<tr>
<td>Design</td>
<td>Qualitative research</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>Low (Harden scale score 3/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To provide managed care for uninsured patients</td>
</tr>
<tr>
<td>Main findings</td>
<td>Key features of the JHHC and MCHS partnership: financial capital, expertise in managed care, access to clinicians, assumption of risk, capacity to provide administrative and executive management responsibilities, substantial Medicaid primary care base, regional presence, strong community support, patient loyalty, expertise in case management and outreach services.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authors</th>
<th>Bergin, A. Leggat, S.G. Webb, D. and Lane, K.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2005</td>
</tr>
<tr>
<td>Citation</td>
<td>A case study on easing an institutional bottleneck in aged care. Australian Health Review. 2005 29:3:327-331</td>
</tr>
<tr>
<td>Country</td>
<td>Australia</td>
</tr>
<tr>
<td>Participants</td>
<td>Public health service, private residential facility, community nursing agency, GPs</td>
</tr>
<tr>
<td>Time of project</td>
<td>2004-2005</td>
</tr>
<tr>
<td>Purpose</td>
<td>To improve access to emergency and acute inpatient services while meeting the needs of residential care clients in the metropolitan area</td>
</tr>
<tr>
<td>Design</td>
<td>Case Study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 0/7)</td>
</tr>
<tr>
<td>Main findings</td>
<td>The Interim Health Care project was a multifaceted strategy that provided alternative step-down care and rehabilitation for aged clients, as well as home care and support for carers. The components were developed separately but linked through consistent management to respond to the need of the identified patient group. Successful implementation was conditional upon the partnering organisations working together to improve care integration for these patients. The program built on existing relationships and reported that strong planning, sustained organisational commitment, clear protocols and successful engagement of staff contributed to the project's success. The IHCS was able to accommodate the needs of the patients who had remained in the acute or sub-acute facilities. Case management increased liaison with community and residential services such as hostels and supported residential services (SRS) to aid patients to return home.</td>
</tr>
</tbody>
</table>
### Author 1: Jarvis, A and Grant, S.

**Year:** 2002  
**Citation:** Wingecarribee health service model for transitional care. Australian Health Review. 2002 25:2:66-70  
**Country:** Australia  
**Participants:** Hospital, Division of General Practice, Community Health Centres, GPs  
**Time of project:** 1998-2001  
**Purpose:** To provide ambulatory care through a formal network of services between a rural public hospital and community health service and the local Division of General Practice  
**Design:** Case study  
**Risk of bias:** High (Higgins scale score 0/7)  
**Main findings:** This transitional care project partnership model attempted to integrate agencies at both the service delivery and the organisational level by building relationships and developing effective linkages between all service providers. An implementation committee, with key stakeholder representation, established guidelines and an implementation framework. Clinical matters such as admissions, discharges and referrals were handled by common procedures and protocols. At the organisational level, integration focused on structures, processes and cultures. The study reported improved integration between the acute and community services based on collaborative client management, clear lines of communication and multiple client access points in to the seamless service.

### Author 2: Holtom, M.

**Year:** 2001  
**Citation:** The partnership imperative: Joint working between social services and health. Journal of Management in Medicine. 2001:15(6):430-445  
**Country:** England  
**Participants:** Primary Care Trusts  
**Time of project:** 1998-2000  
**Design:** Qualitative research  
**Risk of bias:** Low (Harden scale score 3/7)  
**Purpose:** To identify organisational and cultural obstacles to effective joint working between health and social services.  
**Main findings:** The partnership model is not an option but a requirement in government plans for a primary-care-led NHS. Guidance on the establishment of PCGs and PCTs has emphasized the partnership imperative and specified the involvement of representative of local authority social service departments on the management boards of PCGs and PCTs.

Whilst partnerships can open up opportunities for closer co-operation there is also potential for a clash of professional interest's and organisational cultures. Local partners are tending to avoid a reliance on structured approaches to partnership, dependent on fully co-located boundaries or signed, joint systems, accepting that there will always be "grey areas" in which they need to co-operate. Local
agencies are putting major energies into functional links, tackling cultural issues which underlie most tensions within and between organisations.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Gardner, K and Sibthorpe, B.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2002</td>
</tr>
<tr>
<td>Citation</td>
<td>Impediments to change in an Australian trial of co-coordinated care. Journal of Health Services Research and Policy. 2002 7:S1:2-7</td>
</tr>
<tr>
<td>Country</td>
<td>Australia</td>
</tr>
<tr>
<td>Participants</td>
<td>Division of General Practice, GPs, hospital services, non-government organizations</td>
</tr>
<tr>
<td>Time of project</td>
<td>1997-1999</td>
</tr>
<tr>
<td>Purpose</td>
<td>To identify impediments to the implementation of a co-coordinated care trial conducted to provide integrated primary and secondary healthcare services for clients with complex needs</td>
</tr>
<tr>
<td>Design</td>
<td>Qualitative research</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>Low (Harden scale score 5/7)</td>
</tr>
<tr>
<td>Main findings</td>
<td>The Co-coordinated Care Trial implemented in the ACT had mixed success. Care Plus, a new purchasing organisation, was a joint venture between the trial sponsors, ACTDGP and the ACT Government, underpinned by a tripartite agreement between the Commonwealth and the sponsors. Funds were pooled from five sources. As an incorporated company there was a Board, which refused requests by NGOs and consumer organisations for representation. The major impediments included that: stakeholders did not fully endorse the trial's key goals and strategies; that GPs were unable to become effective purchasers; that increased gate-keeping was never fully realised, cost-saving strategies and processes were not taken up and any improvements in the continuity of care were impeded by limited provider networks and a reluctance by GPs to collaborate with other providers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author</th>
<th>Wilson, S., Chapman, M., Nancarrow, L., and Collins, J.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2001</td>
</tr>
<tr>
<td>Citation</td>
<td>Macarthur model for ambulatory services. Journal of Health Services Research and Policy. 2001:24:2:187-193</td>
</tr>
<tr>
<td>Country</td>
<td>Australia</td>
</tr>
<tr>
<td>Participants</td>
<td>Hospital, GPs, Division of General Practice, Community Health centres</td>
</tr>
<tr>
<td>Time of project</td>
<td>1999-2000</td>
</tr>
<tr>
<td>Purpose</td>
<td>To provide an integrated Ambulatory Care service in a rural community.</td>
</tr>
<tr>
<td>Design</td>
<td>Case study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 0/7)</td>
</tr>
<tr>
<td>Main findings</td>
<td>The study outlined the process involved in providing integrated ambulatory care in a rural community. The steps in the development were: developing an integrated strategy; appointing a Director of the Ambulatory Care; defining a conceptual framework; gaining endorsement by the Executive and critical staff; commencing community discharges to appropriate allied health services,</td>
</tr>
</tbody>
</table>
commencing services through the day assessment and treatment centre; employing a GP(VR) Registrar and commencing referrals to hospital in the home project overseen by Community Health nurses and ongoing supply of response services. The governance model was not described.

<table>
<thead>
<tr>
<th>Author</th>
<th>Boult, C and Pacala, J.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>1999</td>
</tr>
<tr>
<td>Citation</td>
<td>Integrating healthcare for older populations. American Journal of Managed Care. 1999:5(1):45-52</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Participants</td>
<td>Multidisciplinary teams commissioned by HMOs engaged in the Program for All-inclusive Care of the Elderly and the Social Health Maintenance Organisation for elders including family practitioners, social agencies, acute and long-term facilities.</td>
</tr>
<tr>
<td>Time of project</td>
<td>1990-1997</td>
</tr>
<tr>
<td>Design</td>
<td>Case study</td>
</tr>
<tr>
<td>Risk of bias</td>
<td>High (Higgins scale score 1/7)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To provide an integrated approach to health and social needs of older people</td>
</tr>
<tr>
<td>Main findings</td>
<td>The Program for All-inclusive Care of the Elderly (PACE) appears to exemplify the possible effectiveness of integrating the funding and the healthcare for the small segment of the elderly population with disability and complex health needs. Using capitation payments and accepting the full financial risk of providing all acute and long-term health care, the PACE sites have accepted strong financial incentives to avert the need for expensive institutional care. Early reports of the models ability to provide cost-effective comprehensive healthcare led to its replication at 19 demonstration sites. Wider dissemination of the model occurred in 1997 when a permanent mechanism for making capitation payments to qualified organisations that wish to provide integrated care was initiated by the US Healthcare Financing Administration. In a similar trial the Social Health Maintenance Organisation (SHMO II) funded by HCFA was intended to serve the full range of older Medicare beneficiaries with chronic illnesses or increased risk of hospital admissions. The results are inconclusive. Care integration and health system restructuring is costly and requires strong leadership, a willingness to change, firm commitment and perseverance. Currently there is no proof that client-centred integrated systems produce superior outcomes. The empirical evidence is spare and inconsistency. Further longitudinal studies are required. Specific governance models were not described.</td>
</tr>
<tr>
<td>Author</td>
<td>Navein, J. and McNeil, I.</td>
</tr>
</tbody>
</table>

Country: Surrey
Participants: Hospital residential nursing homes, Primary Care Trust
Time of project: Not implemented
Design: Case study
Risk of bias: High (Higgins scale score 1/7)
Purpose: To develop a Community Emergency Care Service

Main findings:
This study highlights the difficulties of implementing integrated care. The model described had been in planning for four years. It was supported by all the acute trust and PCT chief executives, clinical directors of emergency care, and fitted well with the NHS modernization agenda. It was actively supported by senior NHS executives, yet it was not implemented. Barriers to change are reported in detail. The proposed governance model was not described.

Quality assessment
Nine case studies were included in the review. These provide only a poor quality of evidence for determining the effectiveness of a health care intervention.

Five of the seven qualitative studies presented a lower risk of bias, with interviews and document audits to justify their findings.

Enablers and Barriers
A series of enablers and barriers were drawn from the published studies (Tables 4 & 5). Key informant interviews (Phase 2) also informed the development of a set of components to guide governance vehicles which support service integration (p.28-29).

Table 4: Reported factors for enabling integration

<table>
<thead>
<tr>
<th>ENABLERS</th>
<th>Reported in total studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared purpose, clear goals</td>
<td>9/16</td>
</tr>
<tr>
<td>Flexible partnership structures</td>
<td>9/16</td>
</tr>
<tr>
<td>Common clinical tools</td>
<td>8/16</td>
</tr>
<tr>
<td>Appropriate financing</td>
<td>8/16</td>
</tr>
<tr>
<td>Clinician input in decision-making</td>
<td>7/16</td>
</tr>
<tr>
<td>Suitable infrastructure</td>
<td>7/16</td>
</tr>
<tr>
<td>Team-based approach to service delivery</td>
<td>7/16</td>
</tr>
<tr>
<td>Client or community focus</td>
<td>6/16</td>
</tr>
</tbody>
</table>
Table 5: Reported factors that pose barriers to integration

<table>
<thead>
<tr>
<th>BARRIERS</th>
<th>Reported in total studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication, including lack of information, unclear expectations, ambiguous roles, duplication</td>
<td>12/16</td>
</tr>
<tr>
<td>Structural, including inadequate resources, staff turnover, financial restrictions</td>
<td>11/16</td>
</tr>
<tr>
<td>Cultural, lack of trust, eroded credibility, fear of change, unwillingness to innovate</td>
<td>9/16</td>
</tr>
</tbody>
</table>
DISCUSSION OF SYSTEMATIC REVIEW RESULTS

**Perceived advantages**
Projects designed to join-up services across traditional healthcare boundaries are often based on perceived advantages of integrated delivery. Arguments of cost-effectiveness, realised through shared financial resources, joint purchasing and elimination of duplicated efforts are commonly reported. Evidence of studies that have measured this perceived advantage are sparse in the literature, despite being commonly held aims of integration.

Client-centered approaches to integration purport aims to improved quality of care and provide a seamless continuity of care. This is often the case in projects that have been designed to provide healthcare services to high need clients with complex and chronic needs (Bergin et al, 2005; Jarvis et al, 2002; Gardner et al, 2002; Wilson et al, 2001; Glendinning, 2003; Bingham, 1996; Willcocks et al, 2002; Boult et al, 1999; Gamm, 1998; Lowery et al, 1999; Weiner et al, 1998).

Delivering services to regional and rural communities is another perceived advantage driving some studies described in the review. Cited drivers of a regionalised approach to service delivery include: workforce shortages, decreased capacity to deliver services to clients and opportunities to redefine facility utilisation.

**Description and scope of integrated governance**
Governance involves a number of tasks: setting strategic priorities; selecting the structure to provide project or service direction; obtaining and accounting of financial resources, providing measures of accountability. These complex, and often challenging, decisions account for time and energy expenditure in a single entity. However, when planning integrated projects the computations increase exponentially. Joining up to deliver services can also be forestalled by complex and dynamic bureaucratic processes - even to the point of delaying implementation (Navein et al, 2003).

Efficiency is a common theme in studies reported in this review. Methods to streamline decision-making and strategic planning include the suggestion by Savage et al (2001) to separate strategic and operational responsibilities into two governance vehicles. Campbell (1996) described a pragmatic approach to installing and defining such a system based on percentage of campus floor space occupied in a joint venture located on a shared campus. Strategic decisions were agreed by consensus, whereas operational decisions only needed to obtain a majority vote to proceed.

Governance is also considered in terms of the formality of organisational structures. Comparisons between loose and tight arrangements of governance are similar to concepts of centralized and decentralized control. In loosely controlled ‘virtual’ approaches, integrated governance plays a secondary role to the delivery of services through the existing entities. Directors are distanced from operational decision-making choosing instead to allow member organisations to maintain individually, their independence, integrity and reputation (Dubbs, 2002).

Studies that reported on components of organisation design consistently agreed that when conceptualising models of integrated governance - the needs of the client and community the project will be accountable to must be at the forefront of all discussions (Dagnone et al, 1994).
Variety of models described
A variety of models of integration projects are described in the included studies: networks (Weiner et al, 1998; Gamm, 1998; Glendinning, 2003; Gardner et al, 2002), partnerships (Wilson et al, 2001; Bingham, 1996), joint ventures (Campbell, 1996), mergers (Dubbs et al, 2002) and shared co-operatives (Holton, 2001). Degrees of autonomy are often symbolised by contracts, shared planning documents, pooled funding and representation on joint boards (Dagnone et al, 1994). The categories are not mutually exclusive nor do they represent the full range of integration models in existence.

Initiatives promoting integration
Initiatives to promote integrated health care have been trialed in Australia (Gardner et al, 2002), the United Kingdom (Holton, 2001; Willcocks et al, 2002) and the United States (Weiner et al, 1998). The success of these initiatives has been mixed. Gardner investigated the impediments to integrated care in Australia and found that structural, communication and cultural barriers thwarted attempts to deliver the outcomes promised under the Co-ordinated Care Trials.

In the UK, Government funding for local initiatives is increasingly allocated on a partnership basis and subject to the submission of jointly agreed plans (Holton, 2001). In some instances, these plans also specify the involvement of representatives from integrated agencies on management boards of PCGs and PCTs.

Demonstration projects in the United States revealed three clusters of inter-related governance issues. These issues took time and commitment to manage and included: managing ‘turf issues’ among partners; incorporating community accountability into the governance process; and coping with the competing demands of partnership growth and development (Weiner et al, 1998).

The Canadian models of integrated governance highlight the growing variety of privately and publicly funded care options for clients with increasingly complex healthcare needs. One model (Bingham, 1996) describes the installation of a Quick Response Team to identify high risk clients and work to deliver appropriate home care options. This model describes the whole-of-organisation approach that is required to manage integration across traditional boundaries. The other Canadian model (Campbell, 1996) describes a private sector partnership that established a two-tier governance structure to lead the integration project. Two committees have clearly defined roles in managing the care delivered through the combined regional facility that integrates hospital, primary care and allied professional services.

Difficulty sustaining integration
Our intention was to report on models of governance sustained for more than two years. Locating published studies that have demonstrated sustained governance proved a challenge. Sustainability is particularly important for reporting clinical outcomes. Many of the included studies have been reported within two years of their inception.

Disrupted or withdrawn funding is a common reason for disbanding integration projects. Changes in healthcare policy or the cessation of seeding funding is cited in the literature as a barrier common to sustaining integration. Faced with such prospects, clinicians may then face the challenge of integrating treatment into routine care. According to Baillie (2006) pressure on staff and their organisations to perform to a high standard (in terms of chronic disease management) in the expectation that this
will lead to improved (health) outcomes for their patients needs to be backed by good evidence on what needs to be sustained - or reinvented- and how it can be done.

**Human component of integration**
Qualitative studies highlighted the human elements involved in working in integrated care arrangements. Four studies - Gardner, Holton, Lowery and Weiner - focused on challenges, obstacles and impediments to joined up work practices in healthcare. These studies used stakeholder interviews to identify barriers to integration. Willcocks et al (2002) interviewed executives of Primary Care Trusts to examine the role relationship marketing may play in bringing primary and secondary care services into joined-up arrangements under the NHS policy of integrated care.

**Barriers and enablers**
Common themes emerged from the included studies that were reported as factors that facilitated or enabled integrated governance. The studies suggested that successful projects incorporated the following factors: a shared purpose; focus on client needs; clear goals, flexible partnership structures; common clinical tools; appropriate financing, suitable infrastructure; clinician input into decision-making; and a team-based approach to service delivery.

The three major classes of barriers to integration are: structural, cultural and communication. Financial restrictions, staff turnover and inadequate resourcing were commonly cited as major barriers to effective integration. A lack of trust, eroded credibility, fear of change and unwillingness to innovate were the main cultural barriers reported in the studies. Given the impact that the human resource has on successful integration, communication was reported as the most common barrier to working with other agencies. Unclear expectations, lack of information and duplicated efforts (real or perceived) topped the list of barriers to achieving a successful outcome from an integration project.

**Limitations of research**
Case studies accounted for nine of the 16 papers in this review. Inherent limitations of case study methodology include the subjectivity of information included in reports and the lack of empirical data to evaluate the effectiveness of implemented strategies. Many of the studies reported on projects that were still in an evolutionary stage, and given the relatively short study duration, changes since the time of the study will not be captured or reported.

The remaining seven studies included in the review were assessed using criteria for evaluating qualitative research developed by Bromley et al (2002). Qualitative studies reported on a range of perspectives from stakeholders involved in the delivery of projects trialing integrated governance.

This review is limited in its ability to endorse or recommend findings due to the inability to source evidence based on controlled studies. Caution must be employed when reading the findings that are based on descriptive case studies that failed to report adverse outcomes or clearly pre-specified measures of effectiveness.

Future research in this area should attempt to incorporate pre-specified outcomes of interest into the design. Measures of interest may include pre and post-intervention service utilisation patterns, cost-effectiveness, clear measures of integration and clinical measures for patient cohorts. Controlled studies would also provide important information and comparable data that may reveal important components of integration that can be applied to future models.
In summary, empirical evidence on the topic of integrated governance is limited.

KEY INFORMANT INTERVIEWS

Examples of Australian models of integrated governance

Northern Territory
Sunrise Health Service Aboriginal Corporation (SHSAC) in the Northern Territory was initiated in 1999 by the local Jawoyn Association and established as a Co-ordinated Care Trial, 2002-05. SHSAC, previously administered by Territory Health Service, has a head office in Katherine, ten remote health centres and covers an area of 75,000kms. Since 30th June 2005 it has been fully operational as an independent incorporated medical service for indigenous and non-indigenous people. A tripartite agreement between the Commonwealth, Territory and SHSAC has been signed and the service follows the Primary Health Care Access Program (PHCAP) flexible mixed mode pooled funding model with access to indigenous health funding from the Commonwealth and Territory governments (Rosewarne & Boffa, 2004). SHSAC has a 23 member Board which sets its policy, with representation from each community (ten). Each community health committee manages health care services locally within budgets determined by the overarching SHSAC board. A significant effort has also been provided into governance training for SHSAC members. The service is responsible for all staff (over 100) and services (excluding regional environmental health and communicable diseases).

New South Wales
North Wyong in NSW is one of the sites of the Integrated Primary Health and Community Care Services (IPHCCs). The governance model adopted is a company limited by guarantee. North Wyong IPHCC became a legal body in November 2005 and started trading as ‘Links to Health’ in February this year. This structural change was put in place to overcome some of the State/ commonwealth funding sensitivities created by Section 19(2) of the Health Insurance Act (HIA). In accord with s19(2), the IPHCC is a separate legal entity and participants are members not shareholders, holding limited liability and offering some tax and other advantages.

The IPHCC has incurred a high set up - and ongoing compliance – cost; some loss of organisational control (as members come onto the Board as individuals not organisational representatives) and more reporting and disclosure requirements. Offset against these costs, housing has been provided by the local council and consumables by the State Government, in the form of set-up grants. To cover the integration component, such as project management and administration, additional funds are expected to be required for at least a further three years. Within nine months of operation the income generated fully funds the salaried GP positions.

Whilst an independent evaluation is yet to be completed, early indicators demonstrate that, relationships between stakeholders have been maintained; there is positive patient feedback; GPs have been attracted to the region; the ‘entity’, endorsed by the collaboration of its key stakeholders, has attracted other funding.

South Australia
In South Australia the Advanced Community Care Association Inc. (ACCA), formed as a result of the ‘Generational Review’ (2003). It receives $12M annually from the Department of Health, Central Northern Adelaide Health Service, Southern Adelaide Health Service and the Children, Youth and Women’s Health Service. The ACCA funds ‘GP and ED avoidance’, Advanced Care for Residential Living, the Repatriation General Hospital Substitution Program, ‘Specialist Agency Packages’ and discharge packages...
from all metropolitan hospitals by commissioning rather than care packages (ACCAa, 2005). This fourteen member organisation incorporated body has a Board with its own constitution (ACCAb) and probity rules (ACCAc).

During 2004/5 ACCA-funded services were provided to more than 7000 people, by over one hundred contracted and sub-contracted non-government agencies. More than 95% of referrals came via the ACCA Contact Centre. The ACCA group of programs now provide more health care at home than any comparable service in Australia (ACCAa, 2005). The ACCA and its providers have set a two year target of achieving nearly 20,000 episodes of care, based on the 7000 delivered in 2004/5 and a projected 13,000 in 2005/6.

Victoria
In Victoria, the Integrated Primary Mental Health Service (IPMHS) is a service delivery partnership between two rural health care providers: Northeast Health Wangaratta (NHW) and the NE Victorian Division of General Practice (NEVDGP). The IPMHS provides direct clinical services via general practice settings and a range of education and training for High Prevalence Mental Health Disorders (HPMHD) in the community.

Funding for the IPMHS is provided through the Victorian State Government Primary Mental Health & Early Intervention Initiative and the Commonwealth Government More Allied Health Service and Better Outcomes in Mental Health Care initiatives.

The IPMHS pilot began operating in January 2003. This integrated service delivery model in North East Victoria demonstrates the braiding of federal and state policy and service systems. The model, involving the co-location of mental health clinicians to GP practices, was endorsed by a regional steering committee (Eastern Hume Primary Mental Health Management Committee) and piloted between NHW and NEVDGP. The respective Boards of management endorsed an initial 18-month pilot program. The pilot was formalised though a Memorandum of Understanding (IPHMSAa) and related business contracts.

Independent evaluation (IPHMSb, 2005) demonstrated clearly health outcomes, with patients reporting significant decreases in their major symptoms and difficulties experienced as a result of their mental illness. There was a high level of staff satisfaction with the service and a very high level of GP satisfaction with the co-location model of services provided by the IPHMS Service.

Queensland
The Brisbane South Centre for Health Service Integration (BSCHSI), was established as Queensland's GP/ Hospital Integration National Demonstration Site in 2003. This is a multi organisational collaboration between Queensland Health (QH); Brisbane Inner South Division of General Practice (BISDIV); and Mater Health Services, Brisbane, to deliver an integrated service capacity in areas of mutual interest. The governance model is based on a Steering Committee comprised of representatives from each organisation, which is responsible for all financial and strategic deliverables. The model has recently been expanded to include all significant health care organisations in Brisbane South. To date outcomes (DHA, 2005) include:

- improved organisational operations between five different work teams involving 90 individuals, via the provision of a physical co-location and validated integration strategies;
• the successful pilot and implementation of the Brisbane Inner South E-referral Project (BISEP) (Nicholson et al, 2006) allowing GPs to search and book available Mater Out-patients Department appointments for patients with suspected cancer, electronically. This enables the GP to book an appointment at the Mater before the patient leaves the general practice;
• the development and implementation of undergraduate multidisciplinary seminars (Jackson et al, 2006). Health professionals perceived highly significant shifts in knowledge and significant shifts in attitudes to inter-professional teamcare. This approach has since been adopted via the Faculty of Health Sciences at the University of Queensland; and
• service providers from different disciplines and organisations across Brisbane South adopted a team approach to the referral management of falls patients. A ‘Referral Checklist’ (Queensland Health, 2005) was developed allowing any discipline assessing a patient to involve all other relevant health providers in the patient’s assessment and management.

The BSCHSI governance model provides effective accountability mechanisms, adequate transparency of operations, a balanced capacity to deliver against service expectations, and upholds all relevant codes of conduct (DHA, 2005).

Enablers- now and into the future
The key informant interviews stressed the importance of getting the ‘right people’ involved in implementing models of integrated governance. Important enablers included:

• leadership, commitment and engagement of the key organisational individuals;
• having an ability and willingness to negotiate and trust;
• a demonstrated client or community focus based on local need (population & workforce);
• allowance for cultural sensitivities;
• addressing gaps and duplication in service delivery;
• a clear structure, clear roles and responsibilities; and
• organisational alignment (shared goals, culture, resources).

Supporting the evidence from the literature (Table 4) themes in developing successful integrated governance frameworks into the future:

• **Shared purpose, clear goals**: A key enabler is a clear and shared vision which requires effective leadership; agreed common objectives and commitment to outcomes; effective risk management strategies; open communication and transparency; clear alignment between stakeholders; and an understanding for internal issues across organisations.
• **Flexible partnership structures**: A flexible partnership structure allows models to be determined by local need. However, all models should include clear accountability and reporting rules; effective performance management; good clinical input at Board level; open disclosure rules; governance capacity and transparency; credible board members; equity amongst stakeholders; and be able to provide appropriate funding credibility.
• **Common clinical tools**: Appropriate clinical governance across the continuum can be enhanced using evidence-based clinical tools.
• **Appropriate financing:** A more integrated and patient focused approach requires appropriate funding models linked to incentives and long-term strategies for sustainability.

• **Clinician input in decision-making:** Effective clinical input at Board level has been a critical success factor in the models identified by this review.

• **Suitable infrastructure:** Successful models require dedicated resources, support, and appropriate skills for change management, to be effective and overcome resistance to change.

• **A team-based approach to service delivery:** A team approach to care is based on a clear understanding of professional and organisational roles and responsibilities. The focus should be less on competition and more on collaboration, driven by quality improvement and valuing continuity of care as an output.

• **Client or community focused:** Any successful health care model has to be patient focused.

• **Effective communication across the continuum** is also a recurrent theme from the key informant interviews including, the need for effective, established & expected connectivity between primary and secondary care. Allowing a community to be involved in planning provides local ownership and responsibility and is a powerful driver for successful implementation.

Finally, there must be consistent integrated data collection and review. A systems approach to performance measures should be taken, including accreditation accountability, a link to safety and quality outcomes and the provision of appropriate evaluation data to the health care community involved.

**Barriers**
Factors that pose barriers to integration were identified by both our informants and the literature (Table 5). These include:

• **Communication:** A lack of communication between organisations and professions is a major barrier to a more integrated approach to health care. This includes a lack of training, knowledge and understanding in what organisations/sectors/professions do which can result in unclear expectations or perceptions.

• **Structural:** The key structural barrier in the Australian context is the current commonwealth/state funding mechanism which has historically promoted increasing health ‘silos’. Other structural issues impeding integrated care include, the varying business drivers (public vs private industry; GP vs DGP vs acute care); and fragmented government bureaucracies with high staff turnover and little effective linkage with providers or each other. Inadequate resources fail to take into account the opportunity costs to integrating (cash, people, assets) or the recognition of investment into change management that is required. Public funding requirements have led to the need to be ‘positioned’ to receive funding - either creating a ‘new’ organisation or assigning one organisation to manage all the funds.

• **Cultural:** The most significant cultural barriers are a lack of trust, limited time and protection of territory. Some individuals and/or organisations have vested interests and a fear of change creating significant resistance.

Finally, the lack of accountability and paucity of data regarding outcomes in this area continues to be a significant barrier to implementing new models.
Determining future policy directions

There is a significant and historic opportunity in the current Australian health care environment to progress effective integrated governance relationships focussed on improved community health outcomes. Reforms to improve the health system (COAGa, June 2005), the National Action Plan on Mental Health (COAGc, July 2006) and Australian Better Health Initiative (ABHI) (COAGb, February 2006) will require a far more significant ability to work productively between jurisdictions.

State governments are increasingly attempting to work in alignment with the NGO and private sectors to maximise scarce resources in the face of increasing health care demand. Such significant and ambitious integration agendas MUST be underpinned by effective governance mechanisms, appropriate to the undertaking, partners involved and scale of delivery. This review has highlighted local and international initiatives that have been effective in the area, and proposed 3 potential governance approaches for consideration by those organisations undertaking the challenging but essential step to integrated service delivery.
5. IMPLICATIONS FOR RESEARCH

Further research in this important area is essential to develop a thorough understanding of the organisational variables which facilitate or impede integration. The conduct of controlled studies, with predetermined outcomes of interest and particularly relevant to chronic disease treatment programs, would be particularly timely.

Studies included in this review defined outcomes that were not reported in the final publication. Future research examining cost-effectiveness, service utilisation and improved health outcomes will need a commitment to the conduct of longitudinal studies. Longitudinal research will be beneficial to assessing factors that influence the sustainability of integrated governance and will provide a more rigorous test of the enablers and barriers reported in this review.

An additional concern is the number of high quality governance arrangements which remain unpublished and non-accessible to researchers in the area internationally.
6. REFERENCES


Dwyer, J. (2004). Regionalization: are even the flaws quintessentially Canadian? Healthc Pap, 5, 81-7; discussion 96-9.


IPMHSa. Integrated Primary Mental Health Service N/E Victoria – Memorandum of Understanding.


Jackson C, Nicholson C, Davison B & McGuire T. (June 2006). “Training the primary care team - can 7 different academic disciplines produce and sustain a successful team education program for their students?” accepted Australian Family Physician.


7. APPENDICES

Appendix 1: Process of Systematic Review

Total citations identified by search (n=3145)

Citations excluded on review of abstract (n=3037)

Full manuscripts obtained and reviewed for inclusion (n = 108)

Exclusion criteria
- Article does not describe a model
- Model was not sustained > 1 year
- Examples of “clinical” integration

Articles meeting inclusion criteria (n=16)

Models by country:
- Australia (n=4)
- Canada (n=2)
- New Zealand (n=0)
- the Netherlands (n=0)
- the United Kingdom (n=5)
- the United States (n=5)
## Appendix 2: Measures used to assess quality

### Table 6: Criteria for assessing quality of qualitative research

<table>
<thead>
<tr>
<th>Does the research include:</th>
<th>Yes (score=1)</th>
<th>No (score=0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>An explicit theoretical framework and/or literature review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aims and objectives are clearly stated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A clear description of context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A clear description of the sample and its recruitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A clear description of methods used to collect and analyse data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear attempts to establish the reliability or validity of data analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient original data to mediate between evidence and interpretation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### Table 7: Risk of bias assessments in Cochrane reviews

<table>
<thead>
<tr>
<th></th>
<th>Yes (score=1)</th>
<th>No (score=0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the randomisation sequence adequately generated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was allocation adequately concealed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were the allocated interventions adequately blinded during the study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were outcome assessments adequately blinded to the allocated interventions?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were dropouts and exclusions adequately addressed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are reports of the study free of suggestion of selective reporting?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the study apparently free of other problems that could be put it at high risk of bias?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix 3: References - included studies


## Appendix 4: Table of systematic review excluded studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Reason for Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggarwal</td>
<td>1998</td>
<td>Off topic - TQM case studies</td>
</tr>
<tr>
<td>Aikman</td>
<td>1998</td>
<td>Not a model - vertical integration in an acute services hospital</td>
</tr>
<tr>
<td>Alidina</td>
<td>2002</td>
<td>Not a model – no formal integration described</td>
</tr>
<tr>
<td>Altenstetter</td>
<td>2005</td>
<td>Off topic - primary health care environment in UK</td>
</tr>
<tr>
<td>Anderson, ST</td>
<td>1998</td>
<td>Not a model</td>
</tr>
<tr>
<td>Anderson, DA</td>
<td>2000</td>
<td>Off topic – managed care in hospitals</td>
</tr>
<tr>
<td>Ballatine</td>
<td>1998</td>
<td>Off topic - comparison of performance management systems in healthcare</td>
</tr>
<tr>
<td>Baquet</td>
<td>2004</td>
<td>Off topic – not integration</td>
</tr>
<tr>
<td>Barnett</td>
<td>2001</td>
<td>Not a model - approaches to governance based on economic theory</td>
</tr>
<tr>
<td>Barron</td>
<td>1995</td>
<td>Not a model - editorial</td>
</tr>
<tr>
<td>Bazzoli</td>
<td>2003</td>
<td>Off topic - physician organisation insurance products</td>
</tr>
<tr>
<td>Boulton</td>
<td>1999</td>
<td>Not a model – rationale for integration</td>
</tr>
<tr>
<td>Burnhope</td>
<td>2003</td>
<td>Off topic - study of clinical governance in nursing</td>
</tr>
<tr>
<td>Campbell</td>
<td>2004</td>
<td>Off topic - TQM case studies</td>
</tr>
<tr>
<td>Carter</td>
<td>2003</td>
<td>Not a model - examples of clinical teamwork</td>
</tr>
<tr>
<td>Chapman</td>
<td>1997</td>
<td>Off topic- not multi-institution</td>
</tr>
<tr>
<td>Coddington</td>
<td>2001</td>
<td>Off topic – physician financing</td>
</tr>
<tr>
<td>Collins</td>
<td>1992</td>
<td>Off topic - role of consumer councils in the NHS</td>
</tr>
<tr>
<td>Craig</td>
<td>2002</td>
<td>Off topic - NHS initiatives for the future</td>
</tr>
<tr>
<td>Dooris</td>
<td>2004</td>
<td>Not a model - analysis of health citifies initiative</td>
</tr>
<tr>
<td>Doyle</td>
<td>1997</td>
<td>Not a model of integrated governance</td>
</tr>
<tr>
<td>Dwyer</td>
<td>2004</td>
<td>Not a model – theoretical description</td>
</tr>
<tr>
<td>Edlin</td>
<td>1999</td>
<td>Not a model - editorial on HMOs managing mental health</td>
</tr>
<tr>
<td>Eeckloo</td>
<td>2004</td>
<td>Off topic – independent hospital governance</td>
</tr>
<tr>
<td>Elderfield</td>
<td>2004</td>
<td>Off topic - constructing a health care service not service delivery</td>
</tr>
<tr>
<td>Fine</td>
<td>2004</td>
<td>Not a model – no formal integration</td>
</tr>
<tr>
<td>Flood</td>
<td>2001</td>
<td>Not a model - example of regionalisation</td>
</tr>
<tr>
<td>Forder</td>
<td>1998</td>
<td>Not a model - description of financing options for residential mental health</td>
</tr>
<tr>
<td>Gauri</td>
<td>2004</td>
<td>Not a model - discussion of stakeholder buy-in</td>
</tr>
<tr>
<td>Geoghegan</td>
<td>1995</td>
<td>Not a model - editorial</td>
</tr>
<tr>
<td>Gill</td>
<td>1998</td>
<td>Not a model – support groups</td>
</tr>
<tr>
<td>Goldberg</td>
<td>1998</td>
<td>Off topic - who is responsible for the health of a population</td>
</tr>
<tr>
<td>Gray</td>
<td>1997</td>
<td>Off topic - partnerships between self-help groups and health care facilities</td>
</tr>
<tr>
<td>Haddad</td>
<td>1999</td>
<td>Unable to retrieve</td>
</tr>
<tr>
<td>Harno</td>
<td>2004</td>
<td>Off topic – technical integration</td>
</tr>
<tr>
<td>Hearnshaw</td>
<td>2003</td>
<td>Off topic – clinical audits and TQM</td>
</tr>
<tr>
<td>Hoek</td>
<td>1990</td>
<td>Off topic - hospital governance structures in Dutch hospitals</td>
</tr>
<tr>
<td>Howell</td>
<td>2004</td>
<td>Off topic - comparison of hospital governance in NZ and Australia</td>
</tr>
<tr>
<td>Author</td>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Jones</td>
<td>1995</td>
<td>Off topic – description of economic theory of contracts</td>
</tr>
<tr>
<td>Joseph</td>
<td>2005</td>
<td>Off topic – community development for affordable housing for seniors</td>
</tr>
<tr>
<td>Kalos</td>
<td>2005</td>
<td>Off topic – analysis of planning tool for community participation</td>
</tr>
<tr>
<td>Keck</td>
<td>2000</td>
<td>Off topic – research dissemination strategies</td>
</tr>
<tr>
<td>Keen</td>
<td>1993</td>
<td>Off topic – limited to integrating care settings in a hospital</td>
</tr>
<tr>
<td>Krupa</td>
<td>2004</td>
<td>Editorial piece – shows not attempt to evaluate</td>
</tr>
<tr>
<td>Laird</td>
<td>2005</td>
<td>Off topic – not integration</td>
</tr>
<tr>
<td>Larson</td>
<td>2005</td>
<td>Not a model – editorial on governing complex organisations</td>
</tr>
<tr>
<td>Latimer</td>
<td>2000</td>
<td>Not a model – description of co-location planning</td>
</tr>
<tr>
<td>Leatt</td>
<td>1997</td>
<td>Off topic – financial accountability in IDHs</td>
</tr>
<tr>
<td>Lozon</td>
<td>2002</td>
<td>Off topic – hospital merger</td>
</tr>
<tr>
<td>Malcolm</td>
<td>1994</td>
<td>Not a model – approach discredited with time</td>
</tr>
<tr>
<td>Marx</td>
<td>1990</td>
<td>Not a model – description of IT infrastructure integration</td>
</tr>
<tr>
<td>McWilliam</td>
<td>2003</td>
<td>Off topic – sociological element of partnerships</td>
</tr>
<tr>
<td>Mueller</td>
<td>1995</td>
<td>Off topic – what do economists know about employee cooperation?</td>
</tr>
<tr>
<td>Neville</td>
<td>2005</td>
<td>Not a model – perceptions from managers</td>
</tr>
<tr>
<td>Newton</td>
<td>1996</td>
<td>Not a model – editorial on HMOs managing mental health</td>
</tr>
<tr>
<td>O’Connell</td>
<td>2000</td>
<td>Not a model – review</td>
</tr>
<tr>
<td>Opie</td>
<td>1990</td>
<td>Off topic – networks and relationships between carers</td>
</tr>
<tr>
<td>Overetveit</td>
<td>2003</td>
<td>Not a model – privatisation of Nordic health services</td>
</tr>
<tr>
<td>Parker</td>
<td>2001</td>
<td>Off topic – clinical integration</td>
</tr>
<tr>
<td>Perkins</td>
<td>2000</td>
<td>Not a model – impact of corporate governance on NZ hospitals</td>
</tr>
<tr>
<td>Peschel</td>
<td>2000</td>
<td>Off topic – technical communication pathways</td>
</tr>
<tr>
<td>Peters</td>
<td>2000</td>
<td>Off topic – physician satisfaction with HMOs</td>
</tr>
<tr>
<td>Phillips</td>
<td>1997</td>
<td>Not a model – editorial on IM strategies in healthcare</td>
</tr>
<tr>
<td>Pointer</td>
<td>1995</td>
<td>Not a model – function of governance</td>
</tr>
<tr>
<td>Preker</td>
<td>2000</td>
<td>Not a model – organisation theory on “make or buy” arrangements</td>
</tr>
<tr>
<td>Price</td>
<td>1998</td>
<td>Not a model</td>
</tr>
<tr>
<td>Prybil</td>
<td>1995</td>
<td>Not a model – article describing a set of guidelines for hospital mergers</td>
</tr>
<tr>
<td>Ramsay</td>
<td>1994</td>
<td>Off topic – descriptive analysis of teamwork in health care</td>
</tr>
<tr>
<td>Rico</td>
<td>2003</td>
<td>Off topic – drivers of organisational restructuring</td>
</tr>
<tr>
<td>Robinson</td>
<td>1996</td>
<td>Not a model – single organisation described</td>
</tr>
<tr>
<td>Rogut</td>
<td>1997</td>
<td>Off topic – physician perceptions of ambulatory care</td>
</tr>
<tr>
<td>Ronning</td>
<td>1994</td>
<td>Not a model – no case examples</td>
</tr>
<tr>
<td>Rosenblatt</td>
<td>1991</td>
<td>Off topic – series on hospital development process</td>
</tr>
<tr>
<td>Ross</td>
<td>1993</td>
<td>Off topic – case management in a community setting</td>
</tr>
<tr>
<td>Rovinsky</td>
<td>2002</td>
<td>Off topic – gaining physician input</td>
</tr>
<tr>
<td>Ruffin</td>
<td>1995</td>
<td>Off topic – a summary of managed care in USA</td>
</tr>
<tr>
<td>Scholten</td>
<td>2002</td>
<td>Off topic – impact of hospital governance on physician relations</td>
</tr>
<tr>
<td>Scholten</td>
<td>1998</td>
<td>Off topic – review of 4 theoretical models of hospital leadership</td>
</tr>
<tr>
<td>Author</td>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Scott</td>
<td>1996</td>
<td>Not a model</td>
</tr>
<tr>
<td>Sharp</td>
<td>1993</td>
<td>Off topic - description of an audit tool</td>
</tr>
<tr>
<td>Sheaff</td>
<td>1999</td>
<td>Not a model - forecast of how GPs and PCTs might work together</td>
</tr>
<tr>
<td>Sirio</td>
<td>2004</td>
<td>Off topic - communities responding to public health needs</td>
</tr>
<tr>
<td>Slaughter</td>
<td>2000</td>
<td>Not a model - introduction of an electronic health record</td>
</tr>
<tr>
<td>Smith</td>
<td>1999</td>
<td>Unable to retrieve</td>
</tr>
<tr>
<td>Smolensky</td>
<td>1999</td>
<td>Off topic - clinical governance in nursing</td>
</tr>
<tr>
<td>Snail</td>
<td>1998</td>
<td>Off topic - hospital integration of clinical units</td>
</tr>
<tr>
<td>Snow</td>
<td>2003</td>
<td>Off topic - population health focus of pooling local information</td>
</tr>
<tr>
<td>Tatman</td>
<td>1992</td>
<td>Off topic - partnerships with parents</td>
</tr>
<tr>
<td>Thurston</td>
<td>2005</td>
<td>Off topic - public participation in improving women's health services</td>
</tr>
<tr>
<td>Triska</td>
<td>2005</td>
<td>Not a model - physician perceptions of integration</td>
</tr>
<tr>
<td>van der Bij</td>
<td>1999</td>
<td>Off topic - TQM techniques used in Dutch hospitals</td>
</tr>
<tr>
<td>Wakerman</td>
<td>1998</td>
<td>Not a model - structural obstacles of delivering remote health</td>
</tr>
<tr>
<td>Walker</td>
<td>1998</td>
<td>Not a model - description of collaboration projects involving DGP's</td>
</tr>
<tr>
<td>Weil</td>
<td>2003</td>
<td>Off topic - teamwork in hospital quality improvement activities</td>
</tr>
<tr>
<td>Wild</td>
<td>2004</td>
<td>Off topic - technological integration in a hospital system</td>
</tr>
</tbody>
</table>
Appendix 5: References - excluded studies


Coddington, D. C., Ackerman, F. K., Jr. and Moore, K. D. (2001) Setting the record straight: physician networking is an effective strategy Healthc Financ Manage, 55, 34-7.


## Appendix 6: Key informant interviewees

<table>
<thead>
<tr>
<th>State</th>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>Kate Carnell</td>
<td>Australian Divisions of General Practice</td>
</tr>
<tr>
<td></td>
<td>Prue Power</td>
<td>Australian Health Association</td>
</tr>
<tr>
<td></td>
<td>Phillip Davies</td>
<td>Commonwealth Department of Health &amp; Ageing</td>
</tr>
<tr>
<td></td>
<td>Richard Eccles</td>
<td>Commonwealth Department of Health &amp; Ageing</td>
</tr>
<tr>
<td></td>
<td>Robert Wells</td>
<td>ANU College of Medicine &amp; Health Services</td>
</tr>
<tr>
<td></td>
<td>Andrew Podger</td>
<td>Former Secretary, DoHA; &amp; Former Public Service Commissioner</td>
</tr>
<tr>
<td></td>
<td>Mukesh Haikerwal</td>
<td>Australian Medical Association</td>
</tr>
<tr>
<td></td>
<td>Robyn Mason</td>
<td>Australian Medical Association</td>
</tr>
<tr>
<td></td>
<td>Julia Nesbitt</td>
<td>Australian Medical Association</td>
</tr>
<tr>
<td>NSW</td>
<td>Catherine Katz</td>
<td>NSW Health</td>
</tr>
<tr>
<td></td>
<td>Di O’Halloran</td>
<td>NSW Health Primary health Care Integration Steering Committee</td>
</tr>
<tr>
<td></td>
<td>Anthony Critchley</td>
<td>North Sydney Central Coast Health</td>
</tr>
<tr>
<td>VIC</td>
<td>Lenora Lipman</td>
<td>General Practice Divisions of Victoria</td>
</tr>
<tr>
<td></td>
<td>Naomi Kubina</td>
<td>West Bay PCP</td>
</tr>
<tr>
<td></td>
<td>Renee Williams</td>
<td>North East Victorian Division of General Practice</td>
</tr>
<tr>
<td>NT</td>
<td>Irene Fisher</td>
<td>Sunrise Health Service, Katherine</td>
</tr>
<tr>
<td></td>
<td>David Ashbridge</td>
<td>NT Government Department of Health &amp; Community Services</td>
</tr>
<tr>
<td></td>
<td>Rob Curry</td>
<td>Aboriginal Medical Services Alliance Northern Territory</td>
</tr>
<tr>
<td>WA</td>
<td>Martin Cutter</td>
<td>WA Health Department</td>
</tr>
<tr>
<td></td>
<td>Catherine Stoddart</td>
<td>WA Country Health Service</td>
</tr>
<tr>
<td>SA</td>
<td>Iolanda Principle</td>
<td>SA Department of Health</td>
</tr>
<tr>
<td></td>
<td>Rob Pegram</td>
<td>Primary Health Care Services, Central Adelaide Health Service</td>
</tr>
<tr>
<td></td>
<td>Tori Wade</td>
<td>West Bay Alliance</td>
</tr>
<tr>
<td></td>
<td>Adair Garrett &amp; Deb Odgers</td>
<td>Primary Health Care Services, Central Adelaide Health Service</td>
</tr>
<tr>
<td></td>
<td>Sue Golley</td>
<td>Advanced Community Care Association</td>
</tr>
<tr>
<td>QLD</td>
<td>Terry Mehan</td>
<td>Queensland Health</td>
</tr>
<tr>
<td></td>
<td>Andrew Wilson</td>
<td>Queensland Health</td>
</tr>
<tr>
<td></td>
<td>Janette Young</td>
<td>Queensland Health</td>
</tr>
<tr>
<td></td>
<td>Geoff Kiel</td>
<td>University of Queensland</td>
</tr>
<tr>
<td></td>
<td>John Kastrissios &amp; Ann Marie Liddy</td>
<td>Queensland Divisions of General Practice</td>
</tr>
</tbody>
</table>
Appendix 7: Key stakeholder interview report

SECTION A: NATIONAL

Q1(a). Are there any current arrangements demonstrating successful integrated governance in Australian health care?

South Australia
Children's Corner House - Collocation of children's Services in S.A.
Homeless Program (started 18 months ago) - TOR & plan involving 16 health and community services organisations with coordinated information transfer system. Evaluation underway.
Advanced Community Care Association (result from ‘Generational Review’, 3.5 year old) - 12 mill/yr annually -incorporated body- BOARD governance - multiple NGO organisations, DGP - state wide hospital avoidance & I/med care for older Australians (www.accasa.org.au). Commissioning rather than care packaging, includes,
Metro Home Link - delivers avoidance and discharge packages
Residential Care & Aged
Early D/C packages
Primary Health Care Networks just commencing (result from ‘Generational Review’, 18 months old) - MOU arrangement (draft copy available) between DGP, SA Health & Community health organisations- population based care.
GP Obstetric Share-Care - MOU between DGP & SA Government; Mental Health Shared Care (State Health funded)

NSW
North Wyong- not for profit Co. Ltd by guarantee- board with directors (come on as individuals) + 2 DGP members- representation from DGP, uni., Area Health & 2 local GPs.
Health Share - pooled funding as part of statewide strategy- NSW approach to capitated funding for 10 care - now defunct.
IPCC - integrated governance arrangements encouraged - not mandatory at this stage- includes Uni of Newcastle, Cessnock GP

ACT
ACT Community Services & Health Board (late 90's) advisory structure.

NATIONAL
CCTs: Katherine West, NT (see below), Broome (contracting out Aboriginal services- dialysis)

Victoria
NE Mental Health Program funds pooling - Vic Health & MAHS funding.
Integrated Cancer Services (Dept. Human Services) only going a few years
Eastern Health HARP CDM program- hospital/ 10 care partnership for hospital avoidance
West Bay PCP- Diabetes. Initially managed and funded by PCP project funds now mainstreamed with HARP under DHS governance- they have $ and contract out for services. Initially key managers of stakeholder agencies (13) formed Steering Committee. Should have had Executive governance group above this for accountability. Now under HARP umbrella and governance.
Queensland
NQ Area Health Service, Indigenous Health: Common service contract between AMS, QH, DOHA
GP NQ Partnership
BSCHSI

Northern Territory
Katherine West: NT govt. biggest funder and provider of 10 care (salaried). Sunrise Health Service started as a CCT 2002-5. Head office in Katherine, 10 remote health centres, covers area of 75,000kms, previously administered by Territory Health Service. Initially no infrastructure now developed to over 100 staff. Initially purchased services, no change for clinic staff to allow smooth transition which the constitution was being developed auspiced by Jawoyn. First year of being fully operational as an independent incorporated medical service for indigenous and non-indigenous people (June 30th 2005) - all staff and services (excluding regional environmental health and communicable diseases). Signed a tripartite agreement between the Commonwealth, territory and Sunrise HS- can now access indigenous health funding not able to under territory health auspice to top up 10 care service. Governance structure: Board representatives from each community (10), 23 member board which sets policy. Each community has a community health committee to which budgets relevant to them are presented. Lot of effort provided into governance training for members. Under consideration- team based 10 care funding ‘single PCT fro NT’ (Medicare $)

Q1(b). What are/were the drivers making formal integration necessary?
- Commitment
- right people, trust, relationship
- connectivity of people
- clear roles & responsibilities
- successful pilot models - Walgatt, Cessnock
- ‘ Moons lining up’ (linking momentum and initiatives)
- willingness and ability to negotiate
- funding opportunities and different ways of thinking (often developed together over time)
- important issues /problem T, T & T
- governance, incentives, culture and finance all aligned
- leadership
- local need (population/ workforce) e.g. concern from Aboriginal elders re the poor health outcomes and the need for services to be community driven/ local driver/ lead agency
- awareness of gaps and inequities between metro and rural/remote areas
- awareness of cultural sensitivities
- commitment and engagement of key people
- problem definition then innovation outside organisational silo
- changing private health insurance arrangements
- duplication of services & lack of workforce/ turnover of staff
- care co-ordination to manage pts with CD who move between systems

Q1(c). What information was used to shape the model(s) they chose?
- direct service provision
- brokerage model
- public / private partnership
- previous pilots in similar setting
data on economic & quality outcomes
local need identification
goal alignment between organisations/ parties/ responsible persons

Q1(d). What were the impediments to an integrated governance model?
- fear of parties
- capacity in managers - experience, key knowledge & skills re breadth of health care organisations
- T, T, T (territory, trust, time)
- Human factor- existence of vested interests
- Varying business drivers- public vs private industry
- Commonwealth / State (hospital/community) split- funding mechanisms promote/ create silo’s
- Trying to co-ordinate with government run services- have to have individual MOUs eg with dentist, mental health team, because they don’t know what each other are doing
- GP small business model / non alignment with DGP directives
- culture of medical practice unity
- single fund holder/ lead agency
- need to be positioned to receive $- either create ‘new’ organisation or assign organisation to manage this (T,T,T)
- lack of data re $ outcomes
- absence of lobbying momentum
- opportunity costs to integrating; availability of resources to implement (cash, people, assets)
- hospitals require them to be internally driven
- lack of training/ knowledge/ understanding in what 10/ community providers can do
- lack of accountability
- recognition of investment into change management

Q1(e). What are/should be the defining governance characteristics of a collaboration/partnership in health care?
- P focus - Shared mission / vision clarity of purpose
- clear accountability- clear reporting rules
- local ownership & responsiveness and responsibility
- leadership / drive / energy
- capacity for governance
- equity
- planning is population-based
- community feels ownership
- capacity and transparency
- appropriate clinical governance
- clear R & R understanding of issues / sensitivities for internal issues across organisations
- clear alignment of agencies- finance, culture need to align not just governance model
- clearly defined deliverables
- appropriate funding credibility
- a body capable of receiving funding
- "putting all the dead cats on the table"
- long-term strategies for sustainability
• linked to funding/ incentives/policy/strategy
• less competition more collaboration- driven by quality improvement not financial gain- value continuity of care as an output
• Credible board members
• Dedicated resources and support

Q2. What future policy directions might raise a need for such frameworks?
• Commonwealth / State
• Mental Health Reforms
• COAG- need bilateral agreement before taken to COAG/ reflect in the ACAS (last time had groups but their work did not appear to come to anything)
• bring partnership between state /commonwealth and private sector
• outcomes focus measurement
• mechanism between state & commonwealth in primary care at regional level
• local drivers
• regional service delivery - small rural communities < 7000 people
• common strategic planning for DGP & local regions
• Indigenous health
• Shared governance model away from FFS
• Pooled effort not pooled funds
• Primary Care Access Program funding for roll out of community led AMS services (Rob Curray, AMSNT PCAP document 08 8981 8433)

Q3. What are going to be the challenges / issues?
• Local ownership
• local innovation & $ not pride the crucial factor
• roll of state and national organisations in facilitation
• time for management structures to be in place- limited capacity
• risk sharing
• ABHI - still in 2 silos
• move form disease focus to regional focus
• consistency and performance
• having sufficient enablers / sustainability
• evaluation in place/ economic modeling
• scalability
• honesty, mutual respect
• misinformed politicians

Q4. Will a greater formal integration of health care services in Australia be a likely future scenario?
• Pressures will drive it will we pull it off?
• population - based or disease focused?
• much will depend on a shared government policies / approach
• Yes - & procurement of services around formal arrangements
• Yes - measurement the key
• 10 care led system- currently acute sector the driving force which dictates 10 care led response. Need 10 care leadership & governance model
• Health regions/districts with pooled $- sufficient to deal with acute sector juggernaut and manage risk
• ‘Dammed if we don’t’. Has to happen- matter of when. Needs significant leadership and champions (clinical, academic, political, consumer). Status quo
Q5. What will be the key issues the governance framework needs to address?

- clear and agreed objectives and outcomes
- clear parameters, timelines
- commitment to outcome
- public communication and transparency
- good data collection & review
- monitoring role- systems thinking, linked to safety and quality outcomes
- good risk management
- Most measures known by health system currently. Need to transfer performance measures, accreditation accountability to community
- good clinical input at Board level
- credentialing
- open disclosure
- effective, established & expected connectivity between 1st + 2nd care
- effective performance management
- access and affordability for continuity
- effective information management is crucial and must link with the clinical need across the continuum to understand issues of all stakeholders- need capacity to move info with the pt
- needs a regional model based around primary care with excellent information connectivity and the capacity to link population health with service delivery and resourcing
- clinical governance across the continuum- standardised care
- linking social determinants of health
- time and skills for change management to be successful and overcome resistance to change

SECTION B: INTERNATIONAL

UK Health Reform initiatives involving General Practice

Compiled from key informant interviews with:

- Prof. Deb Humphris and the Interprofessional Learning (IPL) staff at the University of Southampton Health Care Innovation Unit
- Dr Maureen Baker, Hon Sec, Royal College of General Practitioners, London
- Fiona Smart, Director Professional Development and Clinical Governance, the East Hamphire and Fareham and Gosport Primary Care Trusts, East Hampshire
- Dr Hamish Meldrum, Chair British Medical Association General Practice Committee, BMA House, London
- Prof Trish Greenhalgh, Dept of Primary Care and Population Sciences, University College London

Background

The NHS has experienced a period of unprecedented reform in recent years. Central to this, has been an increased focus on the primary health care sector, with the formation of approximately 500 Primary Care Groups in the late 90s, to take an increasing role in commissioning local health services. By 2000, these had amalgamated into 230 Primary Care Trusts, which had governance responsibilities for the purchasing of most health care services within regions across the UK. Despite the name, GPs took little
governance role in these Trusts and most members were local community members with a centrally-appointed, non-health background Chair.

In 2003, in response to growing disillusionment with general practice and decreasing morale and participation, the NHS negotiated a new contract with general practices (1). This resulted in a number of fundamental changes. It became, for the first time a practice rather than doctor-based contract. It freed GPs from compulsory after-hours responsibilities and included extra payments for GPs who achieved evidence-based quality indicators (Quality and Outcomes Framework). There are a maximum of 1000 points achievable annually with each point worth £124.60. Collection of the measures has been achieved in the main, with little additional practice resourcing. An extra £8 billion has been injected into general practice over the first 3 years to achieve this and most general practices have increased their incomes by approx 30% (excluding after hours payments). Some problems have arisen due to the relative under funding of the essential service component of the contract, with many practices focusing on the more lucrative outcomes targets, and reducing new patient loads to do so.

This year, the government has released a further primary care white paper ‘Our Health, our Care, our Say’ (App 2). Key features of this initiative include:
- Increasing role for nurses and pharmacists
- Increasing link between health and social care
- Right to choose a general practice based on access
- Practice-based commissioning, allowing GPs to offer new services which deliver care safely, with quality and close to home

The four key goals include:
- Increased prevention and early detection of disease
- Identification and treatment of lifestyle risks with an ‘on-line’ assessment tool plus health service support
- Mental health support
- Incentives to increase GP opening hours and increase convenience of appts
- Increased link between health and social care
- Increase chronic disease management and self-management supports.

The number of primary care trusts will reduce to 70 (from 230) national-wide by Oct 06 (most with population coverage of approx 1 million people). Many of the Trusts were struggling financially, returning large deficits which had to be recouped from the following year's budgets. Those that are doing well, do so with leadership from primary, executive and secondary care. Scotland’s PCT equivalent is far less structured, featuring community partnerships where form of arrangement follows function. The primary care white paper has also initiated Practice Based Commissioning (PBC) and Payment by Results which allows practices to receive payment from Trusts for taking additional measures / offering additional services which retain services more efficiently in the primary care sector e.g. dermatology, admission avoidance, diabetes Rx, Ultrasound, counseling. Practices have received this challenge enthusiastically in the main, although the clinical governance issues raised by this shift are yet to be addressed.

Practices report a growing number of salaried GPs, and Alternate Provider Practices (similar to our corporate practices) are commencing in areas unable to be served by existing practices or where contracted by the Trusts. There is currently a much smaller increase in GP numbers than specialist numbers, with shrinking re-entry and training
budgets GP re-validation, put in train following the Shipman Enquiry, remains to be endorsed by government.

The UK government is struggling currently with a large health care deficit, and therefore a pressing need to address the universality v comprehensiveness care question. Many on-lookers think there will be increasing competition between traditional NHS providers and private providers for service provision, with the major concern that the main likely casualty will be teaching provision.

Community hospitals – traditionally supported by GPs – are undergoing major change, with many being targeted for multi purpose centres. The role of GPs in these centres is unclear, with the BMA expressing concern about the remuneration for GPs servicing the centres and concerns about the human resources available outside the practice. Funding for care packages may provide the appropriate vehicle.

IT literacy in UK general practice is high with approx 50-60% practices paperless. There are currently 4 main GP-specific software programs with EMIS being the best known. GPs report significant corruption of data with patient file transfer between systems, and GPs still struggle to link with secondary and tertiary care, which has little clinical IT capacity. ‘Connecting for Health’ - our equivalent of HealthConnect - is slow to roll out, with increasing pressure for ‘opt-in’ provisions for patients (National Program for IT, National Audit Office). ‘Choose and book’ - the electronic booking system which allows GPs to book patient appointments at local hospital OPDs - is unpopular, with GPs reporting lengthy time taken to assist patients with choice of hospital, and the requirement often to have the appointment confirmed with the patient by the hospital.

**Relevance to health care reform research, primary care models and regional organisational governance:**

1. The University of Southampton experience demonstrates the breadth of IPL possible with the resources and interdisciplinary commitment to implement. Unfortunately, overall evaluation is still to come with the completion of the first 3rd year this year. However, many of the curriculum delivery elements would be applicable in the UQ environment. Interestingly, the U of S students request the further development of a clinically-based teaching scenario. This is the sole - and successful - focus of our IPL teaching at UQ currently.

2. The Foundation Degree in Health and Social Care qualification is similarly of great interest. It application to the Australian health workplace would need to be carefully evaluated prior to embarking on the significant curriculum development required at UQ. Like Uni. of Southampton, a commitment from government for work places, or a clear market in the health private sector would need to be established before proceeding further.

3. Our IT approach via ‘Broadband for Health’ was of interest to many of the informants I met with. This web-based, linkage approach seems to overcome many of the enormous hurdles facing an enormously resourced, but struggling, IT sector in health in the UK.

4. Integrated governance. The PCT model – as currently – is NOT a cooperative model of local health organisations approaching governance regionally. IT is rather centrally-appointed bureaucracy with little health provider input, currently struggling to meet financial accountability. It is not the model we seek for regional health governance in our context.
5. Many of the problems confronting the Australian health system are mirrored in the UK. Solutions to some are of interest e.g. GP Quality and Outcome Frameworks, care packaging, and payment for outcomes, and should be progressed with further research, and discussion with key GP groups and government.
Appendix 8: References - identified by stakeholders

Included

ACCAa Advanced Community Care Association Annual Report 2004-05

ACCAb Advanced Community Care Association Inc. Board Constitution and Rules

ACCAc Advanced Community Care Association Inc. Board Probity Rules


Health Outcomes in Victoria - The Next Wave of Reform. Report to the Government of
Victoria,

Australian Department of Health and Ageing (DHA) (2003). BSCHSI - GP Hospital

COAGc June 2006 National Action Plan on Mental Health 2006-2011,

COAGb February 2006 Better Health for all Australians

COAGa July 2005 Australia’s Health System


Fareham & Gosport Primary Care Trust Annual Report 2004-5. ‘Our Year’, NHS, UK.

First Steps Forward – South Australian Health Reform June 2003 Government of South
Australia.


of the South Australian Generational Health Review, Government of South Australia,

IPMHSa Integrated Primary Mental Health Service N/E Victoria – Memorandum of
Understanding.
IPMHSb (June 2005). Integrated Primary Mental Health Service N/E Victoria Program Evaluation  

Jackson C, Nicholson C, Davison B & McGuire T. (June 2006). “Training the primary care team - can 7 different academic disciplines produce and sustain a successful team education program for their students?” accepted Australian Family Physician.


NSW Health Futures Planning Roundtable (2005) Planning for the Future NSW Health 2025 - Summary  


Primary Health Care Network – N/NE Memorandum of Understanding 2006 Central Northern Adelaide Health Service, Government of South Australia.

Queensland Health, (2005). Falls Management and Prevention Program for Community Dwelling Older Adults  


WestBay Alliance & Western HARP Consortium - DHS HARP submission (2003/04)  

Excluded

AMSANT Position Paper. Aboriginal Community-controlled services- Service Delivery, Advocacy, Planning & Funding, at the local, regional and national level. The NT Aboriginal Health sector perspective.


**DoHA submission to the Productivity Commission’s Health Workforce study**

**General Practice Hospital Integration Issues in Rural and Remote Australia**

**GP-Hospital Integration - What have we learnt?**

**National Chronic Disease Strategy. p.27–37.**