Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

Report 3

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<tr>
<td>AAAPC</td>
<td>Australian Association for Academic Primary Care</td>
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<td>ABF</td>
<td>Activity Based Funding</td>
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<td>ABHI</td>
<td>Australian Better health Initiative</td>
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<td>ACCHS</td>
<td>Aboriginal Community Controlled Health Services</td>
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<td>ACA</td>
<td>Accountable Care Organisation</td>
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<td>AGPN</td>
<td>Australian General Practice Network</td>
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<tr>
<td>AHPA</td>
<td>Allied Health Professionals Association</td>
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<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
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<tr>
<td>AML Alliance</td>
<td>Australian Medicare Local Alliance</td>
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<tr>
<td>AMSANT</td>
<td>Aboriginal Medical Services Alliance Northern Territory</td>
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<tr>
<td>APHCRI</td>
<td>Australian Primary Health Care Research Institute</td>
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<tr>
<td>BC</td>
<td>British Columbia</td>
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<tr>
<td>CCG</td>
<td>Clinical Commissioning Group</td>
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<td>CHIC</td>
<td>Connecting Healthcare in Communities</td>
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<tr>
<td>CPHC</td>
<td>Comprehensive Primary Health Care</td>
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<tr>
<td>CSSS</td>
<td>Centre de santé et de services sociaux (Health and Social Services Centres)</td>
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<td>DASSA</td>
<td>Drug and Alcohol Services South Australia</td>
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<td>DGP</td>
<td>Divisions of General Practice</td>
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<td>DHB</td>
<td>District Health Board</td>
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<td>DoFP</td>
<td>Divisions of Family Practice</td>
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<td>FFS</td>
<td>Fee-for-service</td>
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<td>EHR</td>
<td>Electronic Health Record</td>
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<td>FHT</td>
<td>Family Health Team</td>
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<td>GHC</td>
<td>Group Health Cooperative</td>
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<td>GP</td>
<td>General Practitioner</td>
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<td>HEAL</td>
<td>Healthy Eating, Active Living</td>
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<td>HiAP</td>
<td>Health in All Policies</td>
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<td>HMO</td>
<td>Health Maintenance Organisation</td>
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<td>IFHC</td>
<td>Integrated Family Health Centre</td>
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<td>IDS</td>
<td>Integrated Delivery Systems</td>
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<td>IPA</td>
<td>Independent Practitioner Association</td>
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<td>IPCC</td>
<td>Integrated Primary and Community Care</td>
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<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>KP</td>
<td>Kaiser Permanente</td>
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<tr>
<td>LHIN</td>
<td>Local Health Integration Network</td>
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<tr>
<td>LHN</td>
<td>Local Hospital Networks/Local Health Areas in some jurisdictions</td>
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<tr>
<td>ML</td>
<td>Medicare Local</td>
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<tr>
<td>MOHLTC</td>
<td>Ministry of Health and Long-Term Care</td>
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<td>MoUs</td>
<td>Memoranda of Understanding</td>
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<td>MSSP</td>
<td>Medicare Shared Savings Program</td>
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<td>NACCHO</td>
<td>National Aboriginal Community Controlled Health Organisation</td>
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<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
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<tr>
<td>NGO</td>
<td>Non-Government Organisation</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NHA</td>
<td>National Hospital Authority</td>
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<td>NHHN</td>
<td>National Hospital and Health Network</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NSW</td>
<td>New South Wales</td>
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<td>NT</td>
<td>Northern Territory</td>
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<td>NZ</td>
<td>New Zealand</td>
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<tr>
<td>P4P</td>
<td>Pay-for-performance</td>
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<tr>
<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
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<td>PCA</td>
<td>Performance Contracts and Allocations</td>
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<td>PCO</td>
<td>Primary Care Organisation</td>
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<td>PCN</td>
<td>Primary Care Network</td>
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<td>PCP</td>
<td>Primary Care Partnerships</td>
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<td>PCIP</td>
<td>Primary Care Integration Project</td>
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<td>PCEHR</td>
<td>Personally Controlled Electronic Health Record</td>
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<td>PCMH</td>
<td>Patient-Centered Medical Home</td>
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<td>PCT</td>
<td>Primary Care Trust</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PHCOs</td>
<td>Primary Health Care Organisations</td>
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<td>PHCRIS</td>
<td>Primary Health Care Research &amp; Information Service</td>
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<tr>
<td>PICE</td>
<td>Planning, Integration and Community Engagement</td>
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<tr>
<td>PMS</td>
<td>Personal Medical Services</td>
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<tr>
<td>PPP</td>
<td>PHO Performance Programme</td>
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<tr>
<td>QoF</td>
<td>Quality and Outcomes Framework</td>
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<tr>
<td>SA</td>
<td>South Australia</td>
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<tr>
<td>SBO</td>
<td>State based organisation</td>
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<td>STO</td>
<td>State and Territory organisation</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>US</td>
<td>United States</td>
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<td>VHA</td>
<td>Veterans’ Health Administration</td>
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<td>WHO</td>
<td>World Health Organization</td>
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1 Executive summary

Fragmentation is at the heart of the ineffectiveness of our increasingly frantic efforts to nurture improvement (Stange, 2009, p 100).

Historically, general practice has been the principal access point for health care delivery in the Australian community. Alongside the growing trend in specialised care, there has been increased fragmentation of health care services, particularly for patients with multiple and/or complex conditions. In Australia and elsewhere, governments recognise that there are multiple health, social and economic implications of fragmented health care; and an integrated health care system is an integral element of health reform. Increasingly, evidence suggests that integrated primary health care (PHC) is an effective way to optimise the efficient delivery of services and improve patients’ outcomes and experiences (Ham and Curry, 2011).

Patients often negotiate many different types of services that impact on their overall health and wellbeing. Therefore, a major challenge is to enable health care to be integrated across different service providers in diverse organisations. A number of organisations and agencies have been established to act at the local/regional level to facilitate linkages and networks between the various health service providers and provider organisations. These organisations operate at the meso level, between policy (macro) and service delivery (micro), to facilitate integration between diverse providers, with the ultimate aim of improving the patient’s journey through the health system.

1.1. Aims

This report, which is the third in a series on integrated PHC, examines integration at the meso level. It aims to identify meso level organisations in Australia (and internationally) and discuss their roles in enabling integration in PHC; explore the models and mechanisms for integrating care in Australia and internationally; identify the challenges and enabler of different approaches to facilitating integration across health service provider organisations; highlight promising approaches to integration; and identify potential unintended consequences of integration efforts.

1.2. Scope

This report examines vertical and horizontal integration at the meso level within the Australian health system with some additional international examples provided. Where possible, this review includes evidence of best practice in Australia and internationally. Other countries are limited to those with comparable health systems and/or those with relevant models of integration that may be applied in the Australian setting (e.g. New Zealand, England, Canada, United States).

1.3. Findings from the literature review

A broad range of meso level organisations and peak bodies that play a role in integrated care were identified, including: PHC (e.g. Medicare Locals); allied health; community health (e.g. Aboriginal Community Controlled Health Services); hospitals (e.g. Local Hospital Networks); medical specialties;

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1 Meso: For the purposes of these reports, meso level integration refers to the activities that organisations and agencies undertake to support integrated care. Meso level organisations generally do not deal directly with patients, but rather interact with other organisations and agencies to facilitate integrated care (Smith, 2007).
arms-length bodies; non-health organisations; and research organisations that contribute to knowledge exchange and linkage between relevant organisations and agencies. Governments at all levels also play a role in promoting and enabling integration across sectors.

In Australian PHC, the Commonwealth government’s key strategy to integrate health care has been the establishment of 61 Medicare Locals (MLs). MLs are Primary Health Care Organisations (PHCOs) that have a remit to focus on integration of health care services more broadly in their geographic area, particularly in terms of the needs of the local community.

1.3.1. Australian models of meso level integration
Some of the main models of meso level integration that have been implemented in different Australian states and territories include:

- Primary Care Partnerships (Victoria)
- Connecting Healthcare in Communities (Queensland)
- Primary Care Integration Program (NSW)
- Comprehensive Primary Health Care: a range of different initiatives including Primary Care Amplification Model; Brisbane South Comprehensive Primary Care Network; Uni-Clinic Cessnock
- Aboriginal and Torres Strait Islander-specific organisations and models: Aboriginal Community Controlled Health Services; specialist outreach services and clinics; framework for PHC in the NT; Australian Better Health Initiative (NT).

While the literature base was replete with descriptive articles and reports, evaluations of effectiveness in terms of meso level integration outcomes were very scarce and offered very little details related to integration at the meso level.

1.3.2. International organisations and models of meso level integration
Internationally there are a number of similar organisations that act to improve integrated health care, including:

- Independent Practitioner Associations and Primary Health Organisations (NZ)
- Primary Care Trusts and GP Consortia/Clinical Commissioning Groups (England)
- Local Health Integration Networks, Primary Care Networks and Divisions of Family Practice (Canada)
- Health Maintenance Organisations and Accountable Care Organisations (US).

The key international models are:
- Integrated Delivery Systems (US)
- Accountable Care Organizations (US)
- Patient-Centered Medical Home (US)

While some evaluations of effectiveness of international models of meso level integration were identified, outcomes were primarily reported at the level of service delivery (micro level integration), which will be presented in Report 5 in this series (Integrated care: What can be done at the micro level to influence integration in primary health care?).

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\[\text{Arms-length bodies is a term coined in the UK to represent executive agencies, independent special health authorities, or non-departmental public bodies (http://www.dh.gov.uk/health/category/arms-length-bodies/).}\]
1.3.3. Mechanisms identified in the models
The key mechanisms that were contained in the various models, both in Australia and internationally, fell into three main categories based on the WHO framework for functions of a health system:

- **Stewardship**: Governance, regulation, sustainability
- **Creating resources**: Partnerships, engagement and communication, data and evidence, eHealth, Infrastructure
- **Financing**: Funding and financing arrangements, balancing competition and integration.

Few research studies have evaluated the effectiveness of mechanisms at the meso level of integration.

1.3.4. Challenges and enablers of integration
The challenges and enablers for meso level integration fell into five main categories. To facilitate integration both between PHC organisations and across different sectors and levels of the health system, meso level organisations need to consider these factors:

- **Communication**: strong communication, networking and exchange of information amongst stakeholders; clarity of aims, objectives, goals, roles and outcomes; and transparency in use of funds and accountability are necessary conditions for successful integration initiatives
- **Organisational culture**: Strong leadership – managerial and clinical; flexibility and adaptability to changing needs; an appropriate pace of change; and working with existing collaborations
- **System and structural arrangements**: Inclusive, shared board membership and joint governance; alignment of boundaries to facilitate coordination of planning and service delivery; formal contracts/informal partnerships agreements; favourable political climate; adequate accountability and evaluation structures; realistic timeframes to allow change to occur; registered/enrolled patient population
- **Information technology and resources**: Adequate resources (human, administrative, financial) to support integration efforts; development of skills/experience in planning, commissioning, purchasing; investment in IT for data collection, sharing, privacy and security; technical support for IT and training
- **Funding arrangements**: capitation or blended payment systems; adequate funding for establishment and maintenance of integration efforts.

For some populations, particularly those living in rural and remote areas, there are few services available to integrate. These populations rely on additional strategies to bring them to the services (e.g. partnerships with public transport services) or vice versa (e.g. Outreach services). A framework for PHC has been developed in the NT to address the challenges of health service delivery, particularly for Indigenous Australians living in remote areas.

Similarly, for culturally and linguistically diverse (CALD) populations, there are many challenges to navigating an unfamiliar health system; and engaging appropriately with CALD communities is essential to facilitate their interactions with integrated health services.

The research also identified a number of potential risks/unintended consequences of integration, including:

- **Perverse incentives**: under-servicing, over-servicing, selective servicing and ‘gaming’ depending on the type of incentive offered
- **Health insurance**: risk selection, adverse selection of patients that influences costs and cover
- **Integration vs. competition**: tension may hinder integration
• Change fatigue: may lead to conflict, resistance to change and high staff turnover.

1.3.5. Summary

It is clear from the literature that there is an ongoing tension between central and regional control of health services planning and delivery. The advantage of central control is greater consistency across organisations, alignment with national priorities etc. However, the trade-off is potential loss of local context, reduced engagement of providers etc (McDonald et al., 2007). Over time, the focus has shifted back and forth both in Australia and elsewhere.

In Australia, meso level organisational integration has largely relied on good will, memoranda of understanding (MOUs) and formal or informal agreements related to partnerships. This has led to local innovation but it has been patchy across regions and success is dependent on strong leadership, common objectives, and clarity of roles, responsibilities and accountabilities.

It is unlikely that a one-size-fits-all approach to integration will be an advantage. Planners and policy makers may need to consider using sets of complementary mechanisms, structures and processes to create an integrated system that fits the needs of the population across the continuum of care. Careful management of change is essential, focussing on a limited number of stakeholder-approved specifications required to induce a shift towards integration. Evidence suggests that large scale, imposed, realignment of complex systems is often destabilising, resisted, unmanageable and unproductive. Any major initiative should be flexible enough to accommodate contextual factors to shape aspects of a new model at the local level.

Importantly, in order to have reliable evidence for decision-makers, evaluation needs to be included, for the purpose of accountability and to develop a better understanding of the effectiveness and impact of health systems integration (Armitage et al., 2009). There is little empirical evidence of the impact of meso level integration on the subsequent delivery of integrated health care. This is due largely to the lack of consensus on how to define it, measure it and implement it; and the lack of a suitable conceptual framework to guide integration at the organisation or systems level (Hogg et al., 2008, Martin and Sturmberg, 2005). Selecting appropriate indicators to measure performance will also be a key challenge.

From the available literature evidence, the main strategies and other arrangements that are more likely to support and influence integration at the meso level are:
**Five key findings**

- Integration of organisations at the meso-level does not guarantee integrated health service delivery; however, some of the leading models (i.e. Integrated Delivery Systems) show significantly improved health outcomes, cost reductions and evidence of integrated health service delivery across the health system (both vertically and horizontally).

- The mission to integrate health service delivery involves **engagement** of numerous health and non-health organisations and providers, across **multiple levels** (horizontal and vertical) involved in the delivery of health services.

- In Australia the overlapping roles of the commonwealth and states for the delivery of health services makes identifying who is **responsible** and **accountable** difficult. The system is complex which influences its efficiency with regard to integrated service delivery.

- Strategic and targeted **financial incentives** are required to deliver both long-term and short-term outcomes for integrated service delivery. Voluntary participation and goodwill facilitate health service integration.

- **Infrastructure** is necessary to support coordination (e.g. shared records), **needs assessments** and longitudinal **measurement** of both population and individual health outcomes.

**1.4. Conclusions**

Health system integration is not a final destination for PHC, but rather a means of achieving improved performance, whilst at the same time adding value to the system, program, community, patients and providers (Armitage et al., 2009). The siloed structures of the past, built in part to preserve professional autonomy, are difficult to align with the inter-professional approaches demanded by systems thinking. Creating agile, responsive, intelligent systems that learn from feedback, reduce unnecessary duplication and harness the creativity of those within and beyond the traditional borders of health systems demands new ways of working. These new modes of working should seek to integrate across disciplines, hierarchies, departments and specialties. The literature suggests identification of appropriate partners in order to grow relationships and build local capacity; and learnings may be generated from feedback in order to adjust, adapt, dissolve and regenerate to meet the changing needs of health systems.

Historically, given the disruptions caused by major re-structures of health systems, changes that rely on inter-organisational relationships are often difficult to implement and appear overwhelming. However, with good planning, leadership, adequate resources, flexibility and realistic objectives, well-chosen meso level initiatives are capable of achieving improved integration of health care.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
2 Context

Who among us would not want hospital staff to work closely with primary, community, and social care services, so that, when we turn up in the emergency department with a serious exacerbation of our chronic condition, the team there knows all about us? Better still, wouldn’t we all want the various teams to liaise closely so we don’t have to go to hospital at all? (Godlee, 2012).

Fragmented care is a persistent problem in health systems across the world. It is the “systemic misalignment of incentives, or lack of coordination, that spawns inefficient allocation of resources or harm to patients” (Enthoven, 2009, p 1). Patients require health services that are adequately linked; poor integration of services leads to delays and duplication, wasted resources and opportunities, and potential harm to the patient. With rising costs and increasing need for multiple types of health care services, many people fall through the gaps between services as they traverse a health system that is often very difficult to navigate.

The scale of these emerging health problems cannot be managed effectively by specialist services working in isolation from generalist primary care services (Powell Davies et al., 2006, p 122).

Between the macro level of governments that develop policies, frameworks and strategies underpinning the health system and enabling delivery of integrated health services, and the micro level of agencies and individuals that provide services directly to patients, lies the meso level organisations that act at the local/regional level to facilitate linkages and networks between the various health service providers and provider organisations. The meso level inter-organisational networks, which may occur at global, national and regional levels, have been recognised as essential to addressing the complex health problems that individual organisations cannot manage alone (Willis et al., 2012).

Only through pooling of resources, talents and strategies from across a range of actors and organizations, may population health be improved (Willis et al., 2012, p iv63).

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<tr>
<td>1</td>
<td>Macro</td>
<td>Integrated care: What policies support and influence integration in health care in Australia?</td>
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<tr>
<td>2</td>
<td>Macro</td>
<td>Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?</td>
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<td>Meso</td>
<td>Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?</td>
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<td>4</td>
<td>Meso</td>
<td>Medicare Locals: A model for primary health care integration?</td>
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<td>5</td>
<td>Micro</td>
<td>Integrated care: What can be done at the micro level to influence integration in primary health care?</td>
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This report is the third in a series related to integrated health care. Each report addresses different aspects of integration at one of three levels: macro, meso, micro. While the series of reports address different levels of integration, there is frequently overlap as the levels are interdependent. Meso level initiatives and strategies are enabled by macro level policy; and, in turn, enable teams of health care providers to deliver appropriate integrated services at the micro level. The current report examines meso level integration (levels are described in more detail below). Although many
different organisations and agencies may play a role in integration at the meso level, this review particularly focuses on the role of PHC and other sectors and organisations will be examined only in terms of their interaction with PHC.

The next (fourth) report in this series discusses the findings from a qualitative research project exploring the role of Australian Medicare Locals in meso level integration of PHC services.
3 Background

One of the key aspects of recent health reforms in Australia has been to integrate health care services to improve the effectiveness, efficiency and quality of care that people receive, with a particular focus on PHC. In Australia, health care is provided by a complex mix of agencies and individuals, including:

- State and Territory government managed hospitals and community health services
- Publicly and privately funded health care providers
- Government and non-government managed health services.

The division of funding responsibilities for health services adds to the complex governance arrangements between Commonwealth and State/Territory governments (Council of Australian Governments, 2011, Nicholson et al., 2012) and is a challenge for integration. Table 16 (Appendix A) briefly summarises the roles and responsibilities for funding and delivering PHC services across the jurisdictions.

In the context of Australia’s system of government and the health care system more specifically, PHC operates at three broad levels:

- **Macro** (system) level governments and agencies are responsible for national and/or state level policy, funding strategies and enabling infrastructure. Examples include Commonwealth, State, Territory and Local Governments.
- **Meso** (organisational) level agencies are positioned between the macro and micro levels, often have a regional role and may act as commissioning, linking, enabling agencies for the local and regional PHC sector. Examples include Medicare Locals (MLs) and Local Hospital Networks (LHNs).
- **Micro** (practice) level includes agencies and individuals who provide direct health care to clients/patients. Examples include general practice/practitioners, community health services, private nursing, allied health professionals and hospitals (AMLA, 2012a, p 3).

Figure 1 illustrates the key stakeholders involved in integrated care, their perspectives and their main focus at the different levels. In some cases, the distinction between levels is not always clear and stakeholders play a role in more than one level. For the purpose of this series of reports, meso level organisations are those that do not deal directly with patients, but rather with the agencies and organisations at the micro level which do manage patient care; or with other meso level organisations.
The main actors at the **macro** level are: Government agencies and policy advisors at national and regional levels. This is a high level ‘big picture’ perspective. Focus is on stewardship, funding, incentives, creating resources and selecting best services for delivery.

The main actors at the **meso** level are: PHCOs, allied health and community health organisations, medical specialists and hospitals. Arms-length bodies also play an important role. This is a middle level, regional perspective. Focus is on partnerships with similar organisations and those in other relevant sectors to facilitate integrated care.

The main actors at the **micro** level are: health care professionals across all organisations, patients and the local community. Focus is on patient-centred health service delivery and implementation of programs.

**Figure 1** Key stakeholders involved in integrated care
3.1. Defining meso level integration
Integration and integrated care have multiple definitions in the literature and people’s understanding of these terms differs according to their perspective (Gröne and Garcia-Barbero, 2001, Kodner and Spreeuwemberg, 2002, Leutz, 1999, Øvretveit et al., 2010). Some definitions focus on the organisation of services across different sectors, while others focus on the provision of a broad range of health and/or social care services (see Table 17, Appendix A for examples of definitions). For example, the needs and expectations of a CEO in a regional health authority will differ from those of a hospital services manager. Although the definitions are varied, a central principle of integrated care is to bring together a diverse group of individuals and organisations to align administrative, funding, organisational, clinical and service delivery models that are designed to enhance access to good quality health care, particularly for patients with complex needs.

Organisations that focus on integration at the meso level are positioned between macro level governments, which develop policies, funding strategies and infrastructure, and micro level agencies/individuals that deliver PHC services to patients and clients. While there is substantial diversity in form and function between different meso level organisations, there are also common factors. Typically, meso level organisations have a regional/local focus and act as agents to commission, link and enable coordination and integration of services across different service providers.

The diversity in definitions is not surprising given that integration at the meso level is both horizontal, such as between general practice and allied health professional organisations at the same level and vertical, such as between different levels of the health system (e.g. between hospital and PHC provider organisations).

Two of the four dimensions of integration described by Fulop et al. (2005) focus primarily on meso level integration. Specifically:
- organisational integration occurs at the meso level of a health care system, for example in the form of mergers, contracting or strategic alliances between health care institutions (formal structure)
- service integration occurs at the meso (and micro) level of a health care system, for example in the form of alliances between health care professionals to integrate services within and between organisations.

Integration at the meso level entails mergers between organisations that agree on rules and policies, as in systemic integration; and alliances, partnerships and networks created by a number of organisations that have shared values (Fulop et al., 2005). This type of integration may occur along a continuum ranging from formalised networks based on explicit governance arrangements at one extreme (e.g. US Kaiser Permanente), through to loose alliances at the other end (e.g. Memoranda of Understanding). The latter form of integration is often underpinned by contracts or service agreements between organisations, and is also known as contractual integration. These factors are central to health service integration at the meso level (Curry and Ham, 2010).

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[iii] See Report 1 for more detail on terms and definitions (Integrated care: What policies support and influence integration in health care in Australia?).
[iv] See Report 1 for more detail on the other dimensions (functional and clinical integration), which operated predominantly at the macro and micro levels, respectively.
3.2. Models and mechanisms - terminology

Frequently, the literature about health care reform refers to ‘models’, such as a model of care, or a payment or service delivery model. This terminology is widely used in published research, grey literature and policy documents when authors refer to a ‘key mechanism’ or a ‘combination of mechanisms’ eliciting a particular behaviour change (Young et al., 2008, Naccarella et al., 2006). Models of integrated PHC have been promoted as a means of building a more effective and efficient health care system that takes a patient-centred focus and meets the needs of the population served (Armitage et al., 2009). For clarification and consistency in the distinction between models and mechanisms (Table 1), this report follows the conceptual framework published by the Australian Primary Health Care Research Institute (APHCRI) (Naccarella et al., 2006).

Table 1 Mechanism and model terminology

<table>
<thead>
<tr>
<th>Mechanisms</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>• are the ‘agents of change’ that act on individuals or organisations</td>
<td>• employ various combinations of mechanisms</td>
</tr>
<tr>
<td>• are often theory-based</td>
<td>• are often context-specific</td>
</tr>
<tr>
<td>• may be modified to different contexts</td>
<td>• may be modifiable, however specific models are more difficult to transfer across settings</td>
</tr>
<tr>
<td>• may be transferable across different settings</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Naccarella et al., 2006)

Typically researchers and policy makers search for a mechanism that works in their context (Naccarella et al., 2006). These mechanisms are usually practical approaches that can be described independently of the context of their application, and are directly transferable to another setting. For example, Fee-For-Service (FFS) is a mechanism; this can be used in many different health care systems (contexts), and is transferable, although the details of the payment scheme itself may have developed within a specific context and policy strategy. This differs from a service contract which is an example of a model containing a payment mechanism. The service contract is context-specific as it cannot be applied directly to another setting without modification (Naccarella et al., 2006). Innovative models are often comprised of multiple mechanisms designed to meet the objectives of specific policy change. For example, the Primary Care Trust (PCT) model in England, which evolved from a GP Fund holding, Total Purchasing and Primary Care Group, comprises multiple mechanisms (Naccarella et al., 2006). PCTs are also described in more detail on page 51.

3.3. Stakeholders in integrated health care

Integrated care involves a growing number of actors or stakeholders across a variety of sectors, including:

• primary health care (PHC), which is provided by a broad range of health care professionals
• secondary care, which is provided by private medical specialists and allied health professionals
• tertiary care or acute care, which is provided in hospitals and other tertiary care institutions

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v More details on the UK models of integration are described in Report 2 (Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?).
vi Secondary care is defined as “medical care provided by a specialist or facility upon referral by a primary care physician that requires more specialized knowledge, skill, or equipment than the primary care physician has” (Merriam-Webster dictionary).
vii Tertiary care is defined as “highly specialized medical care usually over an extended period of time that involves advanced and complex procedures and treatments performed by medical specialists in state-of-the-art facilities” (Merriam-Webster dictionary).
- non-health services, such as social welfare and transport services
- State and Territory and local governments.

### 3.3.1. Primary Health Care (PHC)

Currently, there is no consensus on what constitutes Australian PHC and where the boundaries lie. Traditionally viewed as “…the first level of contact of individuals, the family and community” (Alma-Ata, 1978), PHC is used more broadly now to refer to “the parts of the health system that most people interact with most of the time (Commonwealth of Australia, 2008, p 10); or health care that is provided outside of hospitals.

**Primary care** is the part of Australia’s health system that people use most. It is the first – primary – point of health care delivered in, and to people living in their communities – outside of hospitals (Australian Government Department of Health and Ageing – yourHealth website).

A commonly cited definition of *comprehensive* PHC was developed by the Australian Primary Health Care Research Institute (APHCRI):

*Primary health care is socially appropriate, universally accessible, scientifically sound first level care provided by health services and systems with a suitably trained workforce comprised of multi-disciplinary teams supported by integrated referral systems in a way that: gives priority to those most in need and addresses health inequalities; maximises community and individual self-reliance, participation and control; and involves collaboration and partnership with other sectors to promote public health. Comprehensive PHC includes health promotion, illness prevention, treatment and care of the sick, community development, and advocacy and rehabilitation (APHCRI, 2010).*

In essence, the scope of PHC is changing. For decades, general practice has been the ‘primary’ health care service in the Australian community. Not only as the first point of contact for most people, but also attending to the general health concerns of most of the population. Over time, the form and function of PHC has extended beyond the biomedical model of care to a more social model of health based on the philosophy that for health improvement to occur, the social, political, environmental and economic determinants of illness must be addressed. This model of care is provided by a wider range of providers, services and functions. It is this more holistic view of PHC that underpins reform of the Australian health system and pertains directly to integration across providers, services and functions. Box 1, which is not an exhaustive list of the types of services provided in PHC, provides a summary of the main components of PHC in Australia (Powell Davies et al., 2009).
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

Box 1  Main Components of Australian Primary Health Care

<table>
<thead>
<tr>
<th>General practice</th>
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<tbody>
<tr>
<td>Most general practice operates on a small business or sole practitioner model, although many are corporately owned practices. There is no system of patient enrolment. General practitioners (GPs) are independent professionals who choose when and where to practice, which patients to accept, and what fees to charge. In the last decade, practice nurses have become more common in Australian general practice, particularly in rural areas. Over 4000 practices in 2010-11 employed a practice nurse (Carne et al., 2012). Some practices also involve private allied health service providers, employed as part of the practice team or as independent co-located practitioners, although the number is not known.</td>
</tr>
</tbody>
</table>

- 2011 – current: Medicare Locals (MLs, see p. 24 for more details) transitioned from existing Divisions of General Practice (DGP) into organisations with a new and broader brief that spans the entire PHC system. Sixty-one MLs have been established nationwide. Key roles include health improvement through health prevention and promotion initiatives. The peak body for MLs is the Australian Medicare Local Alliance (AML Alliance). |

<table>
<thead>
<tr>
<th>Community health</th>
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<tbody>
<tr>
<td>Second largest component of PHC. Defined as “multi-disciplinary teams of salaried health and allied health professionals who aim to protect and promote health of particular communities” (SCRGSP, 2011).</td>
</tr>
</tbody>
</table>

- Community health reflects “health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities” (SCRGSP, 2011, p 11.82). |

- Funded by states and territories, with considerable variation in the range of services provided, the extent to which they are decentralised, and the strength of their links to hospital management. |

- Community health generally takes a broader approach to PHC than general practice, with a stronger focus on population health and health promotion. |

- Core community health services include: generalist community nursing, rural health services, allied health, and a wide range of more specialised services including early childhood, alcohol and other drugs, women’s health, men’s health, maternal and child health, mental health and sexual health (SCRGSP, 2011). |

In recent years there has been an increasing emphasis on hospital avoidance, post-acute care and chronic disease management although some services, predominantly non-government, also maintain a strong focus on community development and health promotion. Except in Victoria, very few community health centres have GPs. Some non-government organisations (NGOs) also provide community health services. |

<table>
<thead>
<tr>
<th>Aboriginal Community Controlled Health Services</th>
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<tbody>
<tr>
<td>There are more than 150 Aboriginal Community Controlled Health Services. These vary considerably in their structure and the services they provide, and may include GPs, allied health workers and Aboriginal health workers. These are community run organisations, and often take a stronger preventive approach to health care than mainstream services. They have state/territory offices and the national peak body is the National Aboriginal Community Controlled Health Organisation (Bartlett and Boffa, 2001).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private allied health services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined as “occasions of service to non-admitted patients at units/clinics</td>
</tr>
</tbody>
</table>
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

15

Providing treatment/counselling to patients.”

- “Examples include units providing physiotherapy, speech therapy, family planning, dietary advice, optometry and occupational therapy” (SCRGSP, 2011, p 10.98).

- Allied health professionals include pharmacists, physiotherapists, dietitians, podiatrists, optometrists and more recently exercise physiologists.

Similar to GPs, private allied health clinicians operate independently and may offer their services wherever they wish. They lack the local networks and organisation that Divisions provided to general practice; though there are a number of advocacy groups in place offering support to the allied health workforce. The peak body for allied health services is the Australian Allied Health Professionals Association (AHPA).

Source: Adapted from (Powell Davies et al., 2009)

Given this changing scope of PHC, the distinction between the primary, secondary and sub-acute care sectors is increasingly blurred. Thus, other types of services and health care providers in Australian PHC include:

- Health promotion (AMLA and ANPHA, 2012)
- Disease prevention
- Patient support
- Pharmacists
- Dental services
- Mental health services
- Rehabilitation, palliative care and aged care (Commonwealth of Australia, 2009).

While the secondary care, tertiary care and non-health services are critical elements in integrated care, the role of PHC in integration is the key focus of this series of reports. Therefore, the other sectors are considered only in terms of their interaction with PHC and a full exploration of the contribution of these sectors to integration across the health system is beyond the scope of this report.

3.3.2. **Secondary Care: Medical specialists and specialised services**

In Australia, medical specialists are registered as specialists in fields approved by the Australian Health Workforce Ministerial Council (Medical Board of Australia, 2010). Specialties include dermatology, obstetrics and gynaecology, paediatrics and child health, psychiatry, radiology, surgery and physicians in a range of different fields (e.g. cardiology, geriatrics, rheumatology). **General practice** is also a specialty field.

Powell Davies et al. (2006) suggest that, over time, there has been an increase in specialised services delivered in the community and a blurring of the boundaries between specialists with specific training in a specialty area (e.g. rheumatology, obstetrics, psychiatry) and generalists such as general practitioners (GPs). Often, these specialised services have emerged from general practice itself, whereby GPs have developed areas of special interest (e.g. aged care, drug and alcohol services, women’s health, palliative care) and incorporated them in their mainstream practice (Wilkinson et al., 2005). Specialised services have also grown from a need to reduce pressure on acute care by preventing hospitalisations (e.g. diabetes management, mental health services). While Killaspy

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See below for more detail on sub-acute care.
(Killaspy, 2012, p 361) suggests that increased specialisation in many fields of health care is seen as “the sign of a progressive field”, Wilkinson et al. (2005) caution that it may also contribute to the fragmentation of patient care. Increasing demand for high levels of expertise in specific health areas has prompted a rise in specialised standalone clinics that are physically separate from mainstream general practice and run as distinct businesses, with diverse funding arrangements (Wilkinson et al., 2005).

### 3.3.3. Tertiary care: Acute and sub-acute care services

The American Heritage Dictionary defines acute care as “short-term medical treatment, usually in a hospital for patients having an acute illness or injury or recovering from surgery”. Typically, care is provided by highly specialised medical staff and involves use of technical equipment.

Sub-acute care, which is also termed ‘intermediate’ or ‘step-down’ care, refers to “goal oriented (and in many instances time-limited) interventions, generally provided in a multidisciplinary environment to people requiring evaluation, treatment and management for post-acute, chronic or terminal conditions” (Department of Human Services, 2001, p 1). Sub-acute care is generally provided in the home, or other community-based settings by a team of health professionals, including nurses, allied health professionals and GPs. Thus, effective links between PHC providers and other health care sectors, such as relevant specialists, allied health professionals and community health care workers is essential for the continuum of care.

### 3.3.4. Non-health services

The Health in All Policies (HiAP) model (WHO, 2010), which is active in South Australia, reflects the need for the health sector to work closely with non-health sectors to improve population health outcomes. At a policy level, HiAP ensures that different government departments consider health in their policy and decision making through use of a health lens (WHO, 2010). However, integration is important at a meso level as non-health services may need to link with health providers; for example, transport and social services, as discussed below.

**Transport services**

A recent government report (NCOSS, 2012) stated that, for many people, lack of adequate transport is a major barrier to accessing health care in NSW. This is of particular concern for the frail elderly, chronically ill, people with limited mobility, those who are unable to drive and those living in rural and remote locations, with limited public transport services. While ambulance services attend to emergency transport, a large number of people require non-emergency health transport. Decisions about opening or closing any type of health care service may have a significant impact on health transport needs and, therefore, transport should be considered as a critical element in development and planning of all health services. Moreover, consultation, coordination and joint planning between health care service providers, community groups and health transport stakeholders is essential to enable effective, efficient and equitable health transport options (NCOSS, 2012).

The NCOSS report (2012) outlined a raft of recommendations for improving health transport, including establishing Health Transport Networks to work with MLs on joint planning for the health transport needs of the local community. In particular, the report recommended amendments to the *NSW Care Coordination Policy* to incorporate transport needs in the policy framework; and to provide a formal channel of communication between the Health Transport Networks, MLs, area

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health services and health transport stakeholders (NCOSS, 2012). A partnership strategy was recommended, particularly with Indigenous communities in NSW to enable a flexible approach that recognises Indigenous cultural needs and concepts of health and wellbeing.

**Social services**

One important aspect of integrating health care services in Australia is ensuring that social determinants of health (e.g. education, employment, housing, lifestyle behaviours) inform the design of PHC services (Humphreys and Wakerman). This view is also noted in the Greater Metro South Brisbane MLs’ strategic plan (Roe, 2012), which reflects a ‘health for all’ approach (WHO, 1986), encouraging equity (HealthOne NSW), enabling access, and reflecting the current health reform’s emphasis on ensuring local communities’ needs are met (Commonwealth of Australia, 2010). For example, the Fremantle ML states that one of its strategic priorities is to “identify needs and gaps in the local community with a focus on social inclusion” (Fremantle Medicare Local). To do this requires some form of partnership between PHC services and social services.

There is a wide range of potential links between PHC and non-health organisations, with mutual benefit offered from partnerships which incorporate shared visions or memoranda of understanding (see page 94 for more detail on MoUs). As a potential stakeholder in the process of horizontal integration, the Salvation Army is a not-for-profit welfare organisation which coordinates a range of social services addressing problems such as addiction, aged care, homelessness, health information exchanges, and emergency relief (The Salvation Army Australia Southern Territory, 2012). Coordination between traditional medical and social services such as this could help to improve health outcomes for individuals and communities. The Australian Drug Foundation (2010) provides an additional example as a peak body actively seeking partnerships and alliances to help with their mission of minimising alcohol and other drug harm.

Additionally, MLs are encouraged to have skills-based boards which engage a range of parties including, but not limited to, planning and development, social advocacy, PHC, NGOs, universities, social services, and communities (Roe, 2012). In developing directories of local services, MLs are constructing lists which incorporate not only specialists and allied health but community/social services, drug and alcohol agencies and child/youth/aged-specific supports (Gold Coast Medicare Local, 2011-12).

No research studies evaluating the effectiveness of integration or partnerships between PHC and social services were located.

### 3.3.5. State/Territory and Local governments

State/Territory and local governments have a critical role to play in integrated health care at all levels from policy to service delivery. This report addresses some of the areas of meso level integration that involve State/Territory governments or local councils. One example (SA) is provided to illustrate the types of partnerships, relationships and other links that may be required to enable integration of health care services at a regional level (Box 2). Other States/Territories may have similar arrangements.
Box 2  Example of organisations and their relationship with the State government in SA

“SA Health is committed to protecting and improving the health of all South Australians by providing leadership in health reform, public health services, health and medical research, policy development and planning, with an increased focus on well-being, illness prevention, early intervention and quality care. SA Health is the brand name for the health portfolio of services and agencies responsible to the Minister for Health and Ageing and the Minister for Mental Health & Substance Abuse. The portfolio consists of the Department for Health and Ageing, Central Adelaide Local Health Network, Northern Adelaide Local Health Network, Southern Adelaide Local Health Network, Women’s and Children’s Health Network, Country Health SA Local Health Network, and SA Ambulance Service.

SA Health provides services to the South Australian community including:
- public hospitals
- metropolitan and country health service delivery
- environmental health
- communicable disease control
- epidemiology
- health promotion
- pathology services
- drug and alcohol services
- emergency and ambulance
- organ donation.

SA Health liaises with other agencies in government, particularly:
- Department of Education and Child Development
- Department for Families and Communities
- Department of Planning and Local Government
- Department of the Premier and Cabinet
- Department of Treasury and Finance.

SA Health also engages with some non-government and community service providers on a formal, direct basis and more broadly, on policy and planning matters.”

4 Aims

The key aims of this third report in the series are to:

- examine integration at the meso level within the Australian health system including the delivery of health care services between different levels of the health system (vertical integration) and between PHC and related sectors (horizontal integration)
- describe the roles of PHCOs in integrated care
- examine the models of integration at the organisational level
- describe the evidence base around innovative models and mechanisms of integration
- identify how the models and mechanisms are enacted by different organisations
- identify the benefits, challenges and factors affecting such approaches, and the contexts in which they are most effective, taking into account both Australian and international practices.

Where possible, this review includes evidence of best practice in Australia and internationally; and an analysis will be undertaken to identify enablers and barriers to meso level integration in the Australian context. It is the intention that this work will guide policies and inform the development of future practical and feasible strategies for integration in and between meso level organisations in the Australian PHC setting. Table 2 lists the research objectives and key questions addressed in this review.

Table 2 Research objectives and key review questions

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Key Review Questions</th>
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</table>
| Identify meso level organisations in the Australian and International health care systems. Discuss the role of PHCOs in influencing integration of PHC services and providers; how they promote integration within PHC and across other sectors; and identify the barriers and successes. | • What meso level organisations in the Australian/international health care systems influence integration? (vertically and/or horizontally)  
• What role do meso level organisations play in influencing integration of PHC services and service providers? (e.g. MLs, LHNs)  
• How do they promote integration within PHC and across other sectors?  
• What shared arrangements exist?  
• What are the strengths and weaknesses?  
• What examples illustrate successful integration? |
| Consider models of integration at the meso level; what strategies influence integrated care and health service delivery; and provide examples of best practice. | • What models of meso level integration exist in Australia? (e.g. PCPs in Vic, ACCHS)  
• How do they influence health service delivery?  
• What are the strengths and weaknesses of these models?  
• What examples illustrate successful integration? |
| Identify international models of integration at the meso level; and how these may apply in the Australian context. Consider PHCOs and their influence on service providers; integration with other sectors; and identify barriers and enablers. | • What models of meso level integration exist internationally? (e.g. UK, NZ, US, Canada)  
• What models and mechanisms are used to influence integration between service providers?  
• How do they influence other sectors?  
• What are the strengths and weaknesses of these models?  
• What examples illustrate successful integration? |
| Identify mechanisms of integration                                                | • What mechanisms are used to promote integrated care?                              |
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

<table>
<thead>
<tr>
<th>at the meso level.</th>
<th>(drawn from Australian and International models)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summarise the main challenges and enablers to integration at the meso level.</td>
<td>• What are the main challenges and enablers to integration at the meso level?</td>
</tr>
<tr>
<td>Prioritise options for the Australian context. Identify potential risks or unintended consequences of implementing integration strategies at the meso level.</td>
<td>• What can Australia learn from international models of meso level integration? (e.g. best practice or promising approaches)</td>
</tr>
<tr>
<td></td>
<td>• What are the potential unintended consequences of implementing meso level integration strategies?</td>
</tr>
</tbody>
</table>

4.1. Limitations

Due to time constraints, the timeframe for inclusion of resources for this report was limited to the most recent material (i.e. within the past 10 years) that aims to influence integration in PHC. In addition, we have included material related to organisations that may be in effect during a transition phase. For example, some material relates to the Divisions of General Practice (DGP) while other details reflect recent transitions and address the newly formed MLs. Further, information on meso level integrated care in other countries was limited primarily to New Zealand (NZ), England, Canada and the United States (US) where relevant. These countries were selected on the basis that they were perceived as being comparable countries in terms of the organisation, funding and delivery of PHC; or that they had a diversity of innovative PHC delivery models. We acknowledge that many other types of meso level PHCOs also exist in other countries. However, due to language and time constraints, information sources were limited to those written in English. While information from countries other than those listed above was not explicitly excluded, specific searches in other countries were not undertaken.

Some meso level organisations also include a service delivery arm, which relates to micro level integration. Where this occurs, this report will reflect primarily on meso level integration, and refer only briefly to the micro level aspect of integration, which will be addressed in greater detail in Report 5 (Integrated care: What can be done at the micro level to influence integration in primary health care?).
5 Method

This report followed a ‘rapid review’ format. Rapid reviews are pragmatic literature reviews that focus on research evidence, with a view to facilitating evidence-based policy development. Due to the limited time frame for this review, searches and critical appraisal of the literature were not systematic or comprehensive. In order to obtain the most relevant material quickly, search terms varied across different databases. Consequently, replication of this review may result in a different literature base.

Table 3 lists the information sources used to identify relevant literature for this rapid review. While some articles were located in the peer-reviewed literature, most of the relevant information for this report was located by searching the grey literature, including government or organisational sources, evaluation reports and organisation websites. Where possible the information was triangulated in order to confirm sources.

Table 3 Information Sources

<table>
<thead>
<tr>
<th>Electronic bibliographic databases</th>
<th>e.g. PubMed with the PHC Search Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey literature</td>
<td>Google, Google Scholar</td>
</tr>
<tr>
<td>Government websites</td>
<td>Australian Department of Health and Ageing, State Government Health Departments</td>
</tr>
</tbody>
</table>
| International websites with relevant literature | NZ - [http://www.health.govt.nz](http://www.health.govt.nz)  
[https://www.divisionsbc.ca/provincial/home](https://www.divisionsbc.ca/provincial/home)  
| Organisation websites with relevant literature | Primary Health Care Research Information Service (PHCRIS), Australian Primary Health Care Research Institute (APHCRI), Australian Resource Centre for Healthcare Innovations (ARCHI), Centre for General Practice Integration Studies (CGPIS; now part of the Centre for Primary Health Care and Equity), Medicare Locals sites, peak bodies and organisations related to health e.g. Australian Drug Foundation, NACCHO, AML Alliance. |
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
6 Findings from literature review

Summary
This section flags the key players that operate and engage with PHC. For brevity, this report focuses only on the principle players at the meso level, or provides examples of the types of organisations that may influence integration at this level. This review has identified that there are both challenges and strengths of having multiple PHC organisations. On the one hand, there is a wealth of valuable business, management, communication, regulatory, multidisciplinary, intersectoral, and research skills across PHC professionals working within these organisations. Such a broad range of skill sets and perspectives is a valuable asset to developing and delivering comprehensive, quality integrated health care. Paradoxically, however, the multiplicity of organisations brings its own challenges in terms of engaging in shared agreements and aligning goals more broadly to deliver integrated care across PHC. To date, there are no research studies investigating the impact of integration across these organisations.

The following sections address the research questions outlined in the Aims section above. The sections below outline:

- Australian meso level organisations that influence integration in PHC (6.1)
- Australian models of meso level integrated care (6.1)
- International meso level primary health care organisations (6.3)
- International models of integrated care that may contribute to our understanding of integration in the Australian context (6.4)
- Mechanisms to facilitate integration (6.5)
- Integration challenges and enablers (6.6)
- Risks and unintended consequences (6.7)

Where available, evidence related to the effectiveness of integration models/mechanisms is presented.

6.1. Australian meso level organisations that influence integration in PHC
This first section identifies and briefly describes the meso level organisations in the Australian health care system; and examines their roles in influencing integration, both vertically and horizontally, within PHC and across other sectors. Where possible, the strengths and weaknesses are discussed; and examples of meso level organisations that have been working well to integrate health care services are provided.

Given the scope of this series of reports, the focus is primarily on PHC meso level organisations, such as PHCOs, and their role in integrated care. As illustrated in Figure 1, the main types of meso level organisations* are located in:

- PHC
- Allied health
- Community health
- Hospitals

* Note from Figure 1 that some of these groups also play roles in the macro and/or micro level of integration.
6.1.1. **Primary health care organisations (PHCOs)**

Comprising part of a broader international movement, Primary Care Organisations (PCOs) have been identified as:

* bodies [seeking] to increase the influence of primary care professionals, and in particular general practitioners (GPs), in health planning and resource allocation, and in the health system more generally (Smith and Goodwin, 2006, p 1).

In an effort to integrate services across the key stakeholder groups, the fundamental objective of PCOs (termed Primary Health Care Organisations or PHCOs in Australia) is to act in the meso level to forge links between the micro level (by enabling and supporting activities for service delivery) and the macro level (by influencing the systems responsible for policy, funding and infrastructure). Using mixed methods, Hogg et al. (2008) developed a conceptual framework for PHC. They reported that in this meso level role, PHCOs are predominantly responsible for horizontal integration, which refers to the part of the health system that provides formal and informal links among PHC establishments in a given health region. PHCOs are also responsible for vertical integration between different levels, such as between acute care provided in hospitals and PHC provided in the home and community. In broad terms, PHCOs are primarily funded by government(s), regionally-organised, and are responsible for the needs of both the community and the PHC practitioners. Put simply, PHCOs are responsible for access, quality of care, and coordination of PHC activities within a geographic region; and are involved in linking organisations (including peak bodies) within the PHC sector at the system level to specifically influence the integration of service delivery experienced by consumers.

In a discussion paper examining the development of PHCOs (specifically Divisions) in Australia, Smith and Sibthorpe (2007) describe the core roles of PHCOs in Australia as:

- improving population health outcomes; in contrast, PHC providers at the micro level aim to improve individual health outcomes
- managing demand and controlling costs
- engaging PHC providers
- enabling greater integration of health services
- developing more accessible services in community and PHC settings
- enabling greater scrutiny and assurance of the quality of PHC services

More recently, Australia has transitioned from the DGP (Figure 11, Appendix A) to the newly-formed MLs (Figure 2; introduced in stages from July 2011). Little formal evaluation of the performance of MLs is currently available. Hence, this section will describe the goals of MLs. A brief summary of the literature pertaining to the ways Divisions have influenced integration across PHC for the past 20 years is provided in Box 5 (Appendix A). The lessons from Divisions may be used to inform future integration efforts in Australian PHC.

**Medicare Locals (MLs)**

As part of the Australian National Health Reform, Medicare Locals (MLs) were introduced as the new PHCOs (Commonwealth of Australia, 2010, National Health Performance Authority, 2012). As of July 2012, there are 61 MLs in operation around Australia. These PHCOs are charged with improving the...
health care system’s responsiveness to the PHC needs of their local population. The responsibilities of MLs include addressing the population health needs for their region; coordinating the local and regional PHC systems; improving access to PHC services; and incorporating preventive health and health promotion into their practice. One of the main objectives of MLs concerns improving the patient experience through developing and facilitating integrated and coordinated health care services (AMLA, 2012b). In this manner, MLs are both leaders and partners in initiatives to promote health in local contexts.

The Australian Medicare Local Alliance (AML Alliance; see Table 18, Appendix B for more detail) provides a stewardship role among the MLs and facilitates the ways in which MLs can focus their efforts on integration (AMLA, 2012b). Their key goals include:

- providing member organisations and the community with a forum for resolving integration problems
- being inclusive
- emphasising integration in all partnerships
- embracing a ‘whole of health service’ approach
- coordinating activities with Local Hospital Networks (LHNs) and the community
- aligning policies/protocols/directions with the LHNs
- establishing networks of stakeholders working in key health areas
- providing resources
- enabling secure communication and sharing records.

A further core aspect of integrating health services relates to governance arrangements described in the MLs guidance document (Australian Government Department of Health and Ageing, 2011). This refers to actions such as shared board membership between LHNs, local health professionals, MLs and community representatives. Similarly, one of the main actions of the MLs is to promote coordination of PHC beyond general practice by linking consumers, doctors, nurses, allied health professionals, hospitals and aged care, community, workforce, research and Aboriginal and Torres Strait Islander organisations (AMLA, 2012b). Wiese et al. (2011) emphasise the importance of MLs in linking private and publicly funded health providers which have previously acted as entirely separate entities. Figure 2 illustrates the governance structure of MLs and the partnership arrangements (depicted by thicker red line).
Prior to the development of MLs, a South Australian study found that most general practices had limited awareness or understanding of connections with local PHC services (Wiese et al., 2011). The barriers identified in this research reflect the factors that MLs will need to target in their efforts to increase integration. GPs identified difficulties related to communication and information sharing; and the authors specified the manner in which MLs need to acknowledge the different organisational cultures of the service providers and stakeholder groups in encouraging integrated care. Further, Wiese et al. (2011) suggest that improving awareness among GPs of the availability and services provided by PHC agencies will serve to strengthen the connection between the parties.

Due to the recency of MLs’ development, there are limited data pertaining to evaluation. However, the AML Alliance encourages ongoing review and evaluation of the MLs’ activities. Outcomes to be assessed include uptake, reach, equity, satisfaction, cost and cost effectiveness, efficiency, quality of care, service utilisation, health outcomes and sustainability measures. It is anticipated that these data will be made available throughout the health reform process (AMLA, 2012b).

In Report 4 in this series (Medicare Locals: A model for primary health care integration), details are provided on a qualitative research project involving five CEOs from the first tranche of 19 MLs. The aim was to explore MLs’ understanding of integration and the efforts being undertaken to integrate across PHC and between PHC and other sectors.

In light of the current health system reform, the expansion of the scope of PHC has resulted in an increase in the number of meso level organisations that operate in the PHC sector. As illustrated in Figure 3, meso level professional organisations, peak bodies and arms-length bodies are an integral part of the PHC sphere, but play different roles. Coordinating arms-length bodies, peak bodies and PHC organisations provides an illustration of vertical integration in this sector.

Peak bodies and arms-length bodies

Peak bodies exist across a range of sectors, acting to address the complex health problems that individual organisations cannot manage alone (Willis et al., 2012); they are responsible for advocacy, lobbying, representation and development of common standards and practices Table 18 (Appendix B) shows the key meso level peak bodies, their roles and their contribution to integration...
in PHC. Organisations are typically the agencies or networks responsible for promoting partnerships, enabling communication and improving service accessibility and delivery.

‘Arms-length bodies’ is a term coined in the UK to represent executive agencies, independent special health authorities, or non-departmental public bodies (Department of Health). In Australia, these bodies are established by macro level policies and are involved in regulation, registration, accreditation, providing stewardship and performance monitoring. Table 19 (Appendix B) provides examples of arms-length bodies, their roles and their contribution to integration in PHC.
Reflecting the importance of horizontal integration, the sections below provide examples of the peak bodies and organisations relevant to PHC, allied health and/or community health, non-health services, and those engaged with hospitals, specialists and researchers (i.e. in line with Figure 1). These organisations and peak bodies exist for innumerable health conditions, vulnerable population groups and regions. While it is beyond the scope of this report to identify or describe them all in detail, it is important to acknowledge that any number of them may link with MLs in the path to an integrated health system. For example, a ML located in an area with high rates of alcohol use may find appropriate service providers by connecting to local or state-based organisations or national or state level peak bodies (see Table 4 below). There are similar sets of links for other health conditions (e.g. cancer, diabetes, depression) or different groups (e.g. children, rural and remote residents, Indigenous Australians, older adults). Many of these organisations apply the same types of models and mechanisms described in relation to PHCOs later in this report. For further information about
the range of organisations operating in the PHC realm, refer to the PHCRIS website:

Table 4 Organisations and peak bodies required for integration: an example

<table>
<thead>
<tr>
<th>Peak Body/Organisation</th>
<th>Region</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol and other Drugs Council of Australia</td>
<td>National peak body</td>
<td>NGO representing the interests of the alcohol and other drugs sector. Works in collaboration with the government, non-government, business and community sectors, promoting evidence-based, socially just approaches aimed at preventing or reducing the social and economic harm caused by alcohol and other drugs to individuals, families, communities and Australia.</td>
</tr>
<tr>
<td>Alcohol Tobacco and other Drug Association ACT</td>
<td>State-based peak bodies</td>
<td>Represent the government and non-government agencies in a region providing leadership, representation, advocacy and information. Promote health and reduce alcohol and other drug-related harm to individuals, families and communities. Address prevention, early intervention, treatment and maintenance. Improve delivery of drug and alcohol services. Advocate for adequate resources.</td>
</tr>
<tr>
<td>Network of Alcohol and Drug Agencies (NSW)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association of Alcohol and other Drug Agencies NT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queensland Network of Alcohol and Drug Agencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Australian Network for Drug and Alcohol Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol, Drugs and other Drugs Council Tas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victorian Alcohol and Drug Association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Australian Network of Alcohol and other Drug Agencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug and Alcohol Services SA</td>
<td>Local organisation</td>
<td>DASSA is a function of the Southern Adelaide Local Health Network and is responsible to the Minister for Mental Health and Substance Abuse and governed by the Department for Health and Ageing. DASSA advises on a whole of Government approach to prevent the use of illicit drugs and the misuse of licit drugs; advises on policy relating to tobacco, alcohol and other drugs; provides or brokers a range of prevention, intervention and treatment programs across the State with a particular focus on high risk groups and behaviours, and facilitates development and training in all services in the sector; advises on evidence-based practice and workforce development initiatives and undertakes a program of research to support its core activities.</td>
</tr>
</tbody>
</table>

PHC Peak Bodies
This report recognises the influence and importance of peak bodies in relation to PHC integration. Peak bodies are generally established for the purposes of developing standards and processes, or to act on behalf of all members when lobbying government or promoting the interests of the members.
They are integral to integration activities. For clarity and brevity, this report focuses only on PHC organisations.

The AML Alliance has been established as the peak body for MLs. It has a more expanded role compared to the AGPN\textsuperscript{xii} and represents the needs of, and provides support to, the MLs. The AML Alliance has a stewardship role, coordinating activities across sectors both within and external to PHC. The AML Alliance is involved in advocacy, supporting program delivery, management, transition assistance, developing new partnerships and policy, monitoring progress, and constructing governance frameworks. Their aims include improving overall system integration by working collaboratively with health and non-health partners (Australian Medicare Local Alliance). This peak body is vital to establishing an integrated system and coordinating the organisations on the ground.

The National Lead Clinicians Group, which was established in September 2011, is also a peak body in the PHC sector. This is a multidisciplinary, multi-sectoral group which provides clinical advice to inform higher level policy and practice and facilitates working relationships across sectors. Their role is to “provide advice to the Minister for Health and Ageing on priorities and strategies to improve patient care, promote evidence based clinical practices and assist with the prioritisation and implementation of clinical standards” (Minister for Health and Ageing, 2011). Refer to Report 1 (Integrated care: What policies support and influence integration in health care in Australia?) for more details on the National Lead Clinicians Group as this operates primarily at the macro level of integration.

\textbf{6.1.2. Community Health}

Community health care organisations are multidisciplinary in nature, and target health for specific communities. They often span both the meso and micro levels of integration. They exemplify integration by recruiting a range of health professionals to work together, are often co-located, and address not only the needs of individuals in a community but population health more broadly. For example, South Australia’s Women and Children’s Health Network promotes health for children, adolescents and their families by providing a range of micro level health services (e.g. parenting support, support for families and children with additional needs) and by coordinating health professionals/services for infants, children and young people and providing up-to-date health information to the community (Government of South Australia, 2011b). In terms of integration, the programs offered by this organisation are provided by a team including nurses, medical staff, social workers, physiotherapists and Aboriginal Cultural Consultants across different health specialities.

\textbf{6.1.3. Allied Health}

As described in Box 1, allied health care encompasses a range of health professionals (e.g. pharmacists, physiotherapists, dieticians, podiatrists, optometrists, exercise physiologists) and is a vital component of integration in the PHC sector. While for many years, general practice and allied health streams have worked in parallel, the National Health Reform encourages integration of these silos (Commonwealth of Australia, 2010). In their guidelines for practice, it is noted that “MLs will reflect the range of organisational expertise needed to deliver an expanded suite of programs and services. Such combinations are expected to include Divisions of General Practice and, depending on the local community and range of other PHC organisations and services, an Aboriginal Medical Service\textsuperscript{xiii}, a Primary Care Partnership, allied health service, non-government service provider and

\textsuperscript{xii} AGPN is the Australian General Practice Network, which was the peak body for the former Divisions of General Practice.

\textsuperscript{xiii} Also termed Aboriginal Community Controlled Health Services in some jurisdictions.
other appropriate organisations” (Department of Health and Ageing, 2011). Integration between health professionals for service delivery will be described in more detail in Report 5 in this series (Integrated care: What can be done at the micro level to influence integration in primary health care?). However, from a meso level perspective, there are a number of peak bodies which represent the interests of these health professions and promote networks of practitioners, encouraging communication and collaborative practice. Examples include the Australian Psychological Society and Australian Physiotherapy Association. While it is beyond the scope of the current report to discuss each professional organisation in detail, it is necessary to acknowledge that these organisations will be key contacts for MLs establishing networks of local services.

6.1.4. Hospitals

Local Hospital Networks (LHNs)

From a hospital perspective, the key meso level organisations are local hospital networks (LHNs - also termed local health districts, local health networks or local health areas in different jurisdictions). These organisations were introduced in July 2011 as part of the National Health and Hospitals Network agreement (Council of Australian Governments, 2011). Their primary task is to enable groups of hospitals to be managed at a local level. There are currently 137 LHNs across Australia - 124 ‘metropolitan’ LHNs which consist of small groups of public hospitals connected based on their geography; and 13 state-wide networks, grouped according to function and considered to be more specialised hospital services. The LHNs work with local PHC providers, MLs, aged care services, local communities and clinicians. One of their key roles relates to collaboration with MLs and private providers to meet the needs of the local community and minimise service duplication and fragmentation. The aim of linking LHNs and MLs is to make better use of existing resources and to enable seamless patient transitions through the health system by allowing patients better access to coordinated health care (Commonwealth of Australia, 2011). One of the key steps to integration between MLs and LHNs involves “common membership of governance structures” (Department of Health and Ageing, 2011, p 10). As these networks have been recently established, no evaluations of their progress are available.

6.1.5. Medical Specialists

In a similar vein to those representing allied health professionals described above, medical specialist peak bodies are typically networks of specialists working in the same clinical area. For example, the Gastroenterological Society of Australia is the chief advocacy group for the health professionals and scientists employed in this field. The peak body has over 1000 members and promotes core values around mentoring, sharing knowledge and encouraging professional growth. It takes an integrated approach by inviting memberships from all professionals dedicated to gastroenterological health and patient care including physicians, surgeons, medical graduates, pathologists, allied health professionals and any other parties interested in gastroenterological science, study or practice. A further example is the Clinical Oncological Society of Australia (COSA), the peak national body representing health professionals (e.g. doctors, nurses, scientists, allied health professionals etc.) working in cancer control and care. Some of COSA’s objectives include promoting and providing multidisciplinary and interdisciplinary education and understanding and providing for the professional needs of its multidisciplinary membership. There are many additional peak bodies which represent the whole spectrum of medical specialists. Though not discussed in detail here, acknowledging the existence of such groups highlights the breadth of PHC and the range of parties that may be involved in an integrated health system.

No research studies evaluating the effectiveness of their integration partnerships were located.
6.1.6. **Non-Health Services**
A key aspect of integrated health care is the need to engage sectors beyond health. In many cases these collaborations are underpinned by macro policies and delivered at the micro level. For example, the South Australian Health in All Policies program has led to more integrated activity between SA Health, the Department of Planning and Local Government, the Department for Transport, Energy and Infrastructure, and the Land Management Corporation; and resulted in a Guide for Healthy Urban Developments which will inform changes in the built environment to promote health for local community members (Government of South Australia, 2011a). Meso level organisations that are relevant in this space include state ambulance organisations that play a core role in integrating PHC and the acute sector. Similarly, community transport organisations (e.g. the Health Transport Networks described on page 16) improve the patient experience by facilitating access to health services.

6.1.7. **Research Organisations**
There are a number of research organisations that foster collaboration between PHC researchers, enable high quality research to be produced and disseminate research which may inform PHC practice. These organisations play an important role in integrated health care by promoting knowledge exchange and improving the lines of communication between researchers and policy makers. This allows policy makers to have a source of evidence during policy development and informs researchers about the most valuable topics in the current political and social climate. There are four key national organisations including the Australian Association for Academic Primary Care (AAAPC), the Australian PHC Research Institute (APHCRI), PHCRIS, and Research Australia. More information about each of these organisations can be found in Table 20 (Appendix B). In each Australian state and territory, there exists a number of additional research centres/institutes which conduct investigations into PHC, inform integration and promote collaborations, and while acknowledging the importance of these organisations, it was beyond the scope of the current report to list them all.
6.2. Australian models of integrated care

The concept of local primary health care service provider networks is evolving across Australia and there is no single model or ‘one size fits all’ approach (Cranny and Eckstein, 2010, p 12).

Summary

Action is needed across a range of different strategies, involving a mix of integration efforts that include health education, skills development, community engagement and advocacy. The aims of the Australian models relate to improving relationships, reducing duplication of services, identifying and filling gaps in service provision and ultimately achieving better health outcomes for the community. Models are context-dependent and often build on existing infrastructure or services, improving their function to promote best practice. Little research has been conducted to identify the core success factors in these models.

From the few evaluations that have been undertaken, findings indicate that development and maintenance of robust and sustainable networks incorporating a broad range of stakeholders is essential for integration. Australian models consistently emphasise relationships i.e. voluntary alliances, formal partnerships, improving communication among providers and sharing priorities. These represent the strengths of the Australian models – enhanced communication, coordinated care pathways, shared information and resources, and improved health in communities.

Challenges to models of integration include variable engagement across stakeholders, differences in priorities across organisations, lack of understanding of different parties’ roles and the complexity of funding. This may be particularly challenging in the area of Indigenous health if funding is directed primarily through mainstream services organisations whose core business is not Aboriginal PHC. Nevertheless, some models of practice in Indigenous health have been in place for a long time and provide useful examples of the benefits of community engagement and creating capacity in the workforce.

As discussed previously (see Table 1), the terms ‘models’ and ‘mechanisms’ are often used interchangeably in the literature; yet each term separately is used in many different ways. We use the term ‘model’ to indicate the initiatives that have been designed to enhance integrated PHC services in particular contexts across different Australian States and Territories; whereas mechanisms are the individual components within the models.

This section identifies some of the main models of meso level integration in Australian PHC; how they influence health service delivery; and provides evidence (where possible) of their strengths and weaknesses. Organisations and models that are specifically relevant to Indigenous Australians are discussed below (from page 38). International organisations and models of meso level integration in PHC are discussed separately below (from page 43). The mechanisms drawn from both the Australian and international models are discussed from page 87. Examples of integrated care or organisations that only deliver services directly to patients are not included in this report; they will be examined in Report 5 (Integrated care: What can be done at the micro level to influence integration in primary health care?). However, some meso level models comprise elements of service delivery and are discussed here.
6.2.1. **Primary Care Partnerships**

In some states and territories, primary care networks or partnerships (PCNs or PCPs) have been established as voluntary alliances of predominantly state government-funded primary and community health care agencies (McDonald et al., 2007). For example, the *Primary Care Partnership Strategy* is a Victorian Government initiative that provided funding across the state for collaborative and coordinated planning by PCPs at the sub-regional level. PCPs function to integrate the efforts of individual organisations and sectors around the needs of local communities. The main motivation for service providers to become members is to improve relationships, reduce duplication of services, address gaps in service provision and generally achieve better health and wellbeing outcomes for the community (Victorian Government, 2010). Local community services forums are common, but more formal PCPs exist as geographically-based bodies in Victoria to improve planning innovation and coordination across primary and community services. The mechanisms that influence integration of these networks or partnerships are usually some type of Memorandum of Understanding (MoUs, see page 94 for details) and a representative committee; and they receive limited funding to support improved coordination among their member agencies. In contrast to the ‘hub and spoke’ model used by DGP, with GPs at the centre, PCPs collaborate with a broader range of providers in a decentralised network that includes community health, hospitals, DGP and local government (McDonald et al., 2009).

In Victoria, there are 31 PCPs operating across the state, with most extending to two to three local government areas. While similar models have also been introduced in NSW, Queensland and in South Australia, no evaluation reports were located. In Victoria, where they have been established the longest, evaluations of PCPs have demonstrated that they are effective in improving service coordination (e.g. improved information sharing between agencies) and increasing the use of care plans for intensive service users (Australian Institute for Primary Care, 2003, Australian Institute for Primary Care, 2005).

Although the overall evaluation of PCPs was positive for both agencies and consumers, Powell Davies et al.’s review (2009) suggests that in some cases they are not always aligned with other health service boundaries and there has been variable engagement with general practice. For example, “despite some important achievements in improved service coordination, the NSW Networks were isolated and fragmented from other area health service developments and their funding was not continued past the pilot phase” (McDonald et al., 2007, p 50).

6.2.2. **Connecting Healthcare in Communities (CHIC) (Queensland)**

The Connecting Healthcare in Communities (CHIC) initiative involves development of formal partnerships, known as PHC Partnership Councils (General Practice Queensland), with PHC stakeholders within particular health service districts in Queensland. The key aims of the CHIC initiative are:

- to minimise duplication
- improve integration and service coordination
- potentially increase the capacity of the health system to improve the health of Queenslanders (AIPC, 2012).

The mechanisms to improve service coordination and delivery are:

- Joint governance structure
- Shared planning and service delivery
- Shared assessment tools
- Common management protocols
• Agreed roles in patient support and education
• Local community health promotion action (General Practice Queensland).

Under a joint governance structure, each Partnership Council agrees on, and delivers, shared PHC services in a priority area, such as chronic and complex care, integrated health promotion and illness prevention, early childhood health, community mental health and drug and alcohol services. The Australian Institute for Primary Care and Ageing (AIPC) has recently undertaken an evaluation of CHIC (2008-2011) (AIPC, 2012). However, the results are not yet available.

6.2.3. Primary Care Integration Program
As part of the Australian Better Health Initiative (ABHI), the Primary Care Integration project (PCIP) was established in 2006 to improve integration and coordination of care for people with chronic conditions (Powell Davies et al., 2010, Government of Western Australia, 2012b). All DGP took part in the program between 2006 and 2010; 20 individually and 14 in five consortia.

The Commonwealth provided funding to implement the program and support Divisions; and to engage with the state-funded HealthOne NSW integrated PHC centres (NSW Department of Health, 2012). Specifically, the program aimed to foster patient-centred care in general practice and to:
• Communicate and improve links with other PHC providers
• Optimise use of existing PHC and community care services
• Implement tools/strategies to improve management of patients with chronic illness
• Contribute to the development of local chronic disease pathways and referral tools
• Engage with state-funded PHC initiatives (e.g. HealthOne NSW) (NSW Department of Health, 2012).

Online surveys of Divisions were conducted by the Centre for Primary Health Care and Equity (UNSW) to evaluate the PCIP (Powell Davies et al., 2010). At the Divisions level, the main contribution of the ABHI PCIP was to enable identification of potential integration options and to fill gaps in existing integration programs. Findings indicated that Divisions used a variety of strategies/mechanisms to support integrated care (Figure 4); and that efforts to improve integration showed the greatest benefit with private allied health care providers, community health and hospitals; whereas less impact was evident in working with consumer groups.

<table>
<thead>
<tr>
<th>Strategies that were very major or significant focus</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening partnerships</td>
<td>97%</td>
</tr>
<tr>
<td>Improving communication and information sharing</td>
<td>97%</td>
</tr>
<tr>
<td>Developing systems/structures to support...</td>
<td>93%</td>
</tr>
<tr>
<td>Developing new pathways or models for care</td>
<td>66%</td>
</tr>
<tr>
<td>Building practice capacity for care coordination/...</td>
<td>66%</td>
</tr>
<tr>
<td>Promoting use of MBS items</td>
<td>66%</td>
</tr>
<tr>
<td>Linking with other state or national initiatives</td>
<td>48%</td>
</tr>
<tr>
<td>Community engagement</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>

Figure 4 Mechanisms identified by DGP to support integrated care

Findings suggest that the PCIP led to better information sharing and use of relevant technology; and increased use of shared pathways. Those working in the five DGP consortia reported positive experiences, particularly related to sharing resources, experiences and skills; and improved
communication and teamwork with other organisations. Several barriers were identified, including differences in priorities between organisations; and lack of trust and mutual understanding among some individuals. Feelings of uncertainty about the future of PHC were also expressed in the context of the most recent health reform (Powell Davies et al., 2010).

6.2.4. **Comprehensive Primary Health Care**

Comprehensive Primary Health Care (CPHC) has all the hallmarks of PHC; “socially appropriate, universally accessible, scientifically sound, first level care provided by health services and systems with suitably trained workforce comprised of multidisciplinary teams supported by an integrated referral system” (APHCRI, 2010). CPHC includes health promotion, illness prevention, treatment and care of the sick, community development, advocacy and rehabilitation (Lawless et al.). The strengths of CPHC include its emphasis on well-integrated services including multidisciplinary care and attention to health prevention and promotion. CPHC is also committed to equitable outcomes for all in the community.

CPHC underlies several examples of PHC services (i.e. differing models of service provision and mixes of funding and management models). For example, CPHC is valued by state government-managed health services, a state-government Aboriginal health service, NGOs (i.e. sexual health service), and an Aboriginal Community Controlled Health Service governed by community cabinet (see below for more details) (Bartlett and Boffa, 2001).

There are several examples of the application of CPHC specific to Australia. These are discussed below, including any evaluations where possible. Due to the nature of CPHC, it addresses not only integration of organisations, resources, and community, but also delivery of services at the micro level, which will be discussed in more detail in Report 5 (Integrated care: What can be done at the micro level to influence integration in primary health care?). This report deals with the meso level arrangements related to CPHC that intend to influence the integration of health services in CPHC settings and presents available evaluations.

**Primary Care Amplification Model (Inala Clinic, QLD)**

The Primary Care Amplification Model (Jackson and Askew, 2008) is one example of CPHC and refers to first contact, continuous, comprehensive and coordinated care provided to a specific population. The model adheres to the notion of health for all as it serves to provide care to populations undifferentiated by gender, disease or organ systems. Organisational mechanisms in the model include an ethos of supporting PHC within and external to the practice, an expanded clinical model of care, a governance approach meeting the specific needs of the community, and technical and physical infrastructure to deliver the expanded scope of practice. The model is designed to build on existing infrastructure. GPs are salaried and involved in all of patient contact, as well as teaching and research.

A pilot of the Primary Care Amplification Model is currently underway to evaluate the efficiency and effectiveness of care for patients with type 2 diabetes who attend the Inala chronic disease management clinic, compared to those receiving usual care (Askew et al., 2010). Preliminary data indicate that this model of care results in significant improvements in clinical markers including blood pressure and cholesterol; trends towards improvements in HbA1c levels, as well as improved processes of care for patients with type 2 diabetes, particularly for those with complications (Russell

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xiii An evaluation of Congress has been undertaken; however, no report was available.
and Jackson). Little information has been published on measures of the experiences of organisational or health professional perspective. However, a full report is not yet available.

**Brisbane South Comprehensive Primary Care Network (Brisbane, QLD)**

The Brisbane South Comprehensive Primary Care Network is a not-for-profit model established in 2007 (Jackson et al., 2007). The application of CPHC differs from the Inala example as it involves a range of practitioners including solo GPs, community health services or multi-GP practices. One specific aim is to link community supports, which is at the meso level of integration. Based on Jackson’s “working from the ground up” approach, the model involves a multidisciplinary PHC practice team including professionals from nursing, medical, allied health and practice management sectors.

The model involves a network of PHC services with links to outreach specialist services (physical and virtual) in areas of nursing, allied health, pharmacy, radiology and hospital-in-the-home (Jackson and Marley, 2007). The “3Cs” model of integration used in this approach comprises:

- communication and access
- cultural change and teamwork
- commitment and incentives to integrate (Jackson et al., 2007).

Meso level integration strategies within this model include integrated multidisciplinary undergraduate teaching across seven disciplines; integrated e-referral and e-booking systems; and development of integrated care pathways. Jackson et al. suggest that the benefits of co-location are enhanced when organisations used common information transfer systems; shared “clinical initiatives or strategic health service objectives (Jackson et al., 2007, p 265); where the groups shared a common client base; and where there was shared physical space (e.g. meeting, common and lunch rooms). The authors emphasised that physical co-location was unlikely to achieve optimal integration without “a clear, relevant and multi-faceted integration strategy that promoted regular contact in service planning and delivery” (Jackson et al., 2007, p 266).

An evaluation of health professionals participating in the co-location initiative revealed that the physical co-location significantly improved their knowledge of other co-locating groups. However, in other areas, their experience did not match their initial expectations. For example, after co-locating, participants’ perceptions of the potential to reduce duplication of services, and opportunities to develop professional relationships with people in organisations not involved in co-location were significantly lower than their initial expectations (Jackson et al., 2007). Participants also identified enhanced communication, increased opportunities for collaboration and partnerships and improved workspace as positive outcomes of physical co-location; whereas the drawbacks related to access and parking. While this 12-month evaluation indicates that the model holds promise, a follow-up that includes patients’ experiences is needed to determine the effectiveness of this model in terms of delivering good quality integrated care.

**Uni-Clinic Model (Cessnock, NSW)**

The Cessnock Uni-Clinic, also known as ‘The Clinic’, was established in September 2004 to address the shortages in PHC services in the Cessnock and Kurri Kurri Local Government Areas. This model of integration was formerly introduced by Jackson and Marley (2007); the NSW Uni-Clinic model was designed to link research and clinical education. The model is based on the premise of a not-for-profit trust which specifies that any income generated must be used towards health promotion activities including both research and teaching. The Uni-Clinic model takes a “one clinic, one team”
approach to PHC. Led by GPs, services are delivered by a multidisciplinary team of health care professionals.

Evaluation of this pilot program focused on whether the Clinic had an impact on health service usage (i.e., increased screening rates) and patient satisfaction with receiving care from a multidisciplinary team approach (Goode et al., 2007). At the meso level, this evaluation aimed to see if there was any improvement (increase) in the PHC workforce and the economic costs/savings associated with the model of care. Findings suggested there was no change in the GP population ratio, but the Clinic had added variety to the general practice workforce in the Cessnock area. Extensions to the Clinic have seen increased range of specialised PHC services offered at the clinic, as well as greater collaboration with other PHC services in the community (Pond et al., 2005). In summary, evaluations that have been undertaken typically focused on specific components of CPHC or individual programs and projects rather than services or systems. More recently, a framework for assessing the performance of CPHC services and organisations has been proposed to assist in research and evaluation (Powell Davies et al., 2011). An evaluation based on this framework is yet to be published.

6.2.5. Aboriginal and Torres Strait Islander organisations and models that influence integration

PHC for Aboriginal and Torres Strait Islander people is of particular concern to the campaign to ‘close the gap’ in health between Aboriginal and non-Aboriginal Australians. The Australian government funds indigenous-specific PHC; and the State/Territory governments contribute funding and deliver a range of services, including Indigenous-specific services (see Table 16 (Appendix A). Effectiveness of integration initiatives to improve health service delivery is discussed in Report 5 (Integrated care: What can be done at the micro level to influence integration in primary health care?), whereas this section discusses meso level integration involving collaborations between organisations to facilitate integration of services for Indigenous Australians.

Aboriginal Community Controlled Health Services

While Indigenous Australians can access both mainstream and indigenous-specific health care services, it is important that these two systems work together to provide good quality health care; and that they take steps to close the gap in health between Indigenous and non-Indigenous Australians.

Often considered as a standalone aspect of PHC (see Box 1), Aboriginal Community Controlled Health Services (ACCHS) are examples of highly effective integrated services (described in detail in Report 5xiv). In each state and territory, there is a peak body representing the interests of their area’s ACCHS. These are meso level organisations, connecting and promoting communication between different ACCHS. They are the ‘health voice’ for all Aboriginal people in a certain area, and play an advocacy role supporting both the health workers and the community, promoting integrated Aboriginal health services in their local areas (National Aboriginal Community Controlled Health Organisation, 2013). For example, the Aboriginal Medical Services Alliance Northern Territory (AMSANT) is the peak body for ACCHS in the Northern Territory. AMSANT represents the interests of ACCHS in various forums, including policy, funding, and administrative matters pertaining to Aboriginal health disadvantage.

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xiv Integrated care: What can be done at the micro level to influence integration in primary health care?
The Central Australian Aboriginal Congress, formed in 1973, is one of the oldest and largest ACCHS delivering comprehensive PHC in Australia (Bartlett and Boffa, 2001); and is an example of a peak body which utilises the comprehensive PHC philosophy. Comprehensive PHC focuses on all levels of the health system including mechanisms at the organisational level for creating capacity in the workforce and enabling community empowerment around health issues. Comprehensive PHC also plays a role in advocacy role and policy development at the macro level. At the service delivery end of healthcare systems, comprehensive PHC focuses on providing effective, efficient, and appropriate comprehensive PHC for Aboriginal people and spans different levels of system integration (vertical).

Congress Alukura is an ACCHS that provides a range of culturally appropriate women’s health services in a PHC model (Carter et al., 2004). Alukura was established in 1987 following extensive community consultation with 60 different Aboriginal communities and 11 different language groups. Alukura aims to preserve and recognise Aboriginal identity, culture, law and languages, especially as they relate to “borning matters, pregnancy, childbirth and the care of women and their infants” (Carter et al., 2004, p 229).

In addition to services related to birthing and infant care (antenatal and postnatal care, shared maternity care), Alukura also provides a range of other important women’s services including: gynaecological services, sexual assault and domestic violence counselling, health education; and other services (transportation, health worker training, bush mobile clinic).

A review of Alukura was undertaken in 1998 (cited in Carter et al., 2004), not only to assess how well the congress met the needs of local Indigenous women, but also assessed the relationships with other health care providers and their organisational capacity to meet the objectives. The review reported an increase in the proportion of women attending antenatal care in the first trimester; increased average weight of babies; and perceptions of high quality of care received.

Since the assessment, Congress Alukura and Alice Springs hospital have developed a memorandum of understanding that allows Alukura’s accredited midwives to offer continuity of care to clients giving birth in the hospital. This allows midwives to develop their skills in complicated births.

In contrast to Northern Territory, where less than 20 per cent of the Indigenous population live in urban areas, less than one per cent of the Victorian Indigenous population live outside urban areas (Baeza and Lewis, 2010). This requires a different approach to health care service delivery as there is less access to indigenous-specific services and a greater need for indigenous and mainstream services to work together. ACCHS play a role not only in providing culturally appropriate health care services, but also in educating mainstream services to develop more culturally appropriate care and to work more closely with Indigenous populations. An evaluation report of ACCHS was not available.

**Specialist outreach services and clinics**

While PHC is the first point of access for most people, the Indigenous population suffer from many conditions that contribute to their lower life expectancy and require specialist attention. However, geographic distance to PHC, lack of public transport, cost of travelling to hospital outpatient appointments and poor communication between hospitals and remote clinics are barriers to accessing specialist services for many Indigenous Australians (Gruen and Bailie, 2004). A specialist outreach service was introduced in 1997 to address the gap in services to remote communities. This service entailed cooperation between a range of different specialties (e.g. gynaecology, ophthalmology, otolaryngology, general surgery); administrative staff to organise transport, accommodation and appointments; and hospital services to follow up on more complex procedures.
In contrast to many other outreach services in different areas (e.g. UK, which simply provide more convenient access for patients) (Powell, 2002), integrated specialist outreach clinics in remote parts of Australia provide services that patients would otherwise not be able to access at all (without specialist outreach clinics, 30% of patients referred to a specialist never completed their referral) (Gruen and Bailie, 2004).

Similarly, a specialist cardiac Indigenous outreach service was established in rural and remote Queensland (Tibby et al., 2010). In 2005, a partnership was established between the Prince Charles Hospital and the Central Area Cardiac Clinic Network in Queensland to deliver outreach cardiac health care services directly to rural and remote communities in Queensland, without the need for a referral through a PHC provider. The service specifically targeted Indigenous communities and aimed to develop strong relationships with the Indigenous population by engaging Indigenous health care workers to identify those in need of cardiac specialist services. Tibby et al. (2010) suggest that sustainable improvement in cardiac Indigenous health will require a “synchronised multi-pronged approach” with other agencies, such as housing, sport and recreation, and community councils to address determinants of health and to maximise a harmonious working relationship between Western medical technology and traditional Aboriginal values of health and wellbeing. No evaluation reports for these services were available.

A framework for primary health care in the NT
The Northern Territory Aboriginal Health Forum (Tilton and Thomas, 2011) identified several factors that impact on delivery of good quality, well-integrated and culturally appropriate health care for Indigenous populations living in remote and rural areas of Australia, including:

- Availability of services: distance, lack of transport, poor roads, costs (getting to clinic, treatment/medication costs), cultural safety of services
- Coordination of care: limited service infrastructure puts pressure on PHC to integrate services (e.g. facilitating transitions between hospital and community; ensuring access to diagnostic, treatment, rehabilitation or palliative care services)
- Multidisciplinary care teams: Aboriginal health workers, nurses, GPs, medical specialists and allied health professionals
- Adequacy of resources and workforce: in communities where there is high prevalence of complex conditions, complicated by culturally specific needs, there is a need for adequate staff and resources to allow sufficient time to deliver integrated care that may involve both clinical and non-clinical services.

A framework for PHC in the Northern Territory was developed in a partnership between the Australian Commonwealth government, the NT government and the Aboriginal Medical Services Alliance (Tilton and Thomas, 2011). The framework is the result of a highly consultative process with experienced practitioners, researchers, service delivery organisations and policy makers. PHC, as intended in the framework, refers to complex, holistic, first-level health care that “emphasises community participation, intersectoral collaboration and integration, and as a strategy for reorienting the way a health system works” (Tilton and Thomas, 2011, p 5). The framework comprises five domains:

- clinical services
- health promotion
- corporate services and infrastructure
- advocacy, knowledge and research, policy and planning
- community engagement, control and cultural safety.
While clinical services, health promotion and advocacy are delivered directly to individuals and/or the Aboriginal community, the support functions (corporate services, policy and planning) and enabling functions (community engagement, control and participation, cultural safety and use of knowledge and evidence to inform practice) operate at the meso and macro levels of integration. Tilton and Thomas (2011) suggest that the strong interrelationships between the domains demand not only close connections between those working in the different areas, but also require staff to have a good understanding of, and to work across the domains. For example, to effectively deliver culturally safe, integrated health care services, care teams are expected to work with health promotion programs; engage, recruit, train and support staff appropriately; contribute to planning processes; and be informed by knowledge and evidence to determine the most appropriate mix of services.

The authors of the framework also identified four areas that are important to Indigenous PHC, but that are poorly integrated into comprehensive PHC. These are: alcohol, tobacco and other drugs; early childhood development and family support; aged and disability; and mental health/social and emotional health and wellbeing.

A key function of the framework is to create a supportive environment by directing health promotion efforts away from changing individual behaviour, which is ineffective and potentially counterproductive, towards integrating health promotion principles in organisational policies and practices. Examples include policies that promote non-smoking, no ‘grog’, and healthy catering for health service functions (Tilton and Thomas, 2011). No evaluation of the framework was available.

Health Action Teams (HATs)
Health Action Teams (HATs) are local health advisory groups that have been established in several remote Aboriginal communities in Queensland (Kowanyama, Coen, Lockhart River and Apunipima in Cape York) (Laverack et al., 2009, Coombe et al., 2008). Their goal is to “build community capacity for Indigenous people to take control of and be responsible for their own health” (Laverack et al., 2009). HATs comprise community members that identify health priorities in their community, determine how they will be addressed, communicate with the local peak health authority (e.g. Queensland Aboriginal and Islander Health Council and Queensland Health) and monitor service delivery in the community (Gauld et al., 2011). While evidence is still sparse, existing research suggests that this collective community governance approach to health service delivery represents a positive move towards building capacity in remote communities and “closing the gap in health outcomes between Indigenous and non-Indigenous communities” (Coombe et al., 2008, p 611).

NT Australian Better Health Initiative (ABHI) project
Funded through COAG, the ABHI to improve health service integration has been implemented in the Northern Territory (2008-2010) and has shown promising outcomes. The project involved a partnership between the Commonwealth Department of Health and Ageing, Department of Health and Families, General Practice Network NT, AMSANT, Healthy Living NT and NT Consumers (Race and Nash, 2010). Access to services for patients needing dialysis or those with end-stage renal disease is challenging and requires a number of issues to be considered, including housing, limited health literacy and English language skills, social and cultural dislocation, and costs of living away from home. Results from the evaluation study (Race and Nash, 2010) suggest that the ABHI project enabled development of business models for claiming relevant MBS items; helped to resolve IT
incompatibility problems (e.g. access to shared electronic health records); and facilitated partnerships between service providers.\footnote{xv}

As a result, patients undergoing renal dialysis in areas where ABHI was implemented were more likely to receive holistic health checks through team care (GP, nurse, Aboriginal health worker); and shared care referral pathways were established (e.g. podiatrists, psychologists, exercise physiologists) as needed.

\footnote{xv} Further details on the evaluation study were not available.
6.3. International meso level Primary Health Care Organisations

Summary
This section introduced the range of PHCOs currently active in health systems in NZ, England, Canada and the US. In each case, strengths and weaknesses were described, in addition to details surrounding governance requirements and any available evaluations. For these international organisations, integration was proposed as a means for improving care coordination, reducing waiting times and avoidable hospital admissions, decreasing health inequalities, enhancing patient satisfaction, improving access and enacting evidence-based practice.

With different countries sharing common goals it is possible to learn from each other’s approaches. The international organisations identified in this review coordinate the provision of services by supporting networks of health professionals. In terms of strengths, budgetary control and the use of incentives were effective elements of practice for some of the organisations reviewed. The notion of incentive payments was consistently identified as a useful tool in integrating health systems, and one that Australia could learn from as the MLs develop. Additionally, each of the organisations has strong governance systems and effective leadership is vital in integrating a number of services. Similar to this, formalised plans were identified as a strength of some of the international models in clarifying roles and responsibilities of key players, reflecting the emphasis on accountability that is consistently noted across countries. Identified strengths of integrated practice among the organisations included collaboration between health professionals, improved patient flow across the health system, and better communication both between different practitioners and between health professionals and patients. An additional strength of the international organisations relates to their links with insurers. In many cases, the notion of integration extended from integrating health providers to consider external agencies such as insurance companies and non-health organisations.

Regarding the challenges of integration for international organisations, there was diversity across key stakeholders, with some organisations preferring a whole-of-system approach, and others having a very GP-centric style; also demonstrating differences in terms of whether virtual (contractual) integration or co-location was preferred. Additionally, some of the organisations had strong emphasis on technology (such as those based in the US). Similarly, while the organisations are able to develop evidence-based, shared pathways, the cost and capacity of engaged organisations can make it difficult to sufficiently implement new ideas. Further, there were a range of approaches applied across countries in relation to the need for enrolled populations and different funding strategies. The complexity of funding arrangements was consistently identified as a weakness and a challenge for PHCOs around the world. An additional problem in the different countries related to the lack of clarity regarding each organisation’s role, presenting difficulty when trying to engage new partners. While each organisation referred to the need to recruit a range of stakeholders, the nations had different perspectives on the importance of GPs as gatekeepers versus the value of multidisciplinary teams which extended to include community and social services outside the health sector. Following this, there was a lack of consumer voice in most of the organisations (though the US Group Health Cooperative is an exception).

In most cases, historical context informed current practice of PHCOs. There were multiple types of organisations in the different regions, with changes in organisation structure and function in each place representing new policies and reforms, and changing needs of communities. Often responsibilities increased as the health system evolved. In each country, research literature showed the importance of allocating adequate time to embed new arrangements, and the prospect of sustainable organisations and models is requires future attention. Similar to the circumstances in Australia, there was emphasis on communication, trust, relationships and infrastructure among the
international organisations. The current trend across organisations around the world is a focus on local needs (geographical basis), building on infrastructure already in place, addressing challenges of time and resources, and embracing new technologies. Once again, evidence/formal structured evaluations are lacking; yet are critical for governments to learn from the experiences of other countries.

This section identifies promising international PHCOs and models\(^\text{xvi}\) that operate to influence integration of health care at the meso level. The scope of this review is restricted to NZ, England, Canada and the US, given there is considerable variation and opportunity for learning on meso level integration in these countries. In addition to this diversity, there is also some similarity in the challenges across these countries. For example, there are regional, rural and remote challenges, as well as population-specific challenges (i.e. ageing, indigenous). Each section is prefaced with a brief historical context, governance, policy and the most recent PHCO model(s) and mechanism(s) employed. As there is often overlap across different models during systemic reform, and to provide a complete picture, both current and recent PHCOs are discussed and evaluations presented, where applicable. The previous PHCOs are presented first followed by PHCOs currently working in the health system of each country. Where possible, evaluation of pilots, initiatives, and programs where it pertains to improving integration at the meso level is included.

A 2008 report summarised several international case studies that used a systems approach to improving integrated care and providing care that was both efficient and equitable (Baker et al., 2008). The key strategies that were common in these high-performing systems were (Cohen et al., 2012, Baker et al., 2008):

- a strategic and quality-focused change agenda
- a senior leadership team to initiate and drive change
- a whole-of-system approach
- a common purpose
- a focus on care coordination, reduction of waiting times and evidence-based standardised care processes
- an integrated approach to information technology
- funding realigned to population needs
- transparency across different sectors in the health system (e.g. between hospitals and PHC)
- commitment to evidence-based decision-making.

Research indicates that some of the key attributes of improvements in integrated care include (Baker et al., 2008): organisational culture, leadership, strategy and policy, structure, resources, information, communication, skills training and engagement as listed in Table 21 (Appendix C).

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\(^\text{xvi}\) In many cases, the organisations have also become models of PHC integration (e.g. Kaiser Permanente).
6.3.1. **New Zealand**

Over the past 12 years, two key policy strategies have related to integrated care in NZ: *Primary Care Strategy* (2001); and the more recent *Better, Sooner, More Convenient* (2009) approach. This report details meso level PHCOs that influence integration of care. For details on the macro level policies, refer to Report 2 in this series (*Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?*). Within these policies, two forms of primary care organisations (PCOs) formed spontaneously: community-owned PCOs and independent, GP-owned groups known as Independent Practitioner Associations (IPAs). The former focused largely on providing care to deprived communities, while the latter illustrated how organised or collectivised general practice could provide the basis for local integrated care networks (Barnett, 2003).

**Independent Practitioner Associations (IPAs)**

IPAs evolved in the 1990s from the ground up in response to changes in government policy which proposed new contractual arrangements with GPs (Barnett, 2003). IPAs are predominantly GP-led and -owned organisations.

**Strengths**

An enduring legacy of the IPA movement is the creation of improved primary and community health infrastructure and management services (Thorlby et al., 2012). Quality improvement programs and management support services were initially the key focus of IPAs as well as professional development programs for GPs, practice nurses and other practice staff. Support services included IT advice, financial management, contracting expertise, needs assessment and data management (Thorlby et al., 2012).

IPAs emphasised collectivism, bringing together isolated GPs (often regionally dispersed general practices as in Australia) to strengthen their voice in negotiations and to create a local entity with which funders could set up dialogue. By the mid-1990s, 60 per cent of GPs had joined an IPA (Barnett, 2003). IPAs were predominantly informal arrangements, established from the bottom-up, with GPs coming together on a geographical basis, hinging on personal relationships, and with no standard approach to form, size or governance. IPAs were set up as companies, incorporated bodies, or not-for-profit organisations depending on local circumstances. IPAs also developed a broader national network: the Independent Practitioner Association Council. Since their inception, IPAs have evolved into very different kinds of organisations, often dependent on their location within NZ. The flexibility and adaptability to changing circumstances, and strong engagement of GPs have been consistent strengths of IPAs.

**Weaknesses**

A review of the IPAs in NZ identified several limitations including a lack of community governance and little inclusion of broader PHC sectors and social services. IPAs were granted a degree of autonomy over the use of funding. However, paired with a lack of transparency, this resulted in some disputes between funders and IPAs (Thorlby et al., 2012). For example, there was a great deal of variation in the rules about the use of savings by IPAs. Savings were supposed to be reinvested into patient care but some District Health Boards (DHBs)xvii allowed IPAs to keep the entirety of the

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xvii DHBs in NZ are responsible for the planning and funding of all health services within their geographically defined locality. See Report 2 for more details: *Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?*
savings. From 2002, the creation of PHOs was imposed on IPAs as part of NZ’s health reform (Labor’s PHC Strategy). IPAs were originally responsible for contracting for services, quality improvement (benchmarking, education), management support and leadership. In their first five years, IPAs were consolidated, recognising the need to be bigger in order to take advantage of opportunities such as competing for contracts with funders, engaging in quality improvement in PHC, and developing management support services for practices and PHC organisations. Similar to the transition from DGP to MLs in Australia, some IPAs became new primary health organisations (PHOs). The transformation has continued and today some former IPAs are complex organisations playing a central role in developing integrated health networks that are focused on shaping new models of care and convening local community health, PHC and acute services within local health districts.

For IPA general practices to access new government subsidies for PHC funds for chronic disease management or health promotion, they needed to become part of the new PHOs. However, requirements about community governance and not-for-profit status meant that the existing IPAs could not simply become PHOs. As a result, a small number of IPAs wound up operations and became PHOs; others chose to reinvent themselves, becoming management organisations providing support for PHOs; whilst the remainder became GP network organisations existing alongside PHOs (Thorlby et al., 2012). Since 2008, pilot programs have had strong involvement and, in some cases, leadership from the local IPA(s). Current policy objectives have chosen to harness IPA and wider PHC leadership in moves towards developing more integrated care and inclusive services such as Integrated Family Health Centres (IFHCs), a type of polyclinic, which houses a wide range of primary and social services (Letford and Ashton, 2010). The main objective of IFHCs is to improve integration of both PHC services and the acute/PHC interface whilst devolving services from acute settings and relieving pressure on hospitals.

**Evaluation**

The performance of IPAs was not subject to any systematic evaluation, so it is not possible to definitively say to what degree the quality and/or efficiency of health care improved. Evaluation exists only for IPAs holding contracts for individual services. IPAs acted as general practice provider organisations in two ways: sometimes the budget holders for these contracts purchased from a range of providers; alternately, IPAs took on the contract to be the provider of a specific service commissioned by the DHB. There is some evidence that IPAs were successful at containing costs and generating surpluses for contracts won (Thorlby et al., 2012). For example, there have been reports of savings ranging from five per cent up to 25 per cent of the previous year’s expenditure by monitoring GPs’ use of laboratory services and applying an evidence-based approach to set benchmarks for the appropriate use of laboratory tests (Mays and Hand, 2000). However, there was considerable variation between regions, as shown with DGP in Australia.

**Primary Health Organisations**

Primary Health Organisations (PHOs) were established in NZ in 2001, with a focus on improving health in an enrolled population, reducing health inequalities and improving care coordination using a multidisciplinary approach. PHOs are funded by DHBs to support the provision of essential PHC services through general practices to those people who are enrolled with the PHO. Initially, 82 PHOs were established. Policy changes in 2009 encouraged these PHOs to amalgamate and/or form networks to improve efficiency and enhance their capacity to deliver services (Better, Sooner, More
A PHO provides services either directly or through its provider members. These services aim to improve and maintain the health of the entire enrolled PHO population, as well as providing services in the community to restore people’s health when they are unwell. The aim is to improve the links between GP services and other PHC services (such as allied health services) to ensure a seamless continuum of care, particularly to improve management of long-term conditions. PHOs continue to work with, and be contracted by, their local DHB. Most general practices are now part of a PHO. Patients can ask their regular doctor if they are part of a PHO; alternately, patients can enrol by signing a form provided by their doctor, nurse or medical centre receptionist.

PHOs receive universal capitation funding, replacing a system of fee-for-service targeted public subsidies paid to GPs. One key reason for moving to public capitation was to enable redistribution of public resources and, thereby, reduce inequalities by ensuring that PHOs are funded according to the needs of their populations, rather than according to the number of services delivered (King, 2001). There is great variation between PHOs in terms of size, structure, age and context. Two broad types of PHOs have been proposed with key characteristics shown in Table 5.

### Table 5 Characteristics of New Zealand’s Primary Health Organisations

<table>
<thead>
<tr>
<th>Small (&lt; 20 000 enrolees)</th>
<th>Large (&gt;20 000 enrolees)</th>
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</thead>
<tbody>
<tr>
<td>• Inadequate management resources</td>
<td>• Well resourced, efficiently managed</td>
</tr>
<tr>
<td>• Access-funded</td>
<td>• Interim-funded</td>
</tr>
<tr>
<td>• History – Previous NGO, capitated</td>
<td>• History – Previous IPA, fee-for-service</td>
</tr>
<tr>
<td>• Low investment in IT, premises</td>
<td>• Established IT, premises etc.</td>
</tr>
<tr>
<td>• Salaried doctors</td>
<td>• Doctors own practice</td>
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<tr>
<td>• Low co-payments</td>
<td>• Higher co-payments</td>
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<tr>
<td>• Full/increasing use of nurses</td>
<td>• Use of nurses dependent on workload</td>
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<tr>
<td>• Established community governance</td>
<td>• Establishing community governance</td>
</tr>
<tr>
<td>• Māori and Pacific islander focus</td>
<td>• General population focus</td>
</tr>
</tbody>
</table>

Source: Adapted from (Cumming et al., 2005)

**Strengths**

Originally, PHO development was heavily finance-based. Cumming’s evaluation of the PHC strategy suggested that integration in New Zealand is “slow and patchy” (p 9), ranging across the spectrum from simple linkages between organisations and agencies, through to cooperation and coordination, but is still some distance from full integration (Cumming, 2011). However, several precursors to improving opportunities for integration at the macro level were identified, including re-introduction of universal financing and capitation funding, which enables a broader range of providers to deliver services. A move to capitation was considered essential for encouraging multidisciplinary/team approaches to care and a focus on wellness rather than illness (National Health Committee, 2000). PHOs have been granted some autonomy in the way they pay practices and practitioners – i.e. negotiated locally.

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xviii This figure does not include South Canterbury DHB’s Primary and Community Services unit, which took over the functions of the region’s PHO through its Primary and Community Services unit in May 2010.
Weaknesses
In considering the challenges presented by these organisations, it must be noted that DHBs are not only service providers but also contract services to other providers; as such, better service delivery may not necessarily be their priority. Second, existing PHOs primarily represent general practice services, leaving other health care providers outside the loop (Cumming, 2011). Additional challenges include:

- Access to PHOs and interim PHOs are defined by the deprivation index xix
- Too much emphasis is placed on funding and infrastructure policy
- Lack of clarity concerning the roles of PHOs, poor engagement between government and general practice, and lack of attention to leadership, management and organisational development
- Separation of roles between planning, funding and service provision leading to duplication and gaps in services
- Partial financing of GP services makes links between general practice and other services more difficult
- Lack of coherence in some PHC services, such as diagnostic services, midwifery and pharmaceutical services, which were not under the budgetary control of PHOs
- Lack of information sharing has led to underservicing, over-servicing and conflicting advice from multiple care providers
- Increasing cost to the service user, which is a barrier to access.

Evaluation
Evaluations (Cumming, 2011) of the national demonstration integrated care pilot projects identified several factors that were critical to successful integration, including focusing on changing cultures and attitudes; allowing time to develop cooperation and collaboration; and developing formal relationship agreements with Māori and Pacific island populations at an early stage. These factors also included:

- fostering enthusiastic leaders and champions
- achieving political commitment to change
- engaging clinical stakeholders
- ensuring privacy for information sharing
- closely monitoring progress
- establishing realistic timeframes
- providing adequate funding and support
- protecting against territorialism and competition between providers.

One aspect of the new version of PHCO that still raises some questions is that of who controls the budgets for secondary care services. In an effort to reduce avoidable hospitalisations and provide better integration of services between primary and secondary care, meso level PHOs may hold budgets for some secondary care services. However, Cumming suggests that this may be problematic for two reasons: New Zealanders may not support the new privately-owned PHOs holding large budgets for delivering services; and hospital transaction costs may increase if a large number of PHOs hold budgets for secondary care services (Cumming, 2011).

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xix The NZDep2006 is an index of socioeconomic deprivation based on census data which combine nine variables from the 2006 census which reflect 8 dimensions of deprivation. The deprivation scores apply to regions (mesh blocks) rather than individuals (Atkinson, 2011).
One strategy for evaluation of PHCOs in NZ is the **PHO performance programme (PPP)** (New Zealand Ministry of Health, 2006). This evaluation process began as an initiative by the DHB Shared Services and Ministry for Health in order to improve the health of enrolled populations, reduce inequalities in health outcomes via supporting clinical governance and reward quality improvement within PHOs. Improvements in performance against a range of nationally consistent indicators results in incentive payments to PHOs. In order to participate in the program and be eligible for the incentive payments, PHOs are expected to meet a number of pre-requisites, which demonstrate how they intend to implement the program, including clinical governance structures. Establishment funding recognises the work involved and change management required during the set-up phase of a PHO entering the program.

There are three categories of indicators:

- clinical indicators (vaccination, screening)
- process/capacity indicators (progress on performance plan, valid patient National Health Index (NHI\(\text{xx}\)) numbers recorded on PHO registers, access for high needs enrollees)
- financial indicators (pharmaceutical and laboratory expenditures relative to benchmarks).

Benchmarks have been established by a national target-setting document which provides a consistent approach to target setting for all PHOs (Ministry of Health, 2013). PHOs are responsible for monitoring progress against targets for the indicators and coordinating the ongoing clinical change management process with general practices to improve performance. Incentive payments are linked to improvement in performance on indicators against targets. PHOs are free to decide how these payments are to be used as part of their performance plan with the DHB. General practices are to be supported by their PHO to change and improve clinical practice according to performance indicators. GPs receive individualised feedback reports on their pharmaceutical and laboratory utilisation compared to peers as well as consistent educational materials tailored to their local needs. General practices receive ongoing feedback on their individual progress against performance indicators via their PHO. Payments for improvement in performance on indicators against benchmarks are utilised across the PHO to enhance the health services that general practices deliver to their patients.

Recent evaluation (Nov 2012) of the PPP program identified good efforts towards cross-sector collaboration, vendor relationships, IT and data expertise (Cranleigh Health, 2012). PPP is seen widely as a potential vehicle for future collaborative PHC data development. Performance on indicators has improved significantly since the last evaluation in 2008. This improvement has been attributed to the sector focusing on indicator activities, developing services that improve access for high needs populations and increasing acceptance of data quality (leading to increasing buy-in and support). PPP is the only program that rewards activity on a performance basis. To put this into context, it represents only one per cent of total capitation funding to PHC. However, it was generally felt that there is still a need for development and improvement, particularly in the following three key areas:

- Development of indicators that are focused on the wider PHC sector and better integration/alignment with National Health Targets
- More improvements to the data integrity, timeliness and more seamless data capture
- Development of more equitable set of incentives that align with amount of input required to achieve targets.

\(\text{xx}\) Equivalent to a Medicare number in Australia.
There is little mentioned in this program about evaluation of integration of services across allied health professionals and hospitals, with a solid focus on GPs, infrastructure and clinical markers. While integration has been a key focus in NZ health policy for some time, little is known about service users’ experience of integrated health services (Cumming, 2011).
6.3.2. **United Kingdom**

A key element of integrated care in England has been the establishment of PHCOs that operate at the regional level. They have been configured in a variety of ways over the past 10 years. The strengths and weaknesses of these PHCOs are described below.

**Primary Care Trusts**

Originally Primary Care Groups, Primary Care Trusts (PCTs) were established in 2002 by the NHS. By 2010, there were 151 PCTs, with a remit to engage with local communities and partners to tailor services to local needs (Boyle, 2011). Generally, PCTs were responsible for commissioning “primary care services, holding and managing the contracts for general practice, general dental services, local pharmaceutical services and optometry” (p 13). This arrangement aimed to encourage joint planning across sectors of PHC, as approximately 70 per cent of PCTs cover the same area as social services agencies.

**Governance**

Each PCT has a professional executive committee whose role is to assist the PCT in the exercise of its functions, in developing strategy and policy and in developing and monitoring clinical governance and quality standards. The PCT appoints the membership of the committee and must include at least one GP, nurse, other health professional, alongside a CEO, director of finance, one or two local social services authorities, one public health member, and professional members (Boyle, 2011).

Family physicians are responsible for registered populations of patients and typically work in groups of four to six self-employed practitioners. Practices derive most of their income from contracts to the NHS to deliver patient care. Under these contracts, 75 per cent of income comes from capitation payments, 20 per cent from pay-for-performance fees (Quality and Outcomes Framework) and five per cent from Enhanced Services contracts for more specialist care (e.g. substance use services). This structure means GPs are accountable for the care they provide through the contract they hold with the NHS. The budgets for PCTs are derived from public sources, primarily general taxation and national insurance contributions. Some care is funded privately through voluntary health insurance, some user charges, cost sharing and direct payments for health care delivered by NHS and private providers. Funds are allocated by the Department of Health according to health needs to commission care through primary, community, secondary and tertiary care (Boyle, 2011). Most of NHS funds (80%) (Boyle, 2011) are allocated to PCTs which are then responsible for: 1) commissioning health care for their geographically defined populations; and 2) in some cases, directly providing services. In addition to commissioning acute and community health services (such as district nursing), their responsibility includes contracting for Personal Medical Services (PMS)xxi, primary dental services, primary ophthalmic services and pharmaceutical services.

PCTs allocate a notional budget to practices to commission community health and secondary care services according to the needs of an enrolled population. Responsibility for publicly funded health care rests with the Secretary of State for Health, supported by the Department of Health. The Department operates at a regional level through 10 strategic health authorities, which are responsible for ensuring the quality and performance of local health services within their geographic

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xxi PMS contracts pay GPs on the basis of meeting set quality standards and the particular needs of their local population. The PMS Primary Care Act pilots (PMS pilots) were an opportunity for GPs, nurses and Community Trusts to test different ideas for delivering existing services, focusing on local service problems and identifying improvements (Department of Health, 2004).
area. PCTs in England (Health Boards in Scotland) have the responsibility for implementing national policy, monitoring practices, and implementing local quality improvement and financial incentive schemes.

**Strengths**

Responsibility for contracting and commissioning appears to give PCTs considerable leverage to influence the availability and range of PHC services. A capitation-based funding system and associated patient enrolment enables a population focus and care over time, while aligned regional and local planning boundaries between PCTs and other health service planning boundaries help with more coordinated approaches to planning, service development and service delivery (McDonald et al., 2007).

**Weaknesses**

- The consumer voice is absent
- Multilevel arms-length organisations at the meso level of NHS governance add additional layers of bureaucracy and promote ‘mission creep’
- Ongoing structural change is a drag on the system
- Mechanisms developed for commissioning are not effective
- Information is insufficient to enable good system management at all levels
- Significant levels of financial incentives can lead to gaming rather than improvement in the quality of service integration (hence introduction of the UK Quality and Outcomes Framework) (Cranleigh Health, 2012).

**Evaluation**

Ham and colleagues (2011) evaluated outcomes of eight out of 16 pilot studies across PCTs in England. These pilots explored the role of commissioning as a mechanism by which PCTs could influence the delivery of integrated care. The case study sites provide clear descriptions of the work that has been completed or was currently under way. Each case study has a detailed description of the study, arrangement of providers, outcomes and incentives, contracting arrangements, data and information system and results of the new service. The scope of the pilot programs ranged from developing disease-specific packages of care (diabetes, COPD, CVD, maternity, disability, and vaccination), system redesign, out-of-hours care, PHC within emergency departments as well as end-of-life care pathways. Outcomes included patient experience, care planning, proportion of patients with diabetes actively managed, avoidable hospitalisation, and needs assessment (after-hours services). Incentives in contracts for providers related to performance rather than specifying the intervention, with subsequent funding dependent on the savings delivered by a provider.

Ham et al.’s evaluation (2011) focused on payment/commissioning mechanisms that were employed across PCTs by commissioners seeking to implement new forms of integrated care, including those designed specifically for the general practice and PHC sector. Examples include PMS and those focused on secondary care/acute care (e.g. contracting on the basis of Payment by Results and the NHS tariff).

The Tower Hamlets PCT contracted for a new integrated diabetes service with networks of practices, rather than with individual practices (as would usually be the case in the NHS). In this role, the PCT

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xxii The Payment by results tariff was designed to support the introduction of choice and competition and to create incentives for providers to increase elective activity in order to decrease waiting times and reward them for work undertaken (Ham et al. 2011).
acted as the overall integrator of diabetes services, letting parallel contracts with local community health and specialist services run alongside those with general practice networks, and ensuring that the overall mix of contracts added up to the integrated care pathway agreed for people with diabetes in Tower Hamlets. In contrast, at another site (Sandwell), the development of local population health management organisations was financed using PMS contracts to enable the development of risk-bearing provider networks formed from local general practices (Ham et al., 2011). This approach built on the infrastructure and experience available in PHC as a basis for broader risk-bearing budget delegation at the population health level.

Emerging issues and themes common across the broad variety of programs identified three key challenges (Ham et al., 2011):

- Significant time, effort and resources were invested by PCTs in the assessment of local health needs and the design of new care pathways. Whilst this process of engagement was reported as being enormously helpful in bringing groups together to review and improve plans for care, it was extremely time-consuming and costly. The process of developing pathways represented a form of local organisational development, serving to bring different people from across the care spectrum together (for example, hospital specialists, GPs, specialist community nurses, pharmacists, user representatives, social care staff) and offering a rare opportunity to consider how services work (or not) from the patient and carer’s perspective.
- During the process of defining the service to be commissioned, case studies experienced problems in collecting, collating and synthesising the necessary data.
- The resounding message from the case studies was how very hard it was to move from pathway development to implementation. Critical to the difficulty of this process was the nature of contracting across different health economies commonly found in health service improvement literature. PCTs also identified challenges in the actual contracting process, including:
  - costing overall care pathways in an accurate and comprehensive manner
  - identifying organisations with the capacity and capability to manage such a contract
  - handling the process of tendering, assessment and award.

The evaluation also identified several factors that facilitated commissioning of integrated care including both managerial and clinical leadership, PHC-led commissioning, registered patients, provider engagement and allowance for time and persistence for programs. Evidence from areas where integration of care is well advanced underlines the significant potential to improve performance, for example, by avoiding inappropriate hospital admissions, enhancing patient experience and providing more care closer to home (Ham et al., 2011). There are fewer case studies of the extent to which integrated care enables significant efficiencies to be extracted from health service costs and the evidence base could be strengthened by undertaking longitudinal studies (Curry and Ham, 2010, Dixon and Alakeson, 2010).

**GP Consortia / Clinical Commissioning Groups**

The current Conservative Liberal Democratic Coalition Government (July 2010) outlined a fundamental change to the structure of health care commissioning. GP-led consortia – now clinical commissioning groups (CCG) – will take over responsibility for commissioning the majority of NHS services in England, with PCTs due to be abolished by April 2013. In addition, the regional tiers of the NHS will be disbanded (Department of Health, 2011). The timescale proposed for these changes is:

- a comprehensive system of GP consortia in place in shadow form during 2011/12, taking on increased delegated responsibility from PCTs
Following passage of the Health Bill, consortia to take on responsibility for commissioning in 2012/13, the NHS Commissioning Board to make allocations for 2013/14 directly to GP consortia in late 2012, and GP consortia to take full financial responsibility from April 2013 (Department of Health, 2010, p 30).

All GP practices are required to be part of a consortium and contribute to their goals. In the current transition phase, the Pathfinder program utilises the experiences of the first tranche of 177, spanning two thirds of the country in 2011 (PHORCAST, 2012).

**Funding**

The reform has seen the installation of a new NHS Commissioning Board which calculates and allocates budgets based on registered list size and deprivation, and allocates these budgets directly to the consortia. The commissioning board will hold each consortium/CCG responsible for the “stewardship of the resources” and the population outcomes (Ireland, 2010). Subsequently, each CCG will hold its constituent practices accountable for the same objectives. GPs will not be able to profit from savings the consortium makes, nor will they be liable for any losses. The NHS commissioning board will be responsible for directly commissioning GP services, whereas consortia will be expected to play a major role in improving the quality of PHC. The NHS will be responsible for community pharmaceutical services, but CCGs will be financially responsible for the cost of prescriptions written by GP practices within a CCG.

**Governance**

There is a complexity of governance arrangements within each CCG. In a similar manner to the guidance for MLs in Australia, the guidance issued to aspiring CCGs with regards to structures and governance was non-prescriptive. CCGs were told that they should have some sort of ‘governing body’ with at least one nurse member, a consultant member and two lay members (Publications policy and guidance, 2010). In addition, it was specified that they should have an audit committee and a remuneration committee. Over and above this, it was left to CCGs to design their own structures, with the guidance posing a series of questions for CCGs to consider rather than providing a blueprint. There was emphasis on freedom of GP Consortia/CCGs to develop as wished, stipulating only that they should have a recognisable “geographical footprint” (Checkland et al., 2012, p 53) and a written constitution which would be assessed for suitability by the new NHS commissioning board. Further guidance has been promised on this issue. In addition, no stipulation as to the desired size of GP Consortia/CCGs was proposed. Pathfinder CCGs have been targeted as pilots for trialling design concepts for GP Consortia/CCGs including the following aims:

- explore how consortia can develop effective relationships with constituent GP practices and local government, patient groups and secondary care clinicians
- embed and reinforce the importance of engagement with patients and the public and local partnership working with local authorities
- how consortia can best commission services at different geographical levels
- demonstrate how clinical leadership of commissioning can improve care, reduce waste and deliver value
- explore good practice in governance arrangements
- design their new organisational structures
- explore how best to secure the skills and expertise they need, including the human resources issues involved in the transition from PCTs
- take on increasing delegated responsibilities from PCTs
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

- provide a platform to share learning across the GP community (Checkland et al., 2012, p 87).

At a local level, new Health and Wellbeing Boards have been set up in local authorities to ensure that CCGs meet the needs of local people. The proposed membership of these boards includes representatives from:

- Clinical Commissioning Groups
- Directors of public health
- Children’s services
- Adult Social Services
- Elected councillors
- Healthwatch (representing the views of patients, carers and local communities) (PHORCAST, 2012).

**Evaluation**

Evaluation of CCGs has only recently focused on the development phase. Published in September 2012, the content of this report includes both case studies and web surveys. Specifically, the research questions addressed included:

- What have been the experiences of Pathfinder CCGs over the past year?
- What factors have affected their progress and development?
- What approaches have they taken to:
  - Being a membership organisation?
  - Developing external relationships?
  - Commissioning and contracting?
- What lessons can be learned for their future development and support needs? (Checkland et al., 2012).

Broadly, this evaluation concluded that there has been a great deal of hard work undertaken by both GPs and managers involved in the development of CCGs. There is ongoing change with many aspects of the NHS (and associated Local Authority structures) changing at the same time, generating disruption and confusion. This is posited as the most difficult aspect of the development process and is reported to have affected the emerging CCGs themselves, as well as the wider context around them.

Despite these challenges, there is ongoing commitment to GP-led commissioning and evidence of enthusiasm for involvement in local service development. Some claims were made about the added value that GPs bring to the contracting process but these have not been assessed as yet (Checkland et al., 2012). A Quality and Outcomes Framework (QoF) has been established (National Institute for Health and Clinical Excellence (NICE), 2004) and is predominantly the responsibility of the NHS commissioning Board. The second survey of Pathfinder groups (May 2012) indicated that 40 per cent of CCGs are actively looking at the QoF as part of their quality improvement activities. These activities include managing prescribing practices, referrals to secondary care, budgets, quality outcome framework refinement, patient experience and access to GP appointments. The GP Commissioning Consortia reported budget/performance meetings, distribution of performance data, practice visits and incentives as the most frequently employed mechanisms to manage the activities.

**Strengths**

The development of the Pathfinder CCGs is based within the action learning paradigm. Pathfinder CCGs were engaged in events and in online fora to provide feedback on their experiences and
contribute to the ongoing development of policy, as well as sharing learning about what went well or otherwise in the implementation process (Checkland et al., 2012).

**Weaknesses**

*CCG governing bodies* were developing and changing throughout the research period in response to changing guidance. Problems that arose in both the case studies and surveys included (Checkland et al., 2012):

- difficulty of bringing in new GP leaders (with only 4/8 case study sites achieving this)
- requirements to appoint a nurse and a hospital consultant were not welcomed by the majority of case study sites
- the gender balance of CCG governing bodies, with most dominated by male GPs
- little representation from other clinical groups such as allied health professionals or pharmacists
- concerns about the division of responsibilities between CCGs and the new NHS commissioning board.
6.3.3. Canada
Canada’s health system has several features that resemble the Australian system. Similar to Australia’s states and territories, the Canadian provincial health systems have many diverse services, with distinct processes of care and limited facility to share information or work together towards common goals (Baker et al., 2008). The Canadian provinces also have several types of PHCOs which act in the PHC system at the meso level.

Local Health Integration Networks (Ontario)
In March 2006, the government of Ontario passed historic health care legislation, the *Local Health System Integration Act, 2006*, which resulted in the establishment of 14 geographic regions of Ontario. Local Health Integration Networks (LHINs) are PHCOs that deliver operational public healthcare by geographic region (Ontario, 2006). While they do not provide direct services (except for home care through Community Care Access Centres), LHINs are mandated with planning, integration and funding of all public healthcare services at the local levels. LHINs, which have “relatively modest discretionary funding” (Jiwani and Fleury, 2011, p 7), are locally based and undertake quality community engagement.

*Our vision is of a system where all providers speak to one another in the same language, where there are no longer impenetrable and artificial walls between stakeholders and services: a system driven by the needs of patients, not providers (Honorable George Smitherman, Minister of Health and Long-Term Care (MOHLTC)) (KPMG, 2008, p 1).*

The key elements of LHINs are (Ronson, 2006):

- each LHIN must develop an integrated health service plan, which outlines how they plan to implement health care strategies for their community
- the plans must align with the Ministry’s vision for the provincial health system
- each LHIN has the power to allocate funds
- each LHIN holds the power to make ‘integration decisions’
- each LHIN has accountability agreements with the health service organisations that it funds.

It must be noted that some important areas are not in the control of, or funded by, LHINs (i.e. physicians, pharmaceuticals, labs, public health, ambulance services) (Ronson, 2006, p 47). Jiwani and Fleury (2011) suggest that the “accountability agreements”xxiii with providers may be important levers to achieve requirements for integration. However, integration and the role of LHINs are not well defined and this may hinder the implementation of integration activities.

**Governance**
LHINs’ governance structure is that they are community-based, not-for-profit organisations funded by the Ministry of Health and Long-Term Care (MOHLTC) to plan, fund and coordinate services delivered by hospitals, community health organisations, community, aged and mental health agencies. LHIN boards comprise the Planning, Integration and Community Engagement Division (PICE) and Performance Contracts and Allocations Division (PCA) strategists. Integration is defined in an evaluation on the LHIN scheme as:

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xxiii Ministry – LHIN accountability agreements are reviewed annually and updated as needed.
plans that aim to coordinate, partner, transfer, merge or amalgamate services/operations for the improvement of health service delivery and patient flow through the local health care system. Integration can be voluntary (facilitated by the LHIN) or through an Integration order (mandatory) (KPMG, 2008, p 70).

The legislation recognises that improving integration is at the heart of health service delivery. LHINs are organisations that can help to integrate the local health system through the negotiation or facilitation of integration plans with service providers/others, the use of funding levers (incentives and disincentives) and mandating integration of service providers, when it is in the public interest to do so. Under the LHIN model, local service providers retain their focus on service delivery, their individual corporate identities, and their local Boards (KPMG, 2008). LHINs are Crown Agencies with their own Boards of Directors appointed through an Order in Council. The MOHLTC is the steward, providing overall health system direction. The MOHLTC requires both LHINs and service providers to develop strategies to integrate services; and specifically sets out the types of integration that LHINs require, such as moving a service from one provider to another. The legislation prohibits LHINs from making corporate changes such as amalgamation, changes to provider boards or closure of a corporate operation. Under this Act, the health minister is also granted the power to integrate service providers in certain circumstances.

**Strengths**

The implementation stage of the system transformation has been well documented. Recommendations from the MOHLTC report have been actively pursued. For instance, IT resources have been developed since 2008 to enable LHINs to meet reporting requirements, access to information and points of integration between PICE and PCA to allow for planning and community engagement (Recommendation 18, KPMG, 2008, p 7). One example is a toolkit that was produced by the Health System Intelligence Project. A team of health system experts was retained by the MOHLTC specifically for information management to provide the LHINs with:

- Sophisticated data analysis
- Interpretation of results
- Orientation of new staff to health system data analysis issues
- Training on new techniques and technologies pertaining to health system analysis.

This infrastructure means LHINs should have access to the analytical supports necessary for their local health system planning activities (Ministry of Health and Long-Term Care, 2012)

PHC physicians (GPs) are not funded by the LHIN. However, there have been efforts to improve their input. For example, a project (Aug 2010) was implemented to develop a comprehensive LHIN/physician engagement strategy specifically about *Engagement of Primary Care Physicians in LHIN Processes* (*Local Health Integration Network, 2010b*). This project was completed in December 2010. The overall aim was to provide a foundation for physician engagement efforts and a framework to guide future engagement activities of the LHIN. The deliverables included a PHC physician engagement resource guide and toolkit based on survey results (*Local Health Integration Network, 2010b*). This toolkit document provides LHINs with a range of preferred engagement techniques that can be used to strengthen physician relations, communication and partnerships. It is based on the input provided by the PHC physician panel and literature reviews based on best practice engagement methods in Ontario and other jurisdictions (*Internal Association for Public Participation, 2009*, The Change Foundation, 2009, *Internal Association for Public Participation, 2000a*). In addition, the document is aligned with the Guidelines for Community Engagement developed by a pan-LHIN Community Engagement. This encompasses LHINs and health service
providers in order to support consistency in best practice engagement initiatives across the LHINs (Adey and Lopinski, 2010).

Another initiative led by the LHIN is the Aging at Home Strategy (Government of Ontario, 2013). LHINs are charged with identifying and providing funding for enhanced home care and community support services, as well as for innovative projects specific to their LHIN. A portion of funding (20%) is earmarked for innovative projects. The idea behind this strategy is to invite proposals for new projects to support non-traditional partnerships and new preventive and wellness services. This aims to provide new opportunities for LHINs improve services to the province’s culturally diverse populations and increase equity and access for all of Ontario’s seniors.

Jiwani and Fleury (2011) suggest that LHINs are at the ‘coordination’ stage of Leutz’s continuum of care (2005); and that key challenges remain, including achieving cooperation with local hospitals and integration of health and social services. Potential enablers, including information management, EHRs, and health workforce are yet to be effectively incorporated into the system in Ontario.

Weaknesses
The main weaknesses identified in the LHIN organisations have been challenges that are common in system change on this scale. For example, lack of clarity between local and provincial authority on integration activities results in grey areas (KPMG, 2008). Certain authority grey areas were cited by interviewees who noted that it is not always clear where provincial authority ends and local authority begins. There was also some lack of clarity within the LHINs’ governance. Many LHIN Chairs continued to work fulltime on LHIN business even after the initial year of development. This led to some organisational confusion with the Chairs and CEOs having to work out their respective roles and relationships. New organisations go through stages of forming, storming, norming and performing (Tuckman, 1965) and, at the time of this report, the LHINs and the Ministry were in the creating-norms stage (norming). There were also challenges identified between the respective departments responsible for planning and funding PHCOs, namely the PICE and PCA sections.

Evaluation
The effectiveness of the transition process and devolution of authority to LHIN was evaluated three years after formation, under the Ministry/LHIN Accountability Agreement (Schedule 1, Part D, Government of Ontario, 2007). This review comprised two parts: 1) an operational map of the overall LHIN vision; and 2) assessment of the effectiveness of the LHIN environment. The effectiveness review (KPMG, 2008) reported successful LHIN establishment outcomes including the development of the 14 LHINs and LHINs being granted the authority necessary to discharge their core functions of planning, community engagement, funding and integration activities. Challenges have been identified by LHIN and MOHLTC, and fall into three categories: relationships and trust; clear communications; and effective processes and structures. Recommendations from the report recognised these categories (KPMG, 2008).

The report described several recommendations specific to improving organisational integration:

- to continue development of indicators that tracks the LHIN strategic directions around integration and coordination (Recommendation 6, p 5)
- to strengthen existing structures (e.g. the LHIN CEO/Ministry Management Committee meetings) and development of new mechanisms (e.g. strategy workshops) to ensure early and ongoing LHIN input (Recommendation 9, p 6). This recommendation identifies strategy development and implementation with LHIN input as central to enriching policy and strategy
Development and utilising the LHINs understanding of the local health systems and opportunities for integration

- Development of processes and/or structures to facilitate more effective points of integration within their organisations, particularly between the PICE and PCA teams (Recommendation 16, KPMG, 2008, p 7)

Integration activities also include LHINs re-evaluating their work in order to appropriately manage and deliver on their objectives. The aim is to prioritise or eliminate certain planning or community engagement activities in order to focus their resources and more effectively facilitate health system integration and transformation activities (Recommendation 17, p 7). Overall recommendations from the evaluation included increasing the clarity of decision making processes, reviewing and aligning resources, enhancing collaboration processes and partnerships, refining accountabilities and processes, and governance. However, more recent evaluations were not located for the current review.

**Family Health Teams (FHTs) and Community Health Centres (Ontario)**

Community Health Centres and Family Health Teams (FHT) are the main PHCOs in Ontario; and nurse-led clinics are also being established (Hutchison et al., 2011). These organisations operate at the meso level in terms of inter-organisational collaborations; and at the micro level of service delivery. FHTs comprise a multidisciplinary team of health care providers (e.g. social workers, mental health counsellors, dietitians, pharmacists) with flexible governance and a blended remuneration system (capitation, FFS, salary) (Jiwani and Fleury, 2011, Hutchison et al., 2011). FHTs are contracted by the Ontario government to provide a range of services based on the needs of the local population. To date, seven different models of care are provided by 170 FHTs to over two million Ontarians (Jiwani and Fleury, 2011). No evaluations have been conducted, which may partially explain the variety of models.

**Primary Care Networks (Alberta)**

Primary Care Networks, which are part of the Primary Care Initiative, have operated as PHCOs in Alberta since 2005 (Government of Alberta et al., 2012). Alberta is a western prairie province with a population of 3.7 million, covering a region three-quarters the size of NSW. PCNs were first established as a funding agreement between the province and the Alberta Medical Association. Since then the network has evolved to 39 PCNs in Alberta, with about 75 per cent of all practitioners working in practices that are members of the network.

PCNs are an organisation of practices. The PCN is not involved in enrolling or running the practice, but is eligible for a capitation payment of $50 per patient. Each PCN is required to submit a ‘business plan’ to the provincial funding body, Alberta Health Services. The plans detail how the capitation funding would be spent; and are permitted a degree of flexibility in their structure and content allowing for local variation in priority setting. PCNs range in size in terms of both number of practices linked to them and number of patients served. Thus, PCNs in rural areas are smaller across both dimensions (Government of Alberta et al., 2012).

**Governance**

The governance of PCNs is designed to reflect and capitalise on physician autonomy as well as the need for accountability to the funders, the Alberta Health Service and the other relevant government department, Alberta Health and Wellness (Suchowersky et al., 2012). There are two decision-making forums: the clinician-led physicians’ board and the PCN board. They are colloquially known as the ‘Little Board’ and the ‘Big Board’, respectively. The Big Board, which comprises...
representatives of the funding organisations, provides a direct link between the network and the senior local Alberta Health Services leaders responsible for wider public health issues.

The budgets, which are up to $15 million depending on the PCN’s size, are derived from the capitation payments and used to cover administrative costs. For example, costs include employing an executive director responsible to the Little Board, employment of allied health professionals or mental health staff (usually based in individual practices) and other infrastructure supports (e.g. providing comparative data between PCNs).

**Strengths**
Collaboration is identified by stakeholders as the principal benefit alongside of improved access to allied health care (Suchowersky et al., 2012). Collaboration is not simply relationships between physicians and allied health professionals, but also between physicians and the rest of the health system. This has been highlighted as decreasing the isolation of physicians and making better use of the full extent of their capabilities. This model of PHCO is supported by GPs in Canada.

**Weaknesses**
There is a lack of clarity with regard to the general PCN direction; this stems from the autonomy granted to each PCN to identify and set priorities based on responding to local needs (Suchowersky et al., 2012).

No evaluations were located.

**Health and Social Services Centres (Quebec)**
Health and Social Services Centres (CSSSSs\textsuperscript{\textastripedangle}) are Quebec’s equivalent to Australia’s MLs, except they also deliver services. Responsibility for accessibility, support and healthcare of the population across the hierarchy of services (primary, secondary, tertiary care) is the responsibility of the CSSSSs, which have to deliver nine programs:

- public health
- general services
- age-related impairments
- physical disability
- intellectual disability
- pervasive developmental disorders
- youth in difficulty dependencies
- mental health
- physical health.

Some CSSSSs also implement the Chronic Care Model to manage chronic diseases (diabetes, COPD, depression). CSSSSs must also collate their “health and social network partners (family physicians, pharmacologists, rehabilitation centres and community-based agencies)” (Jiwani and Fleury, 2011, p 4). Where services are not available locally, they must negotiate agreements with other regional providers. “Emphasis has been placed on accountability, implementation of best practices, and creating electronic clinical records” (p 4). CSSSSs coordinate and liaise with Network

\textsuperscript{\textastripedangle} CSSS (Centre de santé et de services sociaux).
clinics and Family Medicine Groups, which provide access to PHC services. As these are primarily service delivery organisations, Report 5 provides more detail.

**Evaluation**
Evaluation of CSSSs is being undertaken, but results are not yet available. Vede et al. suggest that recent studies show increasing integration, a philosophy of collective responsibility, and an indication that the organisational structures in the CSSSs are more aligned to the national strategic vision (Vedel et al., 2011).

**Divisions of Family Practice (British Columbia)**
The Divisions of Family Practice (DoFP) initiative is the first of its kind in Canada. Beginning in 2005 in British Columbia (BC), this PHCO is sponsored by the General Practice Services Committee, a joint committee of the Ministry of Health and the BC Medical Association. The vision of DoFP is:

> community-based groups of family physicians working together to achieve common goals (General Practice Services Committee, 2012).

There are 31 DoFP in BC that encompass 120 communities, with discussion of a further seven in different areas of the province (General Practice Services Committee, 2012). Being a division member offers benefits such as shared workload to provide comprehensive PHC, enhanced professional collegiality, access to physician health and wellness programs, assistance with administrative duties, impact on organisation of local and regional health services around the division, shared efforts for recruitment, retention and locums, improved access to health authority and specialist services, and support from colleagues in caring for complex or unattached patients.

**Governance**
The governance of DoFP is structured so that they are incorporated as non-profit societies, which gives them the legal status necessary to sign contracts and/or hold funds to carry out the programs in their communities. They do not duplicate roles and responsibilities of a health authority (General Practice Services Committee, 2012).

**Strengths**
DoFP are developed from grass-roots, ground up with the only provisos that family physicians must have a practice or participate in a network that provides comprehensive care. Physicians must have an interest in working as partners with their Health Authority, the General Practice Services Committee and the Ministry of Health to make changes at both the practice and the health system level. Membership in a division is open to all family physicians in a community. However, in order to be viable, each division should have the participation of the majority of family physicians in their community (General Practice Services Committee, 2012).

**Weaknesses**
The complexity of funding arrangements across the jurisdictions (federal, province, LHA, DoFP) is a challenge (Mazowitz and Cavers, 2011) and, relatedly, there is lack of consensus and clarity across regions as to roles and responsibilities.

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**xxv** Integrated care: What can be done at the micro level to influence integration in primary health care?

**xxvi** Studies cited in Vedel et al. (2011) were unavailable (French language).
Evaluation

Little formal evaluation is currently available. Three prototype DoFP were being trialled with the intention to see which aspects were beneficial - for instance, how can the organisational structure be standardised while still leaving flexibility for each community? (McCarthy, 2009). One initiative, which was implemented with help from the DoFP across a specific province (Fraser Health Authority), was called the Home Health case manager-GP partnership initiative (Divisions of Family Practice, 2009). One of the problems identified in this initiative was that GPs were “disconnected from Home Health case managers who coordinate care for people with complex care needs requiring ongoing support to live at home independently”. For home care of elderly or disabled people, GPs and case managers were both “out of the loop with each other when it came to the care of their patients” (Divisions of Family Practice, 2009). Case managers were responsible for patients within a geographic area, but often were not in communication with the GP on the health status or care plan for the patient, which led to gaps in the care of the patient. As a result of the disconnection between GPs and case managers, patients in the long-term home health services program did not receive coordinated care. Therefore, “patients ended up visiting hospitals more frequently or being placed in residential facilities, leaving a system that was inefficient, fragmented and costly” (Divisions of Family Practice, 2009).

The Home-Health case manager-GP partner initiative led to case managers being assigned to a specific physician’s practice and improved communication with GPs about patients they share. The aim was to enhance and support collaborative efforts around the patient or their caregiver in addressing their care needs. Ideally, this should improve coordination of services for patients. In this way, GPs need contact only one person to discuss the status of their Home Health patient. “Case managers and GPs are ‘in the know’ about what the other is doing and how their care is complementary” (Divisions of Family Practice, 2009). Baseline patient surveys demonstrated the effectiveness of this initiative. For example, a patient survey in Chilliwack showed a significant decrease in hospitalisations over a 12 month period (Divisions of Family Practice, 2009). Similar healthcare integration has been implemented successfully in other areas and will be implemented in every community of Fraser Health within the next two years. The program’s success has been attributed to partner collaboration and integration of resources (Strumpf et al., 2012). The following elements were identified as essential:

- all partners recognised that there was a gap in the delivery of home healthcare
- strong input from GPs and case managers, feedback and consensus on the approach was important for the improvement of all aspects of patient care
- all partners were engaged in the development and implementation of the program
- all partners strived towards the same common goal and worked as a team (Divisions of Family Practice, 2009).

Integrated primary and community care initiative (IPCC) (British Columbia)

The IPCC initiative is a relatively new initiative that aims to bring together “hospitals, primary care, home and community care, and mental health services in the health care planning process for high needs populations, such as the frail elderly and people living with chronic health conditions” (Cohen et al., 2012, p 6). The elements of IPCC are consistent with international evidence of best practice in health care reform. However, as there is no specific funding to support it, progress has been slow and few communities in British Columbia have adopted it, as local health authorities are expected to fund it from existing budgets. Consequently no evaluations have been undertaken.
6.3.4. United States
The US health care system is largely competitive, funded by a mixture of private and public insurance (Blumenthal and Dixon, 2012). It is characterised by complex divisions of responsibility and accountability, both between the federal government and the states, and between the private and public sectors. For more details on US health care policy specific to integration, refer to Report 2 in this series (Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?).

Health Maintenance Organisations (HMOs)
There is a great deal of conflicting and confusing terminology across the PHCOs in the US. For the benefit of this report, the PHCOs discussed are all broadly considered to be Health Maintenance Organisations (HMOs). Although many were established in the 1930s, the HMO terminology arose in the 1970s with legislation which provided federal endorsement, certification and assistance for these organisations. Today, HMOs are viewed largely as agents of cost-containment (McClellan et al., 2010). A large proportion of HMOs are not-for-profit organisations (62%) and the remainder are for-profit, shareholder-owned plans.

HMO networks vary in their size, location, number and type of providers, and are frequently a narrow network serving a very specific population (Shinto, 2010). These are often based on a model of Integrated Delivery Service. This model will be discussed in detail in the subsequent section. These organisations are frequently two-tiered; with a layer of administration, health care plans and funding occurring over the top of the second tier, which deals with coordination of providers and resources. HMOs emphasise prevention and patient education, in addition to treating the sick. The nature of this preventive investment assumes a long-term relationship between the provider and the plan. In contrast to a fee-for-service arrangement, the structure and funding of health plans means there is little incentive to treat patients; consequently, money saved by reducing unnecessary surgeries, excessive inpatient days, and preventable illnesses goes back into prevention and care. The plans also carefully monitor what their physicians do in order to educate and comply with best practice guidelines (Kuttner, 1998). The flexibility for patient and doctors to choose a HMO (and accordingly, a GP) affects satisfaction.

HMOs are an example of organisations that operate in both the meso and micro levels of integration. At the meso level, HMOs integrate with insurers, hospitals and other medical organisations; and at the micro level, they deliver integrated services to their members. The micro level perspective of HMOs will be addressed in Report 5 (Integrated care: What can be done at the micro level to influence integration in primary health care?). The exemplary HMOs in the US include Kaiser Permanente, Group Health Cooperative (Intermountain, Marshfield, Dean), Mayo, Geisinger and the Veterans Health Administration. Several of these well-established HMOs will be discussed below and evidence about their effectiveness and efficacy presented in more detail.

Group Health Cooperative (GHC)
In 1997, consumer-members voted by an 80-20 per cent margin to approve an affiliation between Group Health and Kaiser Permanente. The affiliation created a joint not-for-profit company Kaiser/Group Health to oversee and coordinate both Group Health and Kaiser Permanente Northwest. Despite this affiliation, each of the local organisations retains its own governance system and is responsible for activities such as quality assurance and health care delivery. As such, they are discussed separately in the following section (Glickstein, 1998)
**Governance**

GHC is one of the US’s leading non-profit health systems. It is recognised for its consumer governance and innovation for improving care. First established in 1947, the GHC of Puget Sound began delivering a new kind of healthcare. Consumers paid flat monthly fees for comprehensive care. Members elected a board of trustees and purchased bonds to fund new facilities. Health care professionals, predominantly doctors and nurses, devote as much attention to promoting wellness as to treating illness. Founders believed that “health was everyone’s business and everyone’s right” (Larson, 2009, p 1620). GHC is one of two large consumer-governed health plans in the US (Healthpartners in Minneapolis is the other) (Larson, 2009). The board, which is elected by the patients (consumers), is composed of 11 GHC patients working with management and doctors to set policies and directions for the organisation and to integrate care and coverage. With over 600 000 members (Washington state & North Idaho) in 2009, this organisation enables two-thirds of these members to receive their care solely through an integrated network of facilities owned and operated by the co-operative. These networks of facilities comprise 26 PHC centres, six specialty care units and one hospital (Larson, 2009).

**Strengths**

The governance arrangements are a key strength of this PHCO. First, the structure of the board and election of members make the co-op immediately accountable to its members (patients) via transparent meetings and advisory roles of members. Second, accountability is built into the co-op’s charter by designing it as a prepaid group practice that integrates care and coverage - termed a ‘cooperative model’. The fiscal arrangements are salaried doctors and capitated payments, which are thought to encourage the provision of the most appropriate treatment for patients, and concurrently promote prevention. Third, with providers, clinics, hospitals and insurance plans often under the same roof, the organisation makes long term investments in members’ health and manages resources to get the best quality and value for its entire membership (Larson, 2009); in this way it resembles an ‘accountable care organisation’ model.xxxvii

GHC is considered a (inter)national leader in developing clinical guidelines and evidence-based and population-based medicine (Larson, 2009). A key strength of GHC is its willingness to trial ideas around health information technology and innovative models of care. This is often a costly investment which takes time to see benefits both economic and in service provision. Recently, this approach led to evidence-based decision-making in key areas of investment - namely e-health technologies and models of care, including the patient-centred medical home (PCMH).

**Weaknesses**

Like most HMOs in the US, enrolment is formally linked to employment and employee benefits. As such, those who already experience substantial disadvantage, such as poverty, homelessness and unemployment, are further disadvantaged in obtaining access to well-integrated health care. In addition, while the fiscal arrangements described above are viewed as a strength of the GHC system, this is contentious as there have also been claims that people with high ‘risk’ profiles (i.e. higher health costs) may not be provided coverage (Larson, 2009).

**Evaluation**

GHC has piloted a patient-centered medical home (PCMH) model (refer to page 84 for detail). The Agency for Healthcare Research and Quality (AHRQ) defines a medical home “not simply as a place

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For more detail on Accountable Care Organisations refer to page 92.
but as a model of the organization of primary care that delivers the core functions of primary health care” (AHRQ). Outcomes observed from this GHC pilot include 29 per cent fewer emergency room visits than patients in other clinics; and 11 per cent fewer preventable hospitalisations (Reid et al., 2009). Preliminary results obtained two years after the model’s implementation show that these trends persisted and probably reduced overall costs (Reid et al., 2009). The PCMH model borrows heavily from the chronic care model of care. Its key functions and attributes include:

- Comprehensive care
- Patient-centred
- Coordinated care
- Accessible services
- Quality and safety.

The PCMH is built on three foundational supports, which are relevant to integration at the meso level. These are:

- Health IT: the collection, storage and management of personal as well as aggregate data to improve processes and outcomes.
- Workforce: having a strong multidisciplinary allied health care professional workforce available and trained to provide PCMH elements
- Finance: payment reform from fee-for-service through shared savings, episode payments, partial compensatory care payments and pay-for-performance or comprehensive care, to capitation.

Since 2000, GHC has also implemented a fully integrated IT system, which includes electronic medical records and an online portal through which patients can view their own records (Larson, 2009). Some 25 per cent of all physician–patient encounters in the co-op are now conducted through secure e-mail and medical practice is enhanced by the use of fully digital medical records, including diagnostic images, electrocardiograms, call logs, and notes from multiple practitioners.

**Kaiser Permanente (KP)**

Kaiser Permanente (KP) is the largest, not-for-profit HMO in the US. It serves 8.7 million people in over eight regions. As an HMO, KP provides or arranges managed care for health insurance, self-funded health care benefit plans, individuals and other entities in the US as a liaison with health care providers (hospitals, doctors, etc.) on a prepaid basis. This is a virtually integrated system, whereby health plans, hospitals and medical groups within each region remain distinct organisations, cooperating closely by use of exclusive and interdependent contracts. HMOs require members to select a PHC physician who acts as a ‘gatekeeper’ to access medical services. PHC physicians are usually internists, paediatricians, family doctors, or GPs (Curry and Ham, 2010).

**Governance**

There are two key infrastructure branches pertinent to Kaiser Permanente in its role. First, the Kaiser Foundation Health Plans branch works with employers, employees, and individual members to offer prepaid health plans and insurance. The health plans are not-for-profit and provide infrastructure for, and invest in, Kaiser Foundation Hospitals; and provide a tax-exempt shelter for the for-profit medical groups (Crosson, 1997). Second, there are Permanente Medical Groups, which first formed in 1948 in Northern California. They are physician-owned organisations that provide and arrange for medical care for Kaiser Foundation Health Plan members in each respective region. The medical groups are for-profit partnerships or professional corporations and receive nearly all of their funding from the Kaiser Foundation Health Plans branch. This structure allows each region the autonomy to deliver care according to local need. For example, in California, KP owns and runs hospitals, whereas...
in Colorado it is made up of a health plan and medical group which have long-term contracts with non-KP hospitals.\textsuperscript{xxviii} KP is administered through eight regions, including one parent and five subordinate health plan entities, one hospital entity, and nine separate, affiliated medical groups.

**Strengths**
The key models implemented across KP healthcare that contribute to integration across organisations are their model of payment (capitation funding), their accountability framework and their focus on population-level change. Permanente Medical Groups receive capitation payments to provide care to members in KP facilities. In this way, they take on the responsibility for clinical care, quality improvement, resource management, design and operation of care delivery in each region. KP integrated healthcare systems pioneered the use of capitation funding (or pre-paid group practice as it was originally known) as a way of creating incentives to support prevention and PHC and avoid the inappropriate use of specialist care. Although capitation funding has a long history, there has been renewed interest in this approach in the US in relation to the role that ‘accountable care organisations’ might play in health care reform (Fisher et al., 2012, Fisher and Shortell, 2010).

Accountability is emphasised at the meso level between organisations by combining the roles of insurer and provider. In addition, at a service delivery level, care is provided both inside and outside hospitals via a model of multispecialty medical practice (multipurpose centres). A medical group practice is defined as a “formal affiliation of three or more physicians who share income, expenses, facilities, equipment and support staff” (Palo Alto Medical Foundation, 2012). Group practices can either be organised around a single medical specialty, such as cardiology; or encompass physicians from multiple specialties. This model engages clinicians across all levels of care to share responsibility for the budget and quality of care. Specialists and generalists are required to resolve their differences in order to work towards the single goal of providing cost-effective service. Integration is further promoted by a chronic care approach to health care which tackles chronic disease by stratifying the population according to risk and adopting a population approach that targets prevention, self-management, disease-management and case management for highly complex members (Curry and Ham, 2010). Evidence-based evaluation is foremost in this PHCO and KP doctors and others carry out research publishing in peer-reviewed journals and in the organisation’s own journal, *Permanente Journal*. KP operates a Division of Research and the work is funded primarily by federal, state, and other outside (non-Kaiser) institutions (Kaiser Permanente).

Another strength of KP is its focus on population-level change and development of Community Health Initiatives for health promotion and disease prevention. One example is the Healthy Eating, Active Living (HEAL) 2008 -2011 (Center for Community Health and Evaluation, 2008).

**Weaknesses**
In the media, there have been reports of patients being ‘dumped’ by KP hospitals. For example in Los Angeles in 2006, charges were laid based on CCTV footage.\textsuperscript{xxix} ‘Patient dumping’ is the term used to describe the delivery of homeless hospitalised patients to other agencies or organisations in order to avoid expensive medical care. While this case was some time ago, and an exception rather than the norm for KP, it raises a potential weakness of the system in that there is disincentive to treat people who have an inability to pay or insufficient insurance; and an incentive to refuse, transfer or discharge patients on the basis of high anticipated diagnosis and treatment costs.


**Evaluation**

While the US health system has been criticised as inequitable, market-driven and costly, it is also acknowledged that KP performs very well in terms of accessibility, quality of care, affordability and efficiency of costs (The Economist, 2010). A high level of patient satisfaction, resulting in low patient turnover, enables KP to invest in long-term preventive medicine and information technologies (The Economist, 2010). Levels of satisfaction have been attributed in part to KP patients reporting higher levels of collaborative goal-setting, and fewer difficulties attaining a same day appointment or after-hours access (McCarthy et al., 2008). In comparison with the English health system, for 11 medical conditions studies, the NHS uses 3.5 times the number of bed days as KP for patients aged over 65 years (Ham et al., 2003). KP has been rated as excellent and good respectively on clinical quality and consumer experience by the peak bodies in California where KP was founded. These peak bodies include the Integrated Healthcare Association (http://www.iha.org/index.html), and Office of The Patient Advocate (http://opa.ca.gov/report_card/about.aspx) where HMOs can be compared on performance. “Most of its success is explained by culture,” says Alain Enthoven, a health economist at Stanford University, “and that is simply not easy to replicate.” (The Economist, 2010). However, some patients, who are used to having access to unlimited scans and consultations with specialists, regardless of costs, do not like KP's frugality. Likewise, some doctors do not like the inflexibility in the KP system, including their “fixed (albeit generous) salaries” (The Economist, 2010).

KP has a sophisticated electronic medical record and information system that allows patients to access doctors directly via email, often avoiding the need to visit in person (Curry and Ham, 2010). KP continues to invest in technology and is in the middle of a ten-year, $30 billion capital-investment plan. In March 2010, it completed the rollout of its computer system — the biggest one in the world for private health care (The Economist, 2010). Studies have shown a reduction in unnecessary visits, better health outcomes and higher patient satisfaction since KP invested in electronic technology (Chen et al., 2009, Zhou et al., 2010).

The HEAL initiative has all the hallmarks of a HiAP approach and was trialled between 2008-2011 across all regions where KP exists (Center for Community Health and Evaluation, 2008). HEAL programs have been tailored to reflect local needs; and focus on multi-sectoral collaboration and environmental and policy change. Intermediate outcomes around implementation and the extent of community changes which have occurred have been identified as a key evaluation. In the first two years of this program, all Community Health Initiative communities had functioning action plans and collaborative networks around the HEAL policy. Several challenges have been identified including (Center for Community Health and Evaluation, 2008):

- Ongoing level of support required for long-term goals
- Building collaboratives in communities where none previously existed
- Technical assistance and support needed for each community.

Based on these challenges, six recommendations were suggested including:

- structuring resources and support so that efforts can be maintained over a longer period
- planning now for sustainability
- working with existing community collaboratives
- flexibility around intervention approaches
- focus on reach and impact - regularly reviewed and discussed for any population-level change require sufficient numbers of community residents with interventions of adequate impact
- modest provision of technical support - let the community be the guide rather than top down expert approach - “listen well and fit in” (Center for Community Health and Evaluation, 2008, p 14).

**Veterans Health Administration (US)**

The Veterans Health Administration (VHA) is one example of integration by co-location of services. VHA employs physicians, owns and runs hospitals and medical offices, and manages services within a federally funded budget (Perlin et al., 2004).

**Governance**

There are 21 regionally based, integrated service networks that are responsible for resources across all care settings (Perlin et al., 2004). The VHA allocates resources on a capitation basis to each network, which is then responsible for providing all care with those resources. As managers, they are responsible for a person’s entire care needs throughout their lives. Thus, there is an incentive to provide health promotion and effective care management over time.

Network managers are held to account via rigorous accountability structures and performance regimens. Overarching performance measures are agreed centrally and cascade down the system vertically to clinicians and managers to ensure all parts of the system work towards the same goal. Clinical quality is central to this performance assessment. Financial incentives are aligned with organisational goals, with widely disseminated quarterly reviews.

**Strengths**

Investment in IT has allowed for effective data sharing and dissemination of evidence-based guidelines, decisions support tools, physician alerts and health service research to ensure high quality care (Curry and Ham, 2010). Patient-centred care coordination has been facilitated by the financial, network, and IT mechanisms. For example, the VHA’s Care Coordination/Home Telehealth system, a remote monitoring technology, allows patients to manage conditions at home with visits or appointments being triggered only if problems arise (Curry and Ham, 2010). This allows time for early intervention to prevent deterioration and potential admissions to hospital. Patients with complex conditions/comorbidity are managed using an integrated care package as opposed to separate overlapping services.

**Weaknesses**

VHA has been likened to NHS, although it services a narrower population. The VHA system is not sufficiently funded to offer comprehensive health care to all veterans and their families. Consequently, the VHA uses a complex priority ranking approach with prioritisation tied to the nature of the health need and in some cases, income. Highest priority is given to veterans with severe, service-related disabilities (50% or more disabling). Veterans who simply cannot afford the cost of care, or who seek care for a broad array of conditions that are linked to service, but not considered “service-related” (i.e. conditions related to service in a branch of the US defence force) in terms of costs, are given lower priority. This is similar to the Department of Veterans Affairs health

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For more information please see [http://www.tpromo2.com/usvi/files/fedben.pdf](http://www.tpromo2.com/usvi/files/fedben.pdf)
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

Evaluation
There are varying reports about VHA’s performance over the past 10 years (Oliver, 2007). Most frequently, outcome measures have been a combination of service usage, associated costs and clinical markers. For example, reduced use of hospital beds (by 55%) with no adverse health outcomes (Ashton et al., 2003); and at the same time, increases in ambulatory and home visits (Perlin et al., 2004) were reported. Despite increasing members (by 75%), total budget increased only by 32 per cent; so it appears economies of scale are working (Oliver, 2007). Most recently, the impact of implementation of information technology on service usage and patient satisfaction were evaluated. Findings suggested decreased hospital stays (25% reduction in days) and admissions (19% reduction); and high satisfaction scores since VHA’s Care Coordination/Home Telehealth system was introduced (Darkins, 2008).

Geisinger Health System
The Geisinger system is a combination of co-location and contracts between independent providers; and is based in a rural area in north-east Pennsylvania. It comprises a system of three acute care hospitals and 12,000 employees, including 740 multispecialty physicians. It serves 2.6 million people and is an insurer for approximately 30 per cent of the patients who use its service. Compared to the national average, the population served is sicker, poorer, older, more rural and less transient (McCarthy et al., 2009a). The rural setting dictates that the specialist services are provided from three hubs, whilst physicians provide PHC at 40 community-based clinics. Evidence-based best practice bundles of multispecialty care and coordinated care are central to this system. Physicians are brought together in 22 cross-disciplinary service lines to jointly plan and budget for care and assess each other’s performance. Bundled payments and a pay-for-performance system are used with 15-20 per cent of physicians’ compensation linked to meeting performance targets. Personal performance targets for the individual align with the overall organisational goals.

Governance
Geisinger is in a unique position of being an integrated provider and having partial integration of provision and commissioning. Financial benefits of innovative practice go back into the system (Dentzer, 2010). Geisinger differs from the previous models in that, in addition to directly employed staff and directly provided services, it also contracts with more than 18,000 independent providers and community hospitals in a form of virtual integration.

Strengths
The Geisinger system has also developed specific integration tools, including:

- **ProvenCare** is a hospital-based portfolio of products for which care pathways have been developed in order to reliably administer a coordinated bundle of evidenced-based best practice (Paulus et al., 2008). The first ‘bundle’ was established around heart surgery, with clinicians reaching consensus over best practice from start to end of care, and then hardwiring it into the organisation’s system. Developed to eliminate unwarranted variation in practice, this has been applied to other conditions including chronic diseases (e.g. diabetes). The idea

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Eligible Gold card holders have access to all health care services at the expense of the Department of Veterans’ Affairs (DVA); Eligible White card holders have similar access to Gold, but only for service-related disabilities or illnesses; eligible Orange card holders receive pharmaceutical benefits (http://www.dva.gov.au/benefitsAndServices/health_cards/Pages/index.aspx).
behind episode-based payments is to remove incentives to deliver increasing volumes of care by bundling together payments for a range of services relating to a particular episode of treatment. Episode-based payments are designed in part to improve the quality of care by making providers responsible for avoiding and correcting errors; thereby encouraging care to be “done right the first time” and offering a more coordinated and positive experience for patients (Ham et al., 2011)

- **ProvenHealth Navigator** is specific to PHC and is a community-based advanced medical home for individuals with multiple chronic diseases. Practitioners work to the limit of their licenses to maximise quality and minimise cost (Maeng et al., 2012). Nurse care managers are embedded in practices and assigned a case load of 125-150 of the sickest patients. The system is underpinned by a high performing IT system, making the most of electronic health records and information exchange. Patients can also access the web portal to make appointments, email clinicians and order prescriptions.

**Weaknesses**
Analysts who have studied integrated systems in the US have explored the arguments for both co-location-type approaches and contractual arrangements (Robinson, 1999). Although the experience of the VHA demonstrates what can be achieved through co-location, many analysts point to the theoretical and empirical evidence in favour of contractual arrangements, emphasising the weaknesses of incentive attenuation and influencing costs associated with co-location (Robinson and Casalino, 1996). Other work reinforces this assessment and suggests that networks based on contractual integration may offer advantages over real or virtual integration (Goodwin et al., 2004). The exception may be in relation to relatively well-defined population groups such as older people for whom there is evidence that co-location can deliver positive results. Organisations like VHA seek to leverage the benefits of organisational integration by focusing on population management and care co-ordination.

**Evaluation**
Hardwiring clinical pathways to the organisation’s system reduced mortality, infection, length of stay, re-admission rates and costs (Paulus et al., 2008, Carbonara, 2008). The *Provencare* model of fixed pricing has also produced good outcomes. For example, the first ‘bundle’ of best practice, patients with coronary artery bypass grafting procedures, in the Provencare intervention arm had 16 per cent shorter lengths of hospital stay, five per cent lower costs and reduced re-admission rates by 45 per cent (Carbonara, 2008). Similarly, improvements have been observed for the *ProvenHealth Navigator* pilots with sites indicating better medication adherence to prescriptions, use of generic drugs and compliance with evidence-based care practices for diabetes and coronary artery disease. All hospital admissions decreased by 20 per cent in the pilot sites (McCarthy et al., 2009a).

**Mayo Clinic**
The Mayo Clinic is the world’s oldest and largest multispecialty group practice, not-for-profit affiliated regional organisation dedicated to patient care, research and education. It originated out of Rochester, Minnesota but has since expanded across two other states serving 2.4 million people (Shih et al., 2008). Mayo is a privately-owned, not-for-profit organisation; comprises multiple clinics, hospitals and nursing homes; and employs approximately 13 000 salaried staff (McCarthy et al., 2009b).

**Governance**
The Mayo Clinic’s Health Plan is solely for employees and their families.
**Strengths**
It is a well-defined population. Patients are assigned a coordinating physician whose job is to ensure an appropriate care plan is made, and consults are scheduled in a timely fashion. The Mayo Clinic has electronic medical records that are accessible by all clinicians at every site. Shared clinical guidelines and standardised procedures derived from a central advisory group reconcile protocols from across sites and use the IT system to disseminate best-practice guidance.

**Weaknesses**
In Mayo, similar to most of the HMOs discussed in this section, a PHC physician (GP) functions as a gatekeeper for each member; this is the same in Australia. However, HMO GPs have to be selected from those within the HMO network or patients are allocated a GP. Any specialist referral requires the GP to make arrangements, scheduling an appointment with a specialist who is also associated with the HMO. The main disadvantage is lack of choice as members must be assigned to physicians and specialists only in the particular HMO’s network. Similarly, should a GP leave the network, patients/members are often reassigned to another. This makes building GP/patient relationship challenging in this context and, in some instances, it is likely that this could adversely influence the delivery of seamless care. This can be generalised as a challenge across most of the HMOs discussed in this section (Tatum, 2013).

**Evaluation**
Mayo is considered one of the top performing health care organisations in the US and the world. It is ranked in the top quartile for a number of inpatient care quality measures, including improvements in patient care, heart failure, surgical care, and overall the patient satisfaction ratings (McCarthy et al., 2009b). The use of shared clinical guidelines and standard procedures has been identified as a possible explanation for this (Curry and Ham, 2010).
6.4. International Models of integrated care

Summary
Successful international models operating at the meso level to influence integration were identified in the research literature. The Integrated Delivery Systems Model (IDS) refers to configurations of organisations that are responsible for clinical and fiscal outcomes of a particular population served, and do this predominantly by provision of vertical integration across the continuum (primary, secondary, tertiary) of health services. Evidence from evaluations of several IDSs suggests lower costs for the same outcomes compared to fee-for-service equivalent care; savings related to clinical improvements; improved access to advanced technologies for slightly lower costs; and lower cost and service usage by chronically ill patients in comparison to fee-for-service. There were two main criticisms, first, the lack of competition from other providers to keep costs down. Second, an unintended consequence of coverage attached to employment is that it can result in employers limiting employees’ choices of coverage.

The Accountable Care Organisation Model (ACO) is a model representing a variety of network configurations of health services (primary, tertiary and secondary) which require the network to be accountable for local per-capita health costs of a specified population. This model provides fiscal incentives by way of any savings made transferring back to the network which encourages a focus on disease management in PHC and a focus on health service value not on volume. Performance measurement is central to this model. The shift of this model to widespread legislation in the US has seen several pilot projects across the country. Many of the current pioneer ACOs are previously well-established IDSs; in contrast, networks of newer novel configurations of providers are less well tested. One benefit of the flexibility of the ACO model is the capacity to allow service delivery models based on local needs (e.g. the Patient-Centred Medical Home) to operate within providers in an ACO network.

The Patient-Centred Medical Home (PCMH) refers to a health care delivery site where patients have a personal GP (often assigned) responsible for providing and coordinating high-quality patient-centred, coordinated care across services, with fiscal reimbursements in place to support health service use. Evidence suggests patients with complex care needs were significantly less likely to experience fragmented care or medical errors and report higher levels of satisfaction with care, better communication with their providers and better access to screening and preventive services when they were seen in PCMHs.

The most successful models of meso level integration resulting in integrated service delivery have strong and targeted fiscal incentives for providers as well as well-defined governance and contracting arrangements.

There are many models claiming to influence integration. This section touches on key international models which influence integration of health service delivery by functions associated with meso level components.

6.4.1. Integrated Delivery Systems Model
The first model of integrated delivery systems (IDSs) appeared in the 1930s in the US (Enthoven, 2009). This model of health care gained momentum in the 1980s, and there are now over 100 IDSs in operation in the United States (Solberg et al., 2009). An estimated 40 million persons are enrolled in IDSs. Prominent IDSs include Mayo, Intermountain, Geisinger, and KP. Definitions of what
constitutes an IDS vary; the concepts frequently include integrated health services, integrated delivery networks, integrated health care delivery, organised delivery system, integrated health organisations, clinically integrated systems, organised systems of care and Accountable care systems. While there are many definitions of IDS (NPHHI), the general consensus is that an IDS is:

*an organized, coordinated and collaborative network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and health status of the population served (Gillies et al., 1993).*

The IDS model allows for the provision of a coordinated, vertical continuum of services to a particular patient population; and clinical and fiscal accountability for the outcomes and health status of the population or community served. The key attributes and principles that are common across IDSs can be divided into seven domains, which are shown in Table 6.

**Table 6 Attributes and principles of Integrated Delivery Systems**

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<tr>
<th>Domain 1: Value-driven governance &amp; leadership:</th>
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<td>• The board is very focused on integration and reflects all relevant stakeholders</td>
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<td>• Administrative leadership is very committed to promoting and implementing integration</td>
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<td>• Physician leaders are very committed to promoting and implementing integration</td>
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<td>• The organizational structure is very favourable to integrated care</td>
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<td>• Strategic, financial and operational planning toward integration is very clear and convincing</td>
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<tr>
<td>• A culture of safety and teamwork is continuously taught and reinforced</td>
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<td>• Financial, quality and community benefit data are transparent throughout the organization and to the community.</td>
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<th>Domain 2: Hospital/physician alignment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The system has a clear and convincing approach to aligning and integrating clinicians with hospital administration</td>
</tr>
<tr>
<td>• Physician leaders frequently represent the interests of all system physicians</td>
</tr>
<tr>
<td>• Physicians and administrators frequently participate in joint decision making</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain 3: Financial integration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The system is well-prepared for assuming risk-based payment and has conducted considerable analysis of the implications</td>
</tr>
<tr>
<td>• The system has a very good ability to manage contractual relationships with payers with sufficient staff/resources and compatible information systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain 4: Clinical integration/care coordination:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The system provides or contracts for the full range of services and sites of care needed to meet patient demand for preventive, ambulatory, acute, post-acute and behavioural health care</td>
</tr>
<tr>
<td>• Strong evidence exists of accountability, peer review and teamwork among providers</td>
</tr>
<tr>
<td>• Care is frequently delivered at the most cost-effective and appropriate setting</td>
</tr>
<tr>
<td>• Transitions and handoffs between settings are effectively managed and need little improvement</td>
</tr>
<tr>
<td>• Strong collaboration exists between the hospital system and social services</td>
</tr>
<tr>
<td>• The system has almost fully integrated behavioural health programs into primary care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain 5: Information continuity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Electronic Health Records (EHRs) for each patient are accessible to all providers within the system and most community providers outside of the system</td>
</tr>
<tr>
<td>• The HER system can track all patient encounters and combine all data to system wide level for evaluation and benchmarking</td>
</tr>
<tr>
<td>• EHRs can track health outcomes of patients with specific conditions within all physicians’ panels</td>
</tr>
</tbody>
</table>
Domain 6: Patient-centered & population health focused:

- The system has very good, complete data on sociodemographic, utilization, cost and health status characteristics of the populations it serves
- The system’s resources and services are well-matched to the needs of the populations served
- The system provides significant social services to assist patients in accessing needed care
- The system provides almost full or full, 24/7 access to care via phone, email or in-person visits
- The system has trained all or nearly all staff in cultural competency skills
- All providers have been trained in encouraging expanded patient/family/caregiver roles in decision making and self-management

Domain 7: Continuous quality improvement & innovation:

- The system frequently trains/develops employees to be future leaders
- The system frequently tests strategic activities through pilot projects
- Staff feel very empowered to innovate
- Providers frequently employ evidence-based practices

Source: (NPHHI, p 8)

Different forms of IDS

There are four different IDS models, which are described in Table 7; and multiple customised variations of IDSs in the US.

Table 7 Types of Integrated Delivery Systems Models

<table>
<thead>
<tr>
<th>IDS Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 IDS with health plan (e.g. KP, Geisinger)</td>
<td>Single entity (e.g. hospitals, physicians, other providers)</td>
</tr>
<tr>
<td></td>
<td>Both provider and payer</td>
</tr>
<tr>
<td></td>
<td>Involves physicians in strategic planning</td>
</tr>
<tr>
<td></td>
<td>Enhanced data collection and integration, utilisation review, cost-control</td>
</tr>
<tr>
<td></td>
<td>Minimised duplication of services.</td>
</tr>
<tr>
<td>2 IDS without health plan (e.g. Mayo clinic, HealthCare Partners Medical Group)</td>
<td>Single entity as above</td>
</tr>
<tr>
<td>3 Private networks of independent providers (e.g. Hill Physicians Medical Group)</td>
<td>Similar to models 1, 2 and 3</td>
</tr>
<tr>
<td></td>
<td>May include infrastructure services</td>
</tr>
<tr>
<td></td>
<td>Physician-hospital organisations, management service organisations, individual practice associations (IPAs) and HMOs fit in this model</td>
</tr>
<tr>
<td>4 Government-facilitated networks of independent providers (e.g. Community Care of North Carolina)</td>
<td>Government takes active role in organising independent providers, particularly for Medicaid beneficiaries</td>
</tr>
<tr>
<td></td>
<td>Public-private partnerships</td>
</tr>
</tbody>
</table>

Source: (Enthoven, 2009)

Evidence of IDSs effectiveness with regard to integration of services

There is a growing evidence base to suggest that, with appropriate implementation, IDSs improve the health care quality and outcomes; and reduce costs to the system and patients (Enthoven, 2009). Full integration is associated with high performance, improved clinical quality, higher use of electronic medical records, better collection and use of data and greater ability to achieve economies of scale compared to stand-alone organisations.

Examples of cost-effectiveness include:
28 per cent lower cost for the same outcomes in the GHC-Puget Sound IDS compared to free choice FFS
$20 million savings related to 11 clinical improvement projects using integrated health information technology (Intermountain Healthcare)
Better access to advanced technology for slightly higher cost (KP vs. NHS)
Lower cost and use of resources by chronically ill Medicare patients in IDS compared to the national average (US) (Enthoven, 2009).

The core factors that contribute to the success of IDSs are shown in Box 3.

**Box 3  Summary of core factors of the Integrated Delivery System model**

- Multispecialty medical groups
- Aligned financial incentives to reward high-quality, patient-centred care and discourage low-value interventions
- Interoperable information technology (patient/provider access to information)
- Use of guidelines for best practice
- Transparent accountability for performance
- Defined populations (good collection and use of data)
- Physician-management partnership
- Effective leadership
- Collaborative culture

The main shortcomings of the IDSs relate to the lack of competition to keep costs down. Employers often limit employees’ choices of coverage; and insurance companies are the sole insurance provider for an employer group (Enthoven, 2009). Due to the size and complexity of the US health care system, it is acknowledged that “no single approach or public policy will fix the fragmented health care system” (Enthoven, 2009, p S289). However, IDSs may represent an important step in the right direction (Enthoven, 2009). Most recently an application of the IDS model has been seen in the development of the Accountable Care Organisation. These are integrated delivery systems that came into effect officially in 2012 and are globally capitated to control the cost and quality of care for a population of patients (Shinto, 2010). Pilot programs are currently underway to test the application, many of these at renowned IDSs (Mayo Clinic, Geisinger, Intermountain Healthcare).

### 6.4.2. Accountable Care Organization Model

A recent development in the US PHC setting is the Accountable Care Organization (ACO) model (McClellan and Fisher, 2009). The ACO model establishes a spending benchmark based on expected spending. If an ACO can improve quality while slowing spending growth, it receives shared savings from the payers (Medicare and Medicaid). This approach has been implemented in programs such as Medicare’s Physician Group Practice Demonstration, which has shown significant improvements in quality and savings for large group practices.

These networks have been characterised as:

*Groups of health care providers who give coordinated care, chronic disease management, and thereby improve the quality of care patients get. The organization’s payment is tied to achieving health care quality goals and outcomes that result in cost savings.*

http://www.healthcare.gov/glossary/a/accountable.html
Research suggests that as the groups receive a share of the savings beyond a threshold level, steps such as care coordination services, wellness programs, and other approaches that achieve better outcomes with less overall resource use result in greater reimbursement to the providers (McClellan et al., 2010). Similar to the IDS approach, these steps “pay off” and are sustainable in a way that does not occur under current reimbursement systems. In addition, the shared savings approach provides an incentive for ACOs to avoid expansions of health care capacity that drive both regional differences in spending and variations in spending growth, and that do not improve health. By shifting the emphasis from volume and intensity of services to incentives for efficiency and quality, ACOs provide new support for higher-value care without radically disrupting existing payments and practices. The ACO model builds on current provider referral patterns and offers shared savings payments, or bonuses, to providers on the basis of quality and cost. ACOs have substantial flexibility in terms of their organisational requirements, performance measures and payment models (McClellan et al., 2010). They are comprised mostly of hospitals, physicians, and other healthcare professionals. Depending on the level of integration and size of an ACO, providers may also include health departments, social security departments, safety net clinics, and home care services (Miller, 2009). The various providers within an ACO are encouraged to work with one another to provide coordinated care to the beneficiary population (i.e. the geographic population they service), align incentives and lower overall healthcare costs (American Hospital Association Committee on Research, 2011).

A wide variety of provider collaborations can become ACOs (Figure 5) assuming that they are willing to be held accountable for overall patient care and operate within a particular payment and performance measurement framework (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). Examples include existing IDSs, physician networks such as independent practice associations, physician-hospital organisations, hospitals that have their own primary-care physician networks, and multispecialty group practices. Alternatively, primary-care groups, such as those using PCMH approaches (discussed below) or other organisations that provide basic care could contract with specialised groups that provide high-quality referral services with fewer costly complications.

Regardless of specific organisational configuration, the ACO model has three key features

- Local accountability
- Shared savings
- Performance measurement.
The ACO model differs from an IDS approach in that networks are granted freedom to develop the ACO infrastructure (see Report 2\textsuperscript{xxxiii} for ACO variations in composition) (Keckley and Hoffmann, 2011). In addition, ACOs have a much smaller number of enrollees (minimum of 5 000) than HMOs which often have enrollees in the hundreds of thousands (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). Any provider or provider organisation can assume the leadership role of running an ACO, as the Affordable Care Act does not explicitly designate any specific provider to that role. The federal government, in the form of Medicare, is the primary payer of an ACO. Other funders include private insurance, or employer-purchased insurance (Keckley and Hoffmann, 2011). Funders may play several roles in helping ACOs achieve higher quality care and lower expenditures, primarily by collaborating with one another to align incentives and create financial incentives for providers to improve healthcare quality.

ACOs can be implemented through a variety of payment models, employing both fee-for-service and capitation. Strengths and weaknesses of these approaches are presented in Table 8. The transformation of the principles of this model into legislation has enabled support for a broad range of ACO payment models including a ‘one-sided’ shared savings model which entails no risk to the providers even if they experience greater costs or fail to achieve quality performance goals. There are also ‘two-sided’ or ‘symmetrical’ payment models providing opportunity and incentives for proportionately larger bonus payments in exchange for greater accountability for costs that greatly exceed pre-set goals (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). Although there is flexibility in both the structure and the payment of ACOs, there is a general agreement that there needs to be a strong PHC basis. Hospitals are encouraged to participate, but it is not mandatory.

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\textsuperscript{xxxiii} Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?
More recent changes have allowed ACOs to choose a one-sided funding model, in which they would participate in shared savings for the first two years and assume shared losses in addition to the shared savings for the third year (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). In the two-sided model, ACOs participate in both shared savings and losses for all three years. Although the ACO assumes less financial risk in the one-sided model compared to the two-sided model, ACOs have a maximum sharing rate of 50 per cent in the one-sided model; and a higher maximum sharing rate of 60 per cent in the two-sided model, provided that the minimum shared savings rate threshold of two per cent is reached (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). For both models, there is a shared loss cap that increases each year.

**Table 8 Comparison of Payment Reform Models**

<table>
<thead>
<tr>
<th>General strengths and weaknesses</th>
<th>Accountable Care Organization (shared savings)</th>
<th>Primary Care Medical Home</th>
<th>Bundled payments</th>
<th>Partial capitation</th>
<th>Full capitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthens PHC directly or indirectly</td>
<td>Makes providers accountable for total per-capita costs and does not require patient ‘lock-in’. Reinforced by other reforms that promote coordinated, lower-cost care</td>
<td>Supports new efforts by PHC physicians to coordinate care, but does not provide accountability for total per-capita costs</td>
<td>Promotes efficiency and care coordination within an episode, but does not provide accountability for total per-capita costs</td>
<td>Provides ‘upfront’ payments that can be used to improve infrastructure and process, but provides accountability only for services/providers that fall under partial capitation, and may be viewed as too risky by many providers/patients</td>
<td>Providers ‘upfront’ payments for infrastructure and process improvement and makes providers accountable for per-capita costs, but requires patient ‘lock-in’ and may be viewed as too risky by many providers/patients</td>
</tr>
<tr>
<td>Fosters coordination among all participating</td>
<td>Yes – provides incentive to focus on disease management within PHC. Can be strengthened by medical home or partial capitation to PHC physicians</td>
<td>Yes – changes care delivery model for PHC physicians allowing for better care coordination and disease management</td>
<td>Yes/No – only for bundled payments that result in greater support for PHC physicians</td>
<td>Yes – assuming that PHC services are included in the partial capitation model allows for infrastructure, process improvement, and a new model for care delivery</td>
<td>Yes – gives providers ‘upfront’ payments and changes the care delivery model for PHC physicians</td>
</tr>
</tbody>
</table>

Yes – significant incentive to coordinate among
No – specialists, hospitals and other providers are not
Yes (for those within the bundle) – depending on
Yes – strong incentive to coordinate and take other steps
Yes – strong incentive to coordinate and take other steps
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

<table>
<thead>
<tr>
<th>Providers</th>
<th>Participating providers</th>
<th>Incentivized to participate in care coordination</th>
<th>How the payment is structured, can improve care coordination</th>
<th>To reduce overall costs</th>
<th>To reduce overall costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removes payment incentives to increase volume</td>
<td>Yes – adds an incentive based on value, not volume</td>
<td>No – there is no incentive in the medical home to decrease volume</td>
<td>No – outside the bundle – there are strong incentives to increase the number of bundles and to shift costs outside</td>
<td>Yes/no – strong efficiency incentive for services that fall within the partial capitation model</td>
<td>Yes – very strong efficiency incentive</td>
</tr>
<tr>
<td>Fosters accountability for total per-capita costs</td>
<td>Yes – in the form of shared savings based on total per-capita costs</td>
<td>No – incentives are not aligned across provider, no global accountability</td>
<td>No – outside the bundle – no accountability for total per-capita cost</td>
<td>Yes/no – strong efficiency incentive for services that fall within partial capitation</td>
<td>Yes – very strong accountability for per-capita cost</td>
</tr>
<tr>
<td>Requires providers to bear risk for excess costs</td>
<td>No – while there might be risk-sharing in some models, the model does not have to include provider risk</td>
<td>No – no risk for providers continuing to increase volume and intensity</td>
<td>Yes, within episode – providers are given a fixed payment per episode and bear the risk of costs within the episode being higher than the payment</td>
<td>Yes – only for services inside the partial capitation model</td>
<td>Yes – providers are responsible for costs that are greater than the payment</td>
</tr>
<tr>
<td>Requires ‘lock-in’ of patients to specific providers</td>
<td>No – patients can be assigned based on previous care patterns, but includes incentives to provide services within participating providers</td>
<td>Yes – to give providers a PMPM payment, patients must be assigned</td>
<td>No – bundled payments are for a specific duration or procedure and do not require patient ‘lock-in’ outside the episode</td>
<td>Yes (for some) – depending on the model, patients might need to be assigned to a PHC physician</td>
<td>Yes – to calculate appropriate payments, patients must be assigned</td>
</tr>
</tbody>
</table>

Source: (McClellan and Fisher, 2009)

Legislation acts to strengthen the establishment of these networks, as does strong stewardship, and emphasis on performance and accountability across providers. A range of models of care that could be successful is available, though evidence of success of these variations is needed to inform best practice. Additionally, reforms that support PHC (i.e. medical home type arrangements) are able to leverage Accountable Care. In contrast to traditional Medical Home type approaches, ACOs are designed to foster shared accountability for overall quality and costs encompassing a range of PHC providers, including GPs. This should encourage providers to demonstrate not only patterns of care, but also relevant measurement of outcomes which reflect the continuum of care. Further, in relation to social inclusion, ACOs primarily serve Medicare beneficiary patient populations. However, in larger and more integrated ACOs, the population may also include individuals who are homeless and
uninsured (Miller, 2009). One of the main strengths of this model is that patients may play a role in the healthcare they receive from their ACOs by participating in their ACO’s decision-making processes (Merlls, 2010). Pioneering ACOs that are willing to trial innovative payment models will be rewarded by receiving higher incentive amounts, but this is counterbalanced with a 3-year commitment to be responsible for risk associated with a certain portion of the population (15,000 urban or 5,000 in rural areas) (Boyarsky and Parke, 2012).

Several challenges to ACOs have been identified in the literature. The first set of challenges affects the implementation and development of ACOs:

- there is a lack of specificity regarding how ACOs should be implemented.
- the American Hospital Association has estimated that ACOs are likely to incur high start-up costs as well as large annual expenses to maintain the system (FTC and the Department of Justice, 2011)
- there is a risk that ACOs may violate antitrust laws if they are perceived to drive up costs through reducing healthcare competition while providing lower quality of care. To address the issue of antitrust violation, the US Department of Justice has offered a voluntary antitrust review process for ACOs (The United States Department of Justice, 2011)
- The implementation of ACOs will need ongoing learnings especially about how local contextual factors influence the success of different ACOs.

The second set of challenges concerns infrastructure and information technology. For integration of multispecialty groups, all providers require an Electronic Health Record (EHR) system that is capable of advanced reporting, disease registries, and patient population care management (Bates and Bitton, 2010, Jha, 2010). This applies especially to GPs who join an ACO through participation in a group practice, hospital-medical practice alignment, or another joint venture such as an independent practice association.

The third set of challenges pertains to the payment structure for ACOs, which comprises new and unproven mechanisms. Under the one-sided model, providers no longer assume any financial risk throughout the three years and continue to have the opportunity to share in cost savings above two per cent. Under the two-sided model, providers will assume some financial risk but will be able to share in any savings that occur (no 2 per cent benchmark before provider savings accrue) (Shinto, 2010). The payment structure is daunting and confusing but also the two-sided payment models may encourage ACOs to set the bar low, in order to meet pre-set goals and thus receive bonus payments. There is a lack of both payer and provider knowledge and experience and a great deal of uncertainty about legal and regulatory issues around provider coordination and engagement with multiple payers.

The fourth set of challenges relates to developing consistent definitions of cost and quality measures across participating payers (Fisher et al., 2012). This is vital to ensure more informative evaluations, where different pilots can be compared; and enables wider adoption of evidence-based findings as providers will have both clarity about what is needed to improve care, and better support when they achieve measurable improvements. Comprehensive performance measures encompass patients’ experiences of care, health outcomes and the overall costs of care.

The ACO legislation supports the development of evaluation methods. Longitudinal pre-post budget projections based on historical spending and utilisation data (i.e. actuarial methods) are expected to enable the establishment of clear, quantifiable targets and ACOs can track their performance. Five domains have been identified to evaluate the quality of an ACO’s performance. These include
addressing the (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011, p67889):

- patient/caregiver experience
- care coordination
- patient safety
- preventive health
- at-risk population/frail elderly health.

To enable the development and evaluation of various alternate payment models that allow for the creation of ACOs, the Center for Medicare and Medicaid Innovation was established. The CMMIs Pioneer ACO program (Boyarsky and Parke, 2012) is a pilot to aid the development and evaluation of the alternative payment models in order to test how all ACOs and other cost-containment programs integrate and coordinate care, improve quality, and reduce healthcare costs. In addition, ACO pilots are supported by a ‘learning network’ to aid in implementation. This infrastructure recognises the dual challenge: 1) that payer(s) (Medicare/Medicaid) require assistance in implementing reliable, transparent, timely and valid measures of quality and costs; and 2) providers require assistance in achieving improvements in measured performance, setting budget benchmarks, addressing legal issues, etc. Development of sets of standardised tools and education and technical support programs assist this process.

Ongoing evaluation aims to lead to better overall evidence. In November 2012, a framework to evaluate the formation, implementation and performance of the ACOs was published (Fisher et al., 2012). A range of ACO pilots were implemented with commercial insurers and state Medicaid programs prior to the enforcement of the directives specified in the Medicare Shared Savings Program (MSSP) (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011). The MSSP is a permanent program to encourage development of ACOs. Examples are:

- The Brookings-Dartmouth ACO collaborative leads five ACO pilots working with commercial insurers, as well as their second ACO Learning Network with over 80 members from across the country.
- Premier runs an ACO Implementation Collaborative and Readiness Collaborative.
- American Medical Group Association also runs an ACO Development Collaborative and Implementation Collaborative.
- Independent ACO-like initiatives are also taking place in Massachusetts, Illinois and California. Recently, the Brookings-Dartmouth ACO Learning Network published a publicly available comprehensive ACO implementation guide, the ACO Toolkit (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011).

Several ACO pilots have also used the portal systems:

- HealthyCircles was originally built to manage care transitions around H1N1 for the American Medical Association, but some found practical application in the ACO space.
- ETrainer Services was designed around short- and long-term patient wellness and satisfies most of ACOs requirements (Department of Health and Human Services: Centers for Medicare & Medicaid Services, 2011).

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xxxiv H1N1 is a swine origin influenza A virus subtype.
The results of these pilot programs have been mixed: some organisations’ efforts have yielded financial benefits, while others have experienced trouble balancing the costs of implementing ACOs with the savings gained (American Hospital Association, 2011).
6.4.3. Patient-Centred Medical Home Model (PCMH)

The patient-centered medical home (PCMH) has been described as a model that:

... combines the traditional core values of family medicine – providing comprehensive, coordinated, integrated, quality care that is easily accessible and based on an ongoing relationship between patient and physician – with new practice tools such as health information technology (Kellerman, 2009, p 279).

Coordinated and/or integrated care is one of the key principles of the PCMH (Stange et al., 2010). In particular, PCMHs interact with hospitals, home health agencies, nursing homes, subspecialty care and private community-based services, using various mechanisms, including registries, shared health information and information technology.

A medical home is a health care delivery site where patients have a continuous relationship with a personal physician who provides patient-centred, coordinated and high-quality care with adequate reimbursement mechanisms to cover all provided services (Kellerman, 2009). Historically the model evolved from application in paediatric and chronic disease populations (Carrier et al., 2009). Although some medical homes serve the general adult population, most target specific vulnerable populations; and several programs focus exclusively on a specific demographic group.

The American Academy of Family Physicians (American Academy of Family Physicians) outlined nine general standards for PCMHs:

- patient access and communication
- patient tracking and registry functions
- care management including use of evidence based guidelines
- patient self-management support
- electronic prescribing
- test tracking
- referral tracking
- performance reporting and improvement
- advanced electronic communication.

Four key mechanisms within the PCMH model that were identified in a report by The Commonwealth Fund were paired alongside seven principles derived by the US National Committee for Quality Assurance (NCQA) (Carrier et al., 2009) and used as criteria for registration/recognition as a PCMH (Figure 6).
Although the PCMH model appears to be focused predominantly at the service-delivery section, the NCQA recognition program emphasises a systems approach to health care delivery within medical practices as a way to improve quality of care and patient safety. Therefore, it requires elements of integration at the organisation/meso level. For example, a key part of the PCMH model is an aligned funding structure which encompasses a blended payment system. Physicians (GPs) retain fee-for-service payment for face-to-face visits and a baseline care management fee for each patient self-enrolled in the practice, as well as pay-for-performance payments to promote accountability for quality of care. The baseline care management fee is intended to reward physicians for providing services that are not currently billable, yet provide value and savings to the health care system.

**Figure 6    Principles of the Patient-Centered Medical Home**

<table>
<thead>
<tr>
<th>Commonwealth Fund</th>
<th>NCQA Joint Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A regular doctor or source of care</td>
<td>Each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care</td>
</tr>
<tr>
<td>No difficulty contacting provider by telephone</td>
<td>The personal physician is responsible for providing all of the patient’s health care needs or taking responsibility for appropriately arranging care with other professionals</td>
</tr>
<tr>
<td>No difficulty getting care or advice on weekends or evenings</td>
<td>Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication</td>
</tr>
<tr>
<td>Office visits are always well organized and on schedule</td>
<td>The personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients</td>
</tr>
<tr>
<td></td>
<td>Care is coordinated and/or integrated across all elements of the complex health care system and patient’s community. Care is facilitated by registries, IT and other means to ensure that patients get the indicated care when and where they need it</td>
</tr>
<tr>
<td></td>
<td>Quality and safety are hallmarks of the medical home</td>
</tr>
<tr>
<td></td>
<td>Payment appropriately reflects the added value provided to patients who have a patient-centered medical home</td>
</tr>
</tbody>
</table>
At the meso level, the Medical home model requires patients to be assigned to a specific provider for medical home services. Patients are often attributed to a PCMH based on their most recent physician visit and PHC physicians receive Medical home payments on a regular basis (i.e. each month) (Kellerman, 2009). Analysts have expressed concern that potential savings achieved by implementing the PCMH model may not reliably offset the costs of payments to the participating PHC providers on a long-term and sustainable basis. These concerns may be a barrier to more widespread adoption of this model in the US (McClellan et al., 2010).

**Evaluation**

In a large survey across 11 different countries, Schoen et al. (2011) reported that patients with complex care needs were significantly less likely to experience fragmented care or medical errors when they were seen in PCMHs compared to other places of care that did not have the attributes of a PCMH. While over 90 per cent of patients reported having a regular doctor, those with access to a PCMH (45-60% of those surveyed) reported higher levels of satisfaction with care, better communication with their providers and better access to screening and preventive services.

**Weaknesses**

Although various forms of the PCMH have been implemented, there is an overall lack of shared definitions and terminology; and little guidance related to development and assessment, which makes adoption and evaluation more challenging (Carrier et al., 2009).

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xxxv Not all countries specifically used the term ‘medical home’; however, many incorporated the core elements of a PCMH and were analysed as such.
6.5. Mechanisms to facilitate integration

Summary
There are several common underlying mechanisms in the models discussed in this review. Strong leadership, governance, regulation and sustainability are central stewardship mechanisms required for meso level organisations to facilitate integration. There are different models of integrated health care governance that may suit individual partnership arrangements (e.g. memoranda of understanding, alliance contracting and commissioning). That is, one size does not fit all. For any voluntary arrangements between organisations, the mechanisms to integrate service providers are predominantly about developing trusting relationships and sustainable partnerships; addressing the challenges related to organisational change; and acknowledging different organisational cultures. These arrangements also rely on sustained engagement and communication between and within organisations; and benefit from an investment in information technology around eHealth. In some cases, co-location facilitates integrated service delivery.

Complexity in the type and mix of funding arrangements adds to the challenge of creating a coherent system that is aligned to policy objectives; and influences decisions related to infrastructure for the physical environment and building capacity in the workforce.

Finally, the literature frequently suggests that there is a need for improved data and evidence that underpins best practice approaches to integration across the world. However, approaches to assessing integration vary substantially and there is little consensus on the most appropriate measures. Appropriate validated measures of integration are needed to assess not only how well integrated the organisations are, but also the impact of such integration in terms of patient health and wellbeing.

Based on this review of Australian and International organisations operating at the meso level of PHC, several common factors (termed mechanisms) which influence this level of integration have been identified. Reflecting back to the WHO (2000) objectives of health systems (see Figure 7) used to structure Report 1 (Integrated care: What policies support and influence integration in health care in Australia?) in this series, activities influencing integration at the meso level predominantly pertain to creating resources for enabling and supporting activities for service delivery and stewardship and financing to influence the systems responsible. The following section addresses these three functions as a guide to understanding the mechanisms used by PHCOs to promote integration in the PHC sphere. Report 5 in this series (Integrated care: What can be done at the micro level to influence integration in primary health care?) will address the role of specific models and mechanisms pertinent to the final category, the delivery of services.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

6.5.1. Stewardship

At the meso level, stewardship relates to vertical integration where higher level policies are implemented by organisations to promote shared visions and establish an optimal, sustainable health system. This is coordinated through mechanisms such as governance and regulation, as described below.

Governance

As discussed in Report 1 (Integrated care: What policies support and influence integration in health care in Australia?), governance is a key responsibility of governments at the macro level; however, it is also important for policies and leadership to be translated vertically to meso level organisations. This mechanism is included in the current report as integrated structures can exist both horizontally between government and/or non-government agencies, and vertically across levels of government and/or non-government sectors. At the broadest/primary level, governance can be analysed in terms of those involved in collaborating to establish society’s public policies; and at a secondary level, in terms of the forms of specific public policies, such as the resulting rules, institutions, laws and enforcement mechanisms. In addition, governance can be analysed at the level of particular organisations, as in the governance of a district health system or a hospital. For example, health care governance considers whether improvements in the way services are governed affects service delivery. Further, the notion of integrated governance refers to the formal relationships between organisations that allow them to manage deliverables, risks and processes through collaborative business approaches (IPAA, 2002). Emerging partnerships require management of interactions between differing modes of governance, which in some instances promote collaboration and in others, competition. This can lead to difficulties sustaining successful relationships among diverse partners - a possible challenge for MLs as they work to coordinate GP, allied health and community health professionals in the PHC sector (IPAA, 2002).

Several challenges in the current PHC system, such as power-sharing, funding, care models and the absence of effective relationships between organisations, can be addressed through appropriate
governance. As integrated delivery systems/networks are formed, governance structures must be responsive to both internal and external stakeholders. Both internal efficiencies and socially responsible actions are required of these relatively new organisational forms. One systematic review (Jackson et al., 2008) described three potential methods for integrated health care governance (Figure 8):

- separate organisations merging
- developing a separate incorporated structure for areas of common business overlap
- coming to a common collaborative arrangement while maintaining separate independent governance and funding.

![3 Models of integrated health care governance](image)

Source: (Jackson et al., 2008)

**Figure 8**  **Methods for integrated health care governance**

The authors also described the need for a clear separation between governance and operational management, and the value of local communities with the vision, leadership and commitment to extend health service integration (Jackson et al., 2008). It is important to recognise the distinction between governance performance (e.g. Are organisational rules followed?) and organisational performance (e.g. Does the hospital have low infection rates?). This latter distinction is important because many measures of governance performance are closely related to organisational performance and yet different factors intervene at each stage. For example, absenteeism is a good
measure of governance performance – it measures the degree to which governance arrangements promote managerial actions to recruit, motivate, supervise, and discipline staff to comply with their formal work obligations (Jackson et al., 2008).

Common concerns relating to governance have been identified such as board structure and function, size, membership, continuing education, affiliations and alliances (Savage et al., 1997). The effectiveness of the LHIN model of PHCOs in Ontario (Canada) identifies the importance of increasing the clarity of decision-making processes, reviewing and aligning resources, enhancing collaboration processes and partnerships, refining accountabilities and processes and governance (KPMG, 2008). Successful integrated governance requires strong leadership, which is promoted by clear delineation of roles and responsibilities across and within organisations. This may exist in the form of clinical leadership, such as the role played by the newly established National Lead Clinician Group (LCG), or it may refer to GP leadership as was the case with the DGP. Barriers and facilitators to governance in integrating care are like those of any large-scale organisational change – i.e. leadership, organisational culture, information technology, physician involvement and availability of resources (Ling et al., 2012).

**Regulation**

As described above (see page 29), arms-length bodies are regulatory bodies which work closely with meso level organisations to provide stewardship through regulation and performance monitoring. They are separate entities that promote independence, transparency and objectivity. These bodies are an important part of integration as they ensure that practice and frameworks are consistent across organisations and agencies. In addition, some peak bodies may play a regulatory role such as the AML Alliance and the former AGPN, which coordinate the function and outcomes of their respective organisations.

**Sustainability**

Sustainable healthcare is defined as - "a complex system of interacting approaches to the restoration, management and optimisation of human health that has an ecological base, that is economically, environmentally, and socially viable indefinitely, that functions harmoniously both with the human body and the non-human environment, and which does not result in unfair or disproportionate impacts on any significant contributory element of the healthcare system” (Open sustainability). It also refers to the long-term ‘staying power’ of a model or system (Scheirer et al., 2008). A recent report from the World Economic Forum (World Economic Forum, 2013) noted the need to expand the traditional boundaries of healthcare to consider a broader health system that integrates a range of non-health agencies and experts in the development of sustainable health systems. The report notes that, with the current global economic challenges, it is important to consider the long-term effect of current plans and perhaps shift the way of thinking about reform to ensure that new developments in health systems promote sustainability. One example of this can be seen in the ongoing changes in England’s health system structure, which have led to disruption, confusion and change fatigue related to the formation and termination of CCGs and PCTs, respectively (Boyle, 2011). Further to this, the research literature commonly identifies the importance of allowing sufficient time to enable cooperation and collaboration to develop; and cautions that sustainability will occur only if new models are given the opportunity to embed themselves within systems.

In Australia, sustainability can be achieved by learning from the activities of international health systems. For example, a lack of resources and opposition from both competitors and the medical establishment contributed to the demise of the IPAs in NZ. Therefore, Australia can learn from this
experience and ensure that there are sufficient resources and clearly delineated and advertised roles and responsibilities to facilitate a smooth path for new organisations created in the PHC sector.

A further challenge to sustainability is the changing demand for services. For example, while health promotion and prevention strategies and effective chronic disease management may enable healthier populations, the resulting increase in life expectancy creates a different set of demands. Sustainability in this sense needs to include flexibility and the ability for governance to allow organisations to act according to local needs; and for training and education opportunities to enable development of the workforce to keep in step with the changing composition of the patient population (Gruen et al., 2008).

Gruen et al (Gruen et al., 2008) describe how developing a comprehensive approach to sustainability based on the type of evidence/data discussed in sections below could be of benefit to a range of stakeholders including policy makers, funders, and managers.

6.5.2. Creating Resources
Creating resources is about investment in skills, facilities and maintenance to ensure a balanced mix of inputs across local areas; and appropriate policies that continuously deal with the sufficient, efficient creating and/or (re)allocation of necessary resources. It is this function of the WHO’s framework (2000) that is most important for integration at the meso level. As PHCOs consider creating resources, they move through a series of stages which include: identifying what is required through needs assessments of specific organisations, populations or in general; ascertaining by whom will these needs be delivered (i.e. determining which PHCOs and other sector organisations have a role to play); determining how these needs can be addressed (including context-dependent practicalities such as workforce, facilities, and population issues); estimating the period of time the resources will be required (i.e. sustainability); and deciding how the impact will be evaluated (e.g. developing measures, assessing meaningful change, ensuring quality of data, offering training for data management). Lessons for this section have been drawn from previous Australian PHCOs (DGP) as well as the tranches of international PHCOs currently being established, i.e. the Pathfinder CCGs in England and the Pioneer ACOs in the US (Boyarsky and Parke, 2012, Checkland et al., 2012).

Described below are key mechanisms for integration at the meso level which form part of the ‘creating resources’ category. These are core components of any integrated system and must be considered when developing plans for coordinating health systems.

Partnerships
Integration is not possible without partnerships. These include not only patient-provider relationships but also partnerships between different healthcare providers, governments, and health and other sectors (Kalucy, 2009)(as presented in Table 9). While there is little consensus on the definition of health partnerships (also termed health coalitions) (Kendall et al., 2012), they are generally conceptualised as:

Formal alliances among organizations, groups and agencies (government and non-government) that have come together to pursue a common goal within the local community, namely increasing health or reducing the risk of chronic disease (Kendall et al., 2012, p E1).
Table 9 Partnerships in the primary health care context

<table>
<thead>
<tr>
<th>Level of Partnership</th>
<th>Operationalisation</th>
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</table>
| Across providers and settings | • Predominantly an area for horizontal integration  
• Encompasses multiple disciplines, professions, multiple sectors and multiple settings  
• Puts individuals and their families at the centre of health care. For example, evaluations suggested that DGP were able to promote flow of information between GPs and PHC services using their relationships with local agencies to encourage connection between them (Wiese et al., 2011) |
| At government level (i.e. within and between federal, state and territories) | • Purpose of such partnerships is to drive change, and put support structures in place to establish and maintain other necessary partnerships. |
| With sectors outside of health (e.g. Health in All Policies, HiAP) | • Includes partnerships across sectors including transport, education, housing, planning, employment, local council, business, industry  
For example, to build an adaptable workforce, strong partnerships will be required between health and education (Kalucy, 2009). |

The value of partnerships and regional integration is seen as critical to the delivery of effective PHC and forms a key building block in Australia’s current national health reform (Commonwealth of Australia, 2010). Based on this policy, partnerships have been proposed between PHC providers, Divisions network members, community agencies, NGOs, hospitals, governments, Aboriginal medical services, regional training providers, educators, universities and researchers. Often seen as “a mechanism for building local capacity and engagement around a health issue of disease” (Kendall et al., 2012, p E1), partnerships aim to improve health service delivery in a way that addresses the needs of the local community. Partnerships are usually formed when a task cannot be achieved by a single individual, discipline or organisation (Kalucy, 2009). Thus, partnerships enable increased capacity, which can result in enhanced opportunities and resources. Partnerships are employed to enable a wide range of PHC activities including prevention and promotion, service development, chronic disease management, medical education and workforce support. Partnerships are built on contributions from all members, such as financial or in-kind, providing time, expertise and/or resources. They can be informal or formal. For the former DGP, successful partnerships were fundamental to the work of the AGPN at every level of its member organisations - local GP networks, SBOs and nationally. For MLs, the key partnership in their work will be the cooperation, coordination and collaboration encouraged between MLs and LHNs. Other important partnerships will be between MLs and a range of stakeholder organisations that contribute to, or impact on, PHC – e.g. allied health, medical specialists, community health and non-health services (see page 24).

It has also been suggested that there are stages of creating strong productive partnerships (AGPN, 2009). These include:
• the initial engagement phase in which key stakeholders with common purpose are identified  
• partnership development which involves communication, trust building and the development of shared visions, policies and tools  
• building a shared understanding of business processes, including determining governance arrangements  
• implementation phase  
• evaluation is a key final step in ensuring that productive partnerships continue.
While partnerships between health and other sectors are assumed to be advantageous and are often included as an essential element of policies and guidelines, there is very little evidence of their benefit in terms of service delivery, cost-effectiveness or outcomes for consumers (Dowling et al., 2004). The available research, which is beset by various methodological and definitional problems, lacks consistency and clarity. The lack of evidence of effectiveness may also be attributed to the inherent difficulties of developing cooperative, collaborative working partnerships. Integrating activities and processes across organisations with diverse (or competing) objectives, perspectives, organisational cultures and funding arrangements is time-consuming and costly; and may lead to conflicts (Kendall et al., 2012). Other challenges include difficulties in defining responsibilities, accountabilities and goals; and collecting quality data at the population health and service level (AGPN, 2009). Nevertheless, despite the shortcomings in the evidence base, there is no shortage of studies that identify factors which contribute to ‘successful’ partnerships. Some evidence suggests that strong and productive partnerships require a combination of deliberate action, commitment, good will, patience and a specified time frame (e.g. 6-12 months). As seen in Table 10, Mattessich et al. (2004) identified a number of success factors for partnership development covering a range of social and business characteristics.

Table 10  Factors for successful partnerships in primary health care

<table>
<thead>
<tr>
<th>Factor</th>
<th>Operationalisation</th>
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<tbody>
<tr>
<td>Environment</td>
<td>• History of collaboration</td>
</tr>
<tr>
<td></td>
<td>• Recognition as a legitimate community leader</td>
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<tr>
<td></td>
<td>• Favourable political and social climate</td>
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<tr>
<td>Membership characteristics</td>
<td>• Mutual respect, understanding and trust</td>
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<tr>
<td></td>
<td>• Appropriate members</td>
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<td></td>
<td>• Members that see collaboration in their self-interest</td>
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<td></td>
<td>• Ability to compromise</td>
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<tr>
<td>Process and culture</td>
<td>• Shared stake in processes and outcomes</td>
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<tr>
<td></td>
<td>• Multiple layers of participation</td>
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<tr>
<td></td>
<td>• Flexibility and development of clear roles and policy guidelines</td>
</tr>
<tr>
<td></td>
<td>• Adaptability and sustainability during change</td>
</tr>
<tr>
<td></td>
<td>• Appropriate pace of development</td>
</tr>
<tr>
<td>Communication</td>
<td>• Open and frequent</td>
</tr>
<tr>
<td></td>
<td>• Informal and formal links</td>
</tr>
<tr>
<td>Purpose</td>
<td>• Unique</td>
</tr>
<tr>
<td></td>
<td>• Clear attainable goals and objectives</td>
</tr>
<tr>
<td></td>
<td>• Shared vision</td>
</tr>
<tr>
<td>Resources</td>
<td>• Sufficient funds</td>
</tr>
<tr>
<td></td>
<td>• Staff</td>
</tr>
<tr>
<td></td>
<td>• Time</td>
</tr>
<tr>
<td></td>
<td>• Skilled leadership</td>
</tr>
</tbody>
</table>

Source: (Mattessich et al., 2004)

In addition, the AGPN identified several processes as important in overcoming difficulties that may emerge from partnerships (AGPN, 2009), and suggested the following solutions:
• employing a governance framework to clarify partnership decision-making and management processes.

Problems include: lack of consensus on definitions of partnership and measures of success (mostly about the process of partnerships, rather than health outcomes); and attribution of outcomes to partnerships (Dowling et al., 2004).
constructing policies and processes to guide leadership and communication protocols.
creating mechanisms to address quality improvement (capacity building), problem solving and evaluation.
ensuring both flexible contracting arrangements and dedicated resources (funding, time, staffing) for coordination and implementation of shared projects. Surety of resources helps to maintain trust, engagement and awareness, staff retention and long-term planning.
marketing of partnerships may be influential in both enabling development of an identity that the community can relate to and building the profile of services in the community.

AGPN also identified ways in which partnerships may be operationalized and outlined several actions that can be measured or evaluated to assess the efficacy of the relationship (AGPN, 2009), including: delivering services where previously services were unavailable; changing infrastructure to a co-location model, providing comprehensive health services; having shared understanding and resources; and engaging in research.

However, evaluating these factors does not enable explicit measurement of the partnership or integration of organisations in a quantitative sense. The program logic model commonly employed by the South Australian Community Health Research Unit (Lawless et al.) provides one illustration of an approach to evaluating organisations’ actions to determine the effectiveness of particular strategies in PHC practice. The program logic model uses theory, evidence and values to explain how and why particular service elements may lead to desirable health outcomes; and the extent to which the elements predict certain outcomes.

Partnership agreements, from informal to formal (Figure 9), can assist the integration of organisations and the people within and across organisations and sectors. Outlined in the sections below are some key examples of agreements that have been identified across this report which cover the continuum of arrangements that play a part in influencing integration at the meso level:

- **Memorandum of Understanding (MoU)** which has been used widely by the former DGP in Australia
- **Alliancing** which is utilised by PHOs in NZ
- **Commissioning** which has a long history in England.

**Figure 9** The partnership agreement continuum

**Memoranda Of Understanding**

A Memorandum of Understanding (MoU; also called a Memorandum of Agreement) is an agreement between one or more parties (e.g. organisations, agencies, departments, companies), which aims to engage parties on equal terms. MoUs define the agreed intentions, actions, roles, responsibilities, obligations and other details of understanding between the parties. MoUs set out the framework for

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***While this is termed a ‘model’, it is also a mechanism for evaluating elements in a program or model. As such, it may be a useful tool to identify which elements of a particular model are essential to its success.***
cooperation, collaboration and communication between parties so that they can jointly, and as independent organisations in their own jurisdictions, work towards a particular goal, such as improving coordinated care for patients with complex conditions. One example is a MoU between NSW Health, Ambulance Services of NSW and the NSW police force regarding the mental health emergency response (2007). This MoU provides a framework for managing people with mental illness at times when both the NSW Health and NSW Police Force services may be required. Similarly, in the Access to Allied Psychological Services (ATAPs) program, allied health professionals and GPs work together under a MoU to deliver services in rural Australia (Morley et al., 2007). In other examples, the AGPN has had MoUs with the Pharmaceutical Guild of Australia, Optometrists Association Australia and the National Aboriginal Community Controlled Health Organisation (NACCHO) (AGPN, 2009); and individual DGPs have had MoUs with key community-based health care service providers to improve services and systems (e.g. diabetes management) in their local area (Moretti et al., 2010). One Australian study explored the feasibility of two DGPs working together with local area services and other support organisations (e.g. National Heart Foundation) to implement a SNAP program in NSW (Harris et al., 2005). Although both parties emphasised the importance of a MoU in establishing the partnership between the DGP and local area health services, the authors reported that:

*The impact and sustainability of the SNAP program were limited by a lack of effective practice teamwork, poor linkages with referral services, and the lack of a business model to support SNAP in the practices (Harris et al., 2005, p 554).*

Thus, the MoU is only one mechanism, which has been judged by some as insufficient on its own to support implementation of programs. Similarly, evidence from a review of three rural palliative care programs, which used MoUs to improve networking, collaboration and integration between GPs and other community-based health care providers, reported several challenges related to efforts to achieve integrated care including a comment that: (Masso and Owen, 2009).

> *Formal arrangements, such as memoranda of understanding or protocols, used to improve both linkage and coordination, were usually difficult to maintain (Masso and Owen, 2009, p 265).*

**Alliance contracting**

Alliance contracting (or alliancing), is a change management tool characterised by several features, which are also key elements of MoU and partnerships more generally. Alliance contracting, which has been introduced to promote a ‘whole of system’ approach, is currently used in many different areas where public and private sectors intersect. Examples include the Commonwealth Department of Infrastructure and Transport with State government departments (e.g. Victorian Department of Treasury and Finance). With relevance to both financing and partnerships, alliancing is:

*a method of procuring, and sometimes managing, major capital assets. Under an alliance contract, a state agency (the ‘owner’) works collaboratively with private sector parties (‘non-owner participants’) to deliver the project (Department of Treasury & Finance, 2012).*

Members of the alliance are expected to work together in good faith, with integrity, and make decisions based on what is best for the project; work as an integrated, collaborative team; and jointly manage risks to ensure the project is delivered. In brief, alliancing is more about joint decision-making and collaboration between members of the alliance, rather than a specific

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XXXVIII SNAP programs address lifestyle issues of smoking, nutrition, alcohol and physical activity.
structure. Report 2 in this series discusses the alliance contracting model used in NZ. For example, the District Health Boards and NZ government determine the objectives and financial commitment, whereas the health care professionals and network organisations (e.g. Primary Health Organisations) determine how the services will be delivered (Cumming, 2011).

There are a range of applications of the alliancing approach in PHC, particularly in NZ (Ministry of Health, 2011). One example is training of a health workforce (GPs, practice nurses) to perform certain treatments traditionally undertaken only in hospitals, so that hospital specialists can focus on complex acute care cases. In some areas, nurse practitioners are trained to assess patients, diagnose, prescribe medication, and manage patients with long-term chronic illnesses, in consultation with GPs; or less medically qualified staff are trained to undertake some time-consuming tasks traditionally done by practice nurses, such as taking throat swabs in children at school. Additionally, information technology and telehealth are linked to alliancing. For example, in making virtual appointments, calls to the GP clinic are ‘triaged’ by a nurse, who books appointments for consultations by phone/email (GP time set aside specifically), or face-to-face; and lab tests are booked before GP appointments. Video links to GPs and specialists are also offered in small rural towns staffed with rural nurse specialists who provide most of the care. Further, patient telehealth monitoring devices for heart and lung disease (e.g. monitoring blood pressure, lung function) are available (Wakefield et al., 2011).

Other examples of alliancing include coordination of care with nurse-led care plans (Ministry of Health, 2011). That is, instead of waiting until elderly patients (aged 75 years and older) visit the GP when they are ill, patients are invited to visit the practice nurse for a free one-hour consultation; and an individualised care plan is devised. Further, Integrated Family Health Centres (IFHC), which promote co-location to improve integration of services, is based on alliancing. Under this plan, local PHOs commission community health care organisations, such as Te Whiringa Ora Care Connections, to develop individual care plans for patients with chronic illnesses; coach them in self-management; and organise health care services (Ministry of Health, 2011). This involves collaboration with community groups to identify and target groups with increased health/disease risk, such as the Tongan Health Society, which works with the local IFHC to improve early detection of diabetes in the Tongan community. Similarly, Primary Options for Acute Care (POAC) aims to reduce avoidable hospital admissions by providing a range of treatments within the community, including asthma, pneumonia, cellulitis, and gastroenteritis-dehydration. Further, clinical family navigators (registered nurses and overseas-trained nurses who are not registered to practice in NZ) conduct home visits to support health and social needs of high-need patients. Finally, clinician-led collaboration and multidisciplinary groups are classic examples of alliancing. Examples include the use of electronic tools for medical imaging requests to provide faster access to diagnostics; and GP and pharmacist collaboration to synchronise medication dispensing for chronically ill people with multiple medications, or regular case conferencing between health care professionals to discuss patients’ care needs. For example, the hospital geriatrician collaborates with a GP, psychologist, nurse practitioner and other relevant professionals to discuss older patients with high care needs. Whānau Ora is a patient-centred care approach that involves tailoring care to patients’ health and social needs, including lifestyle, education, housing, income, transport, employment. The availability of more flexible funding policy has allowed community-based health professionals opportunities to

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xxxix Integrated care: What policies support and influence integration in health care across New Zealand, England, Canada and the United States?

x1 A community health organisation in NZ, which focuses on Māori and Pacific Island health.
establish governance arrangements to suit the local needs. That is, clinicians from both private and public sectors work together within a joint clinical governance group.

**Commissioning**

Commissioning has been included as it is the most formalised arrangement by PHCOs in England. Its formality is due to the fiscal arrangements which are a large part of the agreements. Report 2 describes commissioning in more detail.

**Organisational change**

Organisational culture is recognised as an important factor influencing the cost and quality of health care. To enable individual behaviour change among health professionals requires a supportive culture and infrastructure. The foremost model of organisational change is PRECEDE (Predisposing, Reinforcing and Enabling Causes in Educational Diagnosis and Evaluation), which suggests that some strategies predispose physicians to behaviour change (such as dissemination of new information) (Green et al., 1980). Interventions that best succeed in changing performance and health care outcomes are those that create an environment for change and also use practice-enabling strategies (various environmental changes that facilitate use of the new behaviour or allow the new skill to be practised) and reinforcing methods (which help maintain the new behaviour). PRECEDE, and other similar models of organisational change, are compatible with the ‘process of change’ model, which would suggest that strategies should be tailored to the stage that most providers are assessed to be at after initial consultations in the change process. For example, in one jurisdiction/organisation it might be determined that local providers are in need of awareness raising (i.e. they are pre-contemplators of integrated practice or even resistant to change), whereas another cohort might be ready for action given levels of frustration with the status quo or previous positive exposure to change arguments or attempts at integrated service.

Examples of specific strategies that Woodward suggested could be employed across the stages of change include (Woodward, 2000):

- **Predisposing (to help raise consciousness for change)**
  - Educational materials
  - Conferences
  - Outreach visits (i.e. visit health personnel at their place of work)
  - Identify local opinion leaders from within the workforce to advocate for change and to strive for consensus in adoption of new practices/guidelines etc.
  - Peak bodies championing change
  - Self-assessment modules.

- **Enabling factors (to help in the transition from contemplation of change to action)**
  - Rehearse change behaviours in the context of continuing education
  - Clinical guidelines, ‘care maps’ and practice algorithms
  - Reminders/prompts (some reminders can be computer-generated)
  - Management and clinical information systems that are congruent with the desired change.

- **Reinforcing and maintenance of change**
  - Audit and feedback
  - Peer review
  - Quality Improvement Cycles
  - Continuing education and in-service training
  - Outcome measurement.
The principles that have been outlined here were developed historically in the context of, firstly individual/patient change, and then organisational and practitioner change for the implementation of clinical best-practice. The concepts involved are equally applicable to any specific change involved in advancing integrated care. Whilst there is now a wealth of literature pertaining to the successful application of ‘process of change’ strategies to individual health care, there exists a gap in the research base for application to the behaviours of health care providers, particularly those working in diverse organisations, with different organisational cultures and systems. Furthermore, there is even less research evidence related to organisational change strategies that are needed to foster integration across organisations at a meso level.

Change management is particularly challenging for Indigenous organisations, where a greater understanding of cultural differences and the unique challenges of partnerships between Indigenous and non-Indigenous organisations is needed (Coombe, 2008). ACCH “function at the interface of Indigenous and non-Indigenous cultures” (Taylor et al., 2001, p 126).

Their fundamental cultural orientation places them in an interfacing position between the predominantly Western management culture with its understandings of leadership, power, ways of communicating, planning and organising and the Aboriginal domain where community health and wellbeing issues predominate (Taylor et al., 2001, p 127).

The interface between the two cultural domains may lead to tension and conflict when the ACCHS are expected to function within the fiscal accountability framework of the funders as well as meet their responsibilities to the local community. While the two cultures may share a common goal - to close the gap in health between Indigenous and non-Indigenous Australians - the motivations, values and approaches may differ. The concepts of ‘collective responsibility’, leadership and participatory action predominate in ACCHS, whereas funding bodies may demand a more structured process that is driven by a “directive management culture” (Coombe, 2008). Although the adaptive culture of ACCHS is one of its strengths, it does not preclude the development of conflict and tension that can arise from a variety of sources related to organisational change (e.g. fear, suspicion, loss of control, change fatigue). Coombe (2008, p 646) suggests that “creating an environment receptive to change not only needs to be generated within the organisation, but also by the external stakeholders”.

Organisational culture
Given the history of GP-led PHCOs in Australia (DGP) and elsewhere (e.g. IPAs in NZ), development of strong communication and trust between the different sectors is a cornerstone for integration. Evidence suggests that when actors from different areas, with different organisational structures, belief systems, accountabilities, goals, outcome measures, and motivations for collaborating, who have had no prior interactions, form a partnership, the initial outcome is often conflict (Bouwen and Taillieu, 2004, Exworthy, 2008, Van Herten et al., 2001). This may be based on power, status, financial contribution, or the number of participants in the working group (Flynn and Kroger, 2003). This finding reinforces the notion that good collaborative teamwork is difficult to achieve without strong leadership and a supportive organisational culture to foster it (Wiese et al., 2011).

Organisations can be regarded as cultural artefacts that are created and re-created through human interaction (Axelsson and Axelsson, 2006, p 77).

Many of the barriers to effective integration at the meso level are structural or systemic. That is, the participating organisations have different administrative systems, rules and regulations, budgets and
financial processes, information systems and databases (Axelsson and Axelsson, 2006). In relation to this, barriers to integrated service delivery may originate at various levels, including:

- System: boundaries between organisations/sectors; lack of transparency and flexibility
- Regional or local level: competition between care providers, inadequate support from insurers
- Lack of commitment or support: inter-organisational and/or inter-professional mistrust
- Poor management: lack of authority, poor communication, inadequate information and monitoring systems (Mur-Veeman et al., 2008).

It is often the case that fragmentation in PHC is easier to identify than integration. The two stories in Box 5 and Box 6 (Appendix C) illustrate the complexity of integration at the meso level. Box 5 highlights the challenges associated with identifying, implementing and engaging PHC organisations. Box 6 highlights the challenges at the systemic level but also states the obvious but often ignored reality - that organisations are comprised of people and professionals whose work is inherently interdependent. What integration looks like at the organisational level is often difficult to conceptualise and define because it requires systemic thinking and is context dependent, as these examples highlight. Population, available resources, infrastructure, and governance all influence how organisations work, hence how they are able to integrate with each other and within each organisation. Therefore, strategies to influence integration should take into account political, historical, and regional characteristics that drive quality PHC. It is important to reflect on the past efforts and context, which has led to the current state of systemic integration. Defining the characteristics of integration within a given context may enable the development and implementation of a conceptual framework.

A common barrier to achieving integration between organisations is a lack of clarity and transparency in organisational aims, objectives and outcomes; and poor understanding of specific roles and responsibilities. Alignment and coherence between organisations (e.g. general practice and hospitals) is often determined by the quality of compatible information systems, administrative capacity, and organisational culture (Powell Davies et al., 2009). Wiese et al. (2011) suggest that closer integration may be enabled when there is a greater understanding between organisations of their different histories and cultures; and where relationships and trust are built on shared expectations related to coordination of care and communication. Simple awareness of what other organisations or sectors do is insufficient to establish a trusting relationship that leads to better integration of systems and services. Integration efforts across organisations may also be hampered by a lack of adequate resources – human, administrative and financial – to support integration. For example, community health organisations are restricted by fixed budgets that preclude the capacity of community health organisations to foster collaboration with general practice or other PHC organisations (Powell Davies et al., 2009); and lack of transparency in the use of funds may affect use of savings (Cumming, 2011).

In some cases, a lack of understanding about roles and responsibilities results in gaps. For example, one of the criticisms of the former DGP was the variability across the DGP in their approaches and support of services (Phillips, 2003). This is not surprising as there was no clear understanding of the DGPs’ roles in quality assurance and monitoring; and some did not perceive quality of care monitoring and improvement as part of their role (Smith and Sibthorpe, 2007). Similarly, lack of clarity about roles of PHOs in NZ (Cumming, 2011) and between local and provincial authorities in Canada (KPMG, 2008) led to conflict over ‘grey’ areas.
Engagement and Communication
Lack of engagement with relevant stakeholders, both consumers and practitioners; and lack of representation and involvement in planning, management and governance, may impact on implementation of integration efforts (Harris et al., 2008). It has been suggested that engagement of GPs and other PHC providers is a challenge for integration across different organisations and sectors. For example, a weakness of NZ’s GP-led PHOs was that other PHC providers and relevant stakeholders were not involved in the planning, management or governance of the organisations (Cumming, 2011).

Improving engagement may be a function of shared goals and visions. As mentioned above, the motivation of different stakeholders for integration will have great impact on the extent of their engagement with other partners. A key mechanism for improving engagement is through communication. This may be direct verbal connections, increased mail/email contact or networking through electronic records (see page 104 below). The pioneer ACOs (US), Pathfinder CCG (England), and program logic approach are good examples of effective communication and iterative learning that may useful for the Australian context.

Culturally and linguistically diverse groups (CALD)
One example of the importance of putting sufficient effort into proper engagement and communication is demonstrated in the CALD community.

The active involvement of consumers is integral to the development, implementation and evaluation of effective and appropriate health care. Health services need to recognise and understand the heterogeneity of the community that they serve. When planning implementing and evaluating integration strategies, health agencies need to ensure that they include people from culturally and linguistically diverse (CALD) groups in these strategies. Groups of Australians from CALD are a vulnerable population when it comes to delivering integrated health care. For these communities general stressors associated with CALD can include migration, language difficulties, unemployment, poverty, racial discrimination, family reunion, having experienced torture and trauma. There are also the language and structural barriers associated with accessing the health system which can include crowded waiting areas, multiple interviews with multiple providers in multiple settings as well as unfamiliar and abrupt procedures. For these populations these stressors are compounded by a complex health system that involves fragmented assessment, treatment, and referral protocols and an unfamiliar western biomedical model of disease and physiology (Council Galway County, 2012, Government of Western Australia, 2012a).

CALD groups have been shown to underutilise services in PHC and have a more acute and episodic interaction with health services (Council Galway County, 2012, Government of Western Australia, 2012a). Integrated service delivery is particularly important for this group. The challenge to improve health service delivery across all Australians involves engaging with communities. For CALD communities this is vital and requires considerable time and attention. Ten steps for engaging with CALD communities have been outlined and can be applied to improve integrated health service delivery at the meso level. These steps can be applied to all communities (Queensland Government, 2012):

1. **Engage communities as early in the process as possible.** Input in the planning phase will promote effective engagement and can avoid heading in the wrong direction.
2 **Build trust.** Seek to understand which stage people are in during the settlement process and engage accordingly. Initially involve sector representatives and other trusted support people. Be clear about expectations and roles. Avoid tokenism and build relationships.

3 **Recognise diversity within communities.** Differences exist between culturally and linguistically diverse communities, and also within groups. Take time to understand communities and offer a range of targeted engagement strategies.

4 **Allow time.** Sector representatives and community leaders need time to encourage participation of community members, for trusting relationships to build, and for information to circulate.

5 **Build capacity.** Support public sector staff and community members to undertake research, liaise with key knowledge holders, and undertake formal training and identification of champions.

6 **Avoid over-consultation.** Plan well and liaise with others who might also engage the community of interest. Seek advice from the sector.

7 **Address language issues.** Consider the need to have written, electronic and verbal information translated and/or made available in plain English, and to employ bicultural workers or interpreters at face-to-face consultations.

8 **Ensure engagement is adequately resourced.** Make sure resources are available to support translating and interpreting, to hire appropriate venues, and for catering, child care, transport support and capacity building. Consider partnerships with multicultural organisations and build engagement into work practices.


10 **Provide feedback on the outcomes of engagement.** Ensure participants are aware of responses by noting feedback in the notes of meetings and making such notes available. In the longer term, the department’s response or actions undertaken in light of engagement can be communicated, and communities invited to provide information on the outcomes they themselves have achieved.

Good communication is critical to the evolution and sustainability of partnerships. One form of communication, termed knowledge translation and exchange, is discussed below.

**Knowledge translation and exchange**

The notion of knowledge translation and exchange is a useful mechanism in integration at the meso level as it allows the transfer of policy and research into practice to inform organisations’ processes and promotes the value of high quality communication. This role is executed by a number of organisations included in Appendix B, such as PHCRIS and the Australian Association for Academic Primary Care. There are many ways in which the knowledge exchange mechanism has been operationalised. One key understanding is that knowledge is exchanged through interpersonal contact. A common method, developed in Canada, is termed linkage and exchange (Lomas, 2007). From a research perspective, this may refer to the involvement of policy-makers and other stakeholders as consultants in research projects to ensure that research is informed by policy needs and that users have an interest in the findings. Linkage and exchange methods are advocated by the Australian PHC Research Institute (APHCR) and employed with the Australian government’s Centres for Research Excellence, which were introduced to build health research capacity (Jackson et al., 2012). From a meso level PHCO perspective, it may refer to sharing experiences and learning from each other’s actions. The importance of this learning is reflected in the transparent publication of implementation processes for Pathfinder CCGs (England), Pioneering ACOs (US) and LHINs (Canada).
Facilitated networks are also used in knowledge transfer and exchange, such as ‘communities of practice’ which encourage informal knowledge exchange and diffusion of knowledge between members. A local example, Griffith University and General Practice Queensland’s collaborative research hub (General Practice Queensland, 2012) initiative facilitated collaboration and linkage and exchange between researchers, experts and the DGP to inform research and apply the findings. A MoU outlined the rules and operational model for the hub (Armstrong and Kendall, 2010).

Parent et al. (2007) developed a method of knowledge exchange to enhance system-wide capacity with the aim of promoting greater use of research in policy-making. The authors indicated that successful knowledge translation requires a social system with generative capacity (ability to discover knowledge), disseminative capacity (ability to contextualise, translate and diffuse knowledge through a social network), absorptive capacity (ability to recognise value of external knowledge and apply it to address issues in a system), and adaptive and responsive capacity (ability to continuously learn and renew elements of knowledge transfer system). These are important factors for PHCOs to consider in their efforts to facilitate integration across disparate organisations.

However, information sharing across organisations presents problems related to communication and information systems, particularly in terms of security (including privacy, confidentiality etc.); interoperability; common principles; and willingness to cooperate (Wiese et al., 2011). This may lead to under- or over-servicing in some areas.

Data and Evidence
Health is a “data-intensive industry” (World Economic Forum, 2013). As part of regulation, funding arrangements and performance measurement, there are a range of key performance indicators and clinical outcomes which are assessed regularly among actors in the health system. Data on systems, health professionals, patients and communities are collected by hospitals, PHCOs, and at the practice level. It has been suggested that with each coming year, the capacity to store these data extends. That is, the availability of ‘big data’ increases and the benefits of using these data to inform future practice needs to be considered (World Economic Forum, 2013). In Australia and internationally, there is a wealth of information on efficiency of health systems which could inform policy and system-level practices.

As described in the peak bodies section (page 29) and presented in Table 18 (Appendix B), there are a number of research organisations working in the PHC sector which assist with using and disseminating these data. For example, data linkage programs such as SA-NT DataLink (University of South Australia, 2013) allow different health organisations to integrate their data sources to inform development of new practices. Additionally, there are external bodies that have the responsibility of collecting data on specific PHCOs. For example, PHCRIS’ collected data on the former DGP, and the National Health Performance Authority will play a similar role with the MLs. These data include practice incentive information, workforce figures and clinical and population health outcomes.

In a systematic review related to use of evidence among policy makers, Invaer et al. (2002) reported that the use of evidence is facilitated by: the relationship between researchers and policy makers; relevance and quality of the research; a product with specific recommendations; association with the sectors’ interests; and availability of data on effectiveness. This was reinforced by Nutbeam (2004) who suggested that the only way to improve the quality of evidence and promote greater use of evidence in policy making is to conduct research specifically to inform policy. The same can be said for using evidence to inform organisational performance, resource requirements and service
delivery. In contrast, barriers to use of evidence refer to a lack of contact between key players, irrelevance and poor quality of research, conflict or mistrust between parties, issues with power and budget, and high staff turnover (Innvær et al., 2002). Once again, this reinforces the need to ensure that effective communication is in place, and partnership agreements are established to confirm the roles and responsibilities of all key players.

**Appropriate measures of integration**

Related to the supply of data and quality/usefulness of evidence is the issue of measurement. While the aforementioned models and mechanisms have been introduced to promote integration in the PHC sector, one of the key challenges for integration lies in evaluating the extent to which organisations have achieved integration and the outcomes (positive and negative) for end-users. While governments around the world believe that integration of health care services will result in better quality care at a lower cost, currently there is little consensus on how to measure the concept of ‘integrated health care delivery’ or to monitor the progress of organisations’ integration efforts (Strandberg-Larsen and Krasnik, 2009). Much of the research evidence on evaluation of integration and integrated care is hampered by definitional and methodological problems – e.g. performance of what, by and for whom, and to what purpose? Some specific models have been evaluated in certain contexts, but there is much confusion as to how to adequately measure whether organisations are integrated or how effective their integration is in terms of outcomes for the organisations, providers and patients. However, a number of methods for measuring performance have been suggested.

Devers et al. (1994) suggest that measures of integrated health care delivery may fall into three main categories:

- Measures of precursors of integration (structural and cultural measures)
- Measures of intermediate outcomes/internal process variables that assess activities that ultimately lead to goals (process measures)
- Measures that assess the extent to which systems achieve their ultimate goals (outcome measures).

Willis et al. (2012) noted the need for a systematic approach to investigating the impact of networks on health system performance and population health. The authors described how this is a challenge to achieve due to the range and nature of existing networks, their goals, roles and composition. The authors recommend that:

> an evaluative approach built on systems thinking concepts is required for recognizing the complex factors influencing network performance and the dynamic, non-linear and interrelated nature of network activities. Measures of structure (such as gained through social network analyses) may be important for giving insights into network development, relationship strength and member involvement. Longitudinal network analyses provide rich insights into how measures of network structure (such as centrality, density and clique sub-structure) may change and evolve over time in response to both internal and external pressures (Willis et al., 2012, p iv64).

A systematic review of 24 different measures reported a wide diversity of approaches and an overall lack of information about the conceptual frameworks, validity or reliability of the available methods (Strandberg-Larsen and Krasnik, 2009). Strandberg-Larsen and Krasnik propose a conceptual model for assessing integration that incorporates different levels, perspectives and outcomes.
An additional model of measurement has been developed to evaluate integrated health care by assessing functional clinical integration\textsuperscript{xli} between different health care providers (Ahgren and Axelsson, 2005). This model produces valid and reliable data and acknowledges the continuum of integration from simple linkages, through coordination and cooperation to full integration of systems, processes and pooled resources. However these different degrees of integration are not ranked in terms of value. That is, optimal integration may occur at any level according to the needs, objectives and circumstances of the organisations involved.

Paralleling the diversity in defining integration is the availability of a range of methods for measuring performance in relation to integration. For example, in their discussion paper for MLs, the AML Alliance identified three approaches specific to the work of MLs but which could be readily applied to other PHCOs (Table 22, Appendix B) (AMLA, 2012b). These include evaluating integration projects separately, assessing overall progress in integrated care and monitoring progress in specific domains. Whichever measures are employed, consideration should be given as to what they are measuring and what the outcomes mean for patients as well as integration itself.

\textbf{eHealth}

There are a range of resources that are required for integration in the models described above. One is the availability of information technology. With the move towards Electronic Health Records (EHRs), there is a need for adequate information technology resources in organisations, and access for individuals. For example, it has been consistently noted that e-Health (including both PCEHRs and Healthcare Identifiers) will be most challenging in rural locations. This may be assisted by the implementation of the national broadband network proposed to be completed by mid-2015; thus with e-Health considered a key mechanism for integration, internet access is a vital resource (Monash University, 2011).

e-Health is a diverse and rapidly developing field. It includes telehealth (also telemedicine and telecare) and m-Health, which is specifically restricted to mobile phones and similar devices (World Health Organization, 2011). The literature base related to eHealth is extensive and a comprehensive examination of the effectiveness of eHealth technologies on integration is beyond the scope of this report.

Telehealth focuses more on delivery of services to individuals, often involving more than two professionals, or a patient and more than one professional. For example, video-based consultations can involve a patient, a GP or other PHC worker, and a specialist. Videoconferencing can facilitate vertical integration, by improving communication between PHC providers, specialists and hospitals (Cochrane Library, 2010).

While there is a range of strategies around each of the components of e-Health that are relevant to integration at the micro level of service delivery, EHRs also facilitate service integration and organisational integration, by avoiding the necessity of cumbersome transfer of paper-based records.

\textsuperscript{xli} Functional clinical integration in this context refers to clinical integration (what the patients experience) as well as integration of systems (information and financial) (Ahgren & Axelsson, 2005).
Internationally PHCOs which prioritise and invest in the quality and standardisation of data capture and reporting are often the most effective (e.g. US HMOs). In NZ PHC, the PHO Performance Programme (PPP) has recently elevated the priority of this mechanism (Cranleigh Health, 2012).

**Infrastructure**

Infrastructure has been identified by the Australian government as the fourth building block in the National PHC strategy, part of national health reform (ASMI, 2009). According to the Commonwealth government, “physical infrastructure facilitates integration, enables teams to train and work together, and supports different models of care to improve access” (Commonwealth of Australia, 2010, p 21). While the reference is predominantly directed towards the physical environment, infrastructure may also include resources, funding and workforce issues. In Australia, the focus on infrastructure has led to the establishment of GP Super Clinics (described in more detail in Report 5xlii, which examines micro level integration), enhancing the National Rural and Remote Infrastructure program, and investment in teaching and training. Infrastructure refers to the importance of identifying a framework to conceptualise the structure, organisation and performance of PHC. One such framework blends organisational theory with concepts of service delivery and clinical care that may be used as a template for systematic evaluation of PHC (Hogg et al., 2008).

**Physical Environment: Real versus Virtual Integration**

The physical environment is a core facet of infrastructure. In relation to integration, there are two commonly discussed forms – ‘real’ integration in which collaborating health professionals are co-located in the same physical space; and ‘virtual’ integration where collaborations occur through communication, agreements, shared goals etc. For many organisations operating in the Australian PHC, it is neither feasible nor efficient to co-locate. However, a mixed-methods evaluation of the potential benefits of co-location of pharmacists with other health care professionals suggested that co-location facilitated a greater level of integration of pharmacists into the PHC team rather than working separately (Bradley et al., 2008). This study focused on the experience of inter-professional collaboration. Pharmacists who were not co-located reported greater barriers and had not achieved the anticipated level of collaboration and communication. However, this pilot study also suggested that the benefits of co-location could be achieved through regular face-to-face contact, including learning from each other’s expertise, communication and contact, relationships and trust, and information sharing.

In the Australian context, there is often little formalisation of multidisciplinary relationships; hence co-location is one way to formally represent an integrated network. Throughout Europe, there are examples of contracts between representative PHC organisations, such as the Community Pharmacy Owners’ Association, General Practitioners’ Association and the largest health insurance fund in Germany (BARMER) (Eickhoff and Schulz, 2006). Similarly in Switzerland, there are models of collaboration between pharmacists and physicians entitled “quality circles” (Guignard and Bugnon, 2006). While this study suggests there was a positive impact of co-location and inter-professional communication, it did not evaluate the experience of patients in the community; or whether the more collaborative inter-professional communication resulted in more integrated service delivery.

**Workforce**

Workforce issues, which are a component of infrastructure, are also a building block to health reform in their own right. As part of the National PHC Strategy, the Commonwealth government...
highlighted a need to develop and maintain a skilled PHC workforce. The objective of this policy is to develop:

*a flexible, well trained workforce with clear roles and responsibilities built around core competencies, working together to deliver best care to patients cost-effectively and continuing to build skills through effective training and team work* (Commonwealth of Australia, 2010, p 18).

This has relevance from a meso level perspective as it is the members of this skilled workforce who are involved in partnerships, establishing MoUs and determining governance arrangements to enable the best practice and patient outcomes. Additionally, across some areas of Australia there are PHC workforce shortages, causing both pressure on existing health professionals and high hospitalisation rates (Commonwealth of Australia, 2010). Reducing this pressure by introducing new staff is a key step in developing the infrastructure required for integration in the PHC context.

Current government actions (Commonwealth of Australia, 2010) include investment in training of doctors, nurses and allied health professionals and developing Health Workforce Australia (see Table 18, Appendix B), which promotes a system approach to planning for the future of the workforce. Further, national accreditation schemes, provision of MBS and PBS benefits to nurse practitioners and midwives, and changes to higher education are all methods for improving the capacity of the PHC workforce.

**Context**

The context in which PHC organisations and professionals operate has been shown to have a profound effect on service delivery (Bywood et al., 2011). In the PHC setting, PHCOs reflect the characteristics of the surrounding communities. Although organisations may develop using the same model and sharing core elements and mechanisms, ultimately each setting may be influenced by widely differing local factors. For this component, needs assessment is often a challenge and a resource-intense activity undertaken prior to implementation of further policy or practice. In the CCG *Pathfinder* evaluation in England, a commonly identified issue was the cost in both time and labour to undertake sufficient needs assessment (Checkland et al., 2012). Managing the costs as well as gleaning quality useable information in the Australian setting will also be a challenge for MLs. Learnings from the English *Pathfinder* evaluation may be useful to identify ways to successfully do this.

**6.5.3. Financing**

According to the WHO framework (2000), financing reflects fair and strategic distribution of funds. It is evident that the creation and management of resources for integrated health care is heavily affected by funding arrangements. The mix of state and federal funding is one of the factors that makes Australia’s health system complex (see Table 16 for an outline of roles and responsibilities across different levels). The Australian government has acknowledged the challenges related to funding and specified financing and system performance is one of the building blocks for reform in PHC (Commonwealth of Australia, 2010). In particular, the Commonwealth government shares responsibility (funding and services) with the State/Territory governments in the areas of hospital, PHC and aged care. From a meso level perspective, this is important as MLs are federally funded PHCOs operating in local contexts and promoting partnerships with State-funded bodies. It has been suggested that introducing fiscal mechanisms, such as the use of incentives to encourage coordinated care, continued investment in infrastructure, and sharing of resources will be beneficial actions as MLs promote integration across health sectors (Cranleigh Health, 2012).
There is a variety of methods of payment that are employed by the PHCOs discussed in this report and that fit along a continuum (Figure 10). Internationally, financial incentives for PHCOs are generally recognised as a useful mechanism to recognise and reward effort. However, research suggests that providing financial incentives to achieve certain activities can lead to ‘gaming’ (Custers et al., 2008) (U.K. Quality and Outcomes Framework), which may adversely impact on the delivery of high quality care. On the other hand, PHCO programs like NZ’s PPP (New Zealand Ministry of Health, 2006) have funding which, although considered substantial, is not large enough to drive inappropriate target achievement activity. In this setting, mixed payment models are well endorsed and considered to be the most effective type of incentivised funding model (Mechanic and Altman, 2009, Rosenthal, 2008, Wranik and Durier-Copp, 2010). This consists of funding distributed directly to the practice to recognise achievement while retaining the remaining funding to support PHO level support services.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

**Figure 10** The payment method continuum

**Funding and financing arrangements**

The complex mix of funding between Commonwealth and state/territory governments adds to the challenge of aligning objectives, policies, protocols, responsibilities and roles. While there is an expectation that organisations will take steps to improve integration, they do not always have the resources, authority or budgetary control to enable development of the appropriate links or implement strategies to integrate services (Cumming, 2011).

Responsibility for contracting and commissioning gives PHCOs considerable leverage to influence the availability and range of PHC services. A capitation-based funding system and associated patient enrolment enables a population focus and care over time, while aligned regional and local planning boundaries between PHCOs and other health service planning boundaries also help with more coordinated approaches to planning, service development and service delivery. In a comparison and critique of international health care systems, McDonald et al. (2007) suggested that these elements are largely absent in the Australian health care system and set significant limitations on the role of DGPs and PCNs/PCPs. The analysis indicated that while DGPs may have contributed to improving general practice quality and access to multidisciplinary care, and PCNs/PCPs improved coordination, their scope of responsibilities and authority needed strengthening to enable them to take a more comprehensive approach to ensure access to PHC, service coordination and to address population health needs (McDonald et al., 2007). Recently there have been additional funding models proposed such as one in which social insurance is used to fund the healthcare system and empower consumers (Doetinchem et al., 2010, NSW Government, n.d.).

**Balancing competition and integration**

A tension exists between establishing and promoting integration across health services and using competition to influence improvements in integrated care (Ham, 2012). On the one hand, competition in a free market is expected to drive innovation and improvements in performance in integrated care; whereas the counter-argument is that competition undermines integration between organisations that are potentially competing for the same ‘business’ (Ham, 2012). In a competitive market, where the need to secure economic viability is critical, health care provider organisations may focus on individual organisational goals rather than improvements in population health from the perspective of the local community. Conversely, as Curry and Ham suggest:

> integrated care could act as a barrier to choice and competition if it were to entail establishment of organisations that take on the appearance of monopoly providers of care in their areas (Curry and Ham, 2010, p 1).

The right kind of integration is critical – i.e. patient-centred, whole-of-system integration that meets the needs of an ageing population with multiple morbidities, rather than disease-specific integration, which “risks creating new siloes to replace old ones” (Ham, 2012, p 2).
A case study in Amsterdam provides an illustration of how a long-standing collaboration between local health care providers and introduction of regulated competition in the Dutch health care system led to a shift in focus away from community-based integrated PHC towards integrated care for the elderly, but without the strong partnerships and prioritisation of community needs that existed previously (Plochg et al., 2006):

Thus, tension exists between the need to collaborate and the need to compete (Plochg et al., 2006).

However, Curry and Ham also suggest that both integration and competition could both play a role in improving performance so long as patients have a choice in their care providers within or between integrated care organisations (Curry and Ham, 2010); and if policies support and enable them (Ham, 2012).
6.6. Integration challenges and enablers

For PHCOs and other organisations operating in the meso level, challenges and enablers fall broadly in the structural domain (Hogg et al., 2008). The structural domain refers to the organisational and environmental features likely to influence PHC service delivery and has been divided into three components. The first is the health care system level, which includes policies, stakeholders and factors that operate at the systems level to influence PHCOs and providers. The policies related to integration were detailed in Report 1 (Integrated care: What policies support and influence integration in health care in Australia?) of this series. However, challenges and enablers around stakeholders and system level factors that impact on the meso level are discussed in this section. The second category is context and can be defined as the set of factors at the local level that can influence the organisation (e.g. rural/remote, Indigenous and Culturally and Linguistically Diverse populations). The third component concerns challenges and enablers related to organisational structure and dynamics, and refers to how PHC members and professional bodies coordinate and collaborate. This section utilises this conceptual framework to identify the key challenges and enabling factors in Australia at the meso level. These are presented in five main categories: communication; organisational culture; systems and structural arrangements; information, technology and resources; and funding arrangements. The findings from this review are consistent with evidence from an earlier review of the Canadian LHINs and subsequent recommendations (KPMG, 2008).

The overarching challenge for decision-makers is to identify the most effective/successful models of integration, based on good quality evidence. Unfortunately, as noted throughout this review, there is a dearth of good quality evaluations of integration models to inform such decisions. This is partly due to the lack of validated measures of integration (discussed below) but predominantly due to attempts to quantify system(s) that deal with complex activities between multiple organisations that operate locally, but also must remain interconnected with communities and bureaucracies (Miller et al., 1998). This section aims to clarify specific challenges for integration at the meso level. These are largely systemic barriers including: organisational, financial, cultural differences; continual reforming issues; complex funding arrangements; the availability of leadership, especially facilitators of change; stakeholder engagement; quality data collection; transfer and transparency; and conflicts between collaboration and competition.

6.6.1. Communication

Open and frequent communication is a cornerstone of effective integration across meso level organisations (Table 11). Evidence suggests that integration is facilitated by engagement of a wide variety of stakeholders that actively participate in decision-making, work as a team, and have a clear understanding of their respective roles, responsibilities and common objectives. Clarity and transparency in terms of processes and accountabilities is also important for developing trusting relationships.
Table 11  Communication

<table>
<thead>
<tr>
<th>Challenges to integration</th>
<th>Enablers to integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor communication between PHC organisations (Wiese et al., 2011)</td>
<td>• Open and frequent communication, with formal/informal links (Mattessich et al., 2004)</td>
</tr>
<tr>
<td>• Lack of effective teamwork (Harris et al., 2005)</td>
<td>• Multidisciplinary teamwork (Powell Davies et al., 2010, Divisions of Family Practice, 2009)</td>
</tr>
<tr>
<td>• Lack of awareness/inclusion of PHC service organisations (Thorlb by et al., 2012)</td>
<td>• Clear, relevant (agreed) multifaceted strategy to foster integrated care from planning to delivery (Jackson et al., 2007)</td>
</tr>
<tr>
<td>• Lack of trust/mutual understanding (Powell Davies et al., 2010, Mur-Veeman et al., 2008)</td>
<td>• Clear decision-making processes (KPMG, 2008)</td>
</tr>
<tr>
<td>• Lack of transparency (Thorlb y et al., 2012, Cumming et al., 2005)</td>
<td>• Engagement and ‘buy-in’ from relevant stakeholders, including participation in decision-making (Cumming, 2011, Ling et al., 2012, General Practice Services Committee, 2012, Divisions of Family Practice, 2009)</td>
</tr>
</tbody>
</table>

6.6.2. Organisational culture

Prior positive relationships are beneficial to establishing and maintaining meso level integration (Table 12). Key enabling factors are access to adequate support for leadership and to foster champions. However, the key barriers are differences in priorities related to integrated care; and lack of strong leadership and management. Although flexibility and adaptability to change is essential, the literature commonly identified that the pace of change needs to be appropriate; and incorporating changes into existing infrastructure is an advantage.

Table 12  Organisational culture

<table>
<thead>
<tr>
<th>Challenges to integration</th>
<th>Enablers to integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Differences in priorities (Powell Davies et al., 2010)</td>
<td>• Prior positive relationships facilitate integration efforts (Mattessich et al., 2004)</td>
</tr>
<tr>
<td>• Lack of leadership and organisational development (Cumming, 2011)</td>
<td>• Support for managerial and clinical leadership and champions (Cumming, 2011, Ham et al., 2011, Ling et al., 2012)</td>
</tr>
<tr>
<td>• Lack of management, authority (Mur-Veeman et al., 2008)</td>
<td>• Flexibility and adaptability in response to local needs and during period of change (Center for Community Health and Evaluation, 2008, Boyle, 2011, Mattessich et al., 2004)</td>
</tr>
<tr>
<td>• Lack of engagement with stakeholders (Harris et al., 2008, Checkland et al., 2012)</td>
<td>• Working with existing community collaboratives (Center for Community Health and Evaluation, 2008)</td>
</tr>
<tr>
<td>• Lack of flexibility (Mur-Veeman et al., 2008)</td>
<td>• Appropriate pace of change, with multiple layers of participation (Mattessich et al., 2004)</td>
</tr>
<tr>
<td></td>
<td>• Early planning to enhance sustainability (Center for Community Health and Evaluation, 2008)</td>
</tr>
</tbody>
</table>
6.6.3. System and structural arrangements

A defined population (enrolled, registered patients) is a common factor in successful models of integration in England and US (Table 13). Co-location of health services has been reported as both an advantage and disadvantage for integration. However, irrespective of physical co-location, meso level integration is facilitated when organisational boundaries are aligned; and contracts or agreements (formal or informal) are in place.

Differences in governance, administrative, procedural, budgetary and information systems; absence of an appropriate business model; and lack of adequate representation on governing bodies were identified as key system/structural barriers to effective integration.

Political climate and commitment to change is also an important enabler; but too much ongoing change, and lack of realistic timeframes, without opportunities to adjust, was described as disruptive, confusing and may lead to change fatigue.

Table 13 System and Structure

<table>
<thead>
<tr>
<th>Challenges to integration</th>
<th>Enablers to integration</th>
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<tbody>
<tr>
<td>• Co-location may lead to attenuation of incentives and higher costs (Robinson and Casalino, 1996)</td>
<td>• Co-location and shared physical space enhances integrated care (Jackson et al., 2007)</td>
</tr>
<tr>
<td>• Health service organisation boundaries not aligned (Powell Davies et al., 2009, Mur-Veeman et al., 2008)</td>
<td>• Formal contracts/informal partnership agreements (Cumming, 2011, Goodwin et al., 2004)</td>
</tr>
<tr>
<td>• Different administrative systems, rules, regulations, budgets, processes, information systems and databases (Axelsson and Axelsson, 2006)</td>
<td>• Registered/enrolled patients (Ham et al., 2011, Larson, 2009, McCarthy et al., 2009b)</td>
</tr>
<tr>
<td>• Lack of representation on governing bodies (Checkland et al., 2012, Harris et al., 2008)</td>
<td>• Common (agreed) care pathways (Jackson et al., 2007)</td>
</tr>
<tr>
<td>• Different modes of governance, lack of community governance and involvement in planning may promote competition rather than collaboration (IPAA, 2002, Thorlby et al., 2012, KPMG, 2008, Harris et al., 2008)</td>
<td>• Shared multidisciplinary teaching (Jackson et al., 2007)</td>
</tr>
<tr>
<td>• Separation of roles in planning, funding, service provision may lead to gaps or duplication of services (Cumming, 2011)</td>
<td>• Expanded range of PHC providers and services offered (Pond et al., 2005)</td>
</tr>
<tr>
<td>• Ongoing changes in system and structure is disruptive and confusing (e.g. PCTs, CCGs) (Boyle, 2011)</td>
<td>• Realistic timeframes, allowing adequate time and resources for collaboration and cooperation to occur (Cumming, 2011, Ham et al., 2011, Boyle, 2011)</td>
</tr>
<tr>
<td>• Uncertainty about future changes (change fatigue) (Powell Davies et al., 2010)</td>
<td>• Favourable political climate and political commitment to change (Cumming, 2011, Mattessich et al., 2004)</td>
</tr>
<tr>
<td>• Inadequate workforce to respond to changing needs of local population (Boyle, 2011)</td>
<td>• Protection from territorialism and competition between providers (Cumming, 2011)</td>
</tr>
<tr>
<td>• Lack of business model to support integration (Harris et al., 2005)</td>
<td>• Evaluation and regular review of reach and impact (Center for Community Health and Evaluation, 2008)</td>
</tr>
<tr>
<td>• Rigorous shared accountability structures and performance regimens (e.g. VHA, ACOs, LHINs) (Curry and Ham, 2010, Miller, 2009, KPMG, 2008)</td>
<td>• Practitioners working to the limit of their licenses maximise quality and cost (e.g. Geisinger) (Maeng et al., 2012)</td>
</tr>
</tbody>
</table>
6.6.4. **Information technology and resources**

The key enablers in information technology and use of resources pertain to access to shared data, information and resources (Table 14). Investment in IT infrastructure and technical support facilitates data collection, data sharing, decision support systems and dissemination of materials, including guidance on how to integrate and foster strong engagement with other stakeholders. Attention to IT privacy and security are also important elements for developing and maintaining trust. Inconsistency in definitions and lack of valid measures of integration were identified as barriers to evaluating performance.

<table>
<thead>
<tr>
<th>Challenges to integration</th>
<th>Enablers to integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of shared information leads to under- or over-servicing (Wiese et al., 2011, Cumming, 2011)</td>
<td>Availability and alignment of adequate shared resources, experiences and skills (Powell Davies et al., 2010, Jackson et al., 2007, McCarthy et al., 2009b, KPMG, 2008, Ling et al., 2012)</td>
</tr>
<tr>
<td>Lack of technical support within each community (Center for Community Health and Evaluation, 2008)</td>
<td>Standardised procedures, tools, and central advisory group (McCarty et al., 2009b, Boyarsky and Parke, 2012)</td>
</tr>
<tr>
<td>Inconsistency in cost definitions and quality measures (Fisher et al., 2012)</td>
<td>Investment in IT allows effective data sharing, decision support tools and dissemination of information and resources (Curry and Ham, 2010)</td>
</tr>
<tr>
<td>Lack of valid measures of integration to assess performance (Strandberg-Larsen and Krasnik, 2009)</td>
<td>Compatible IT and information transfer system (Jackson et al., 2007, Ling et al., 2012)</td>
</tr>
<tr>
<td>Difficulties collecting appropriate data at population and service level (AGPN, 2009)</td>
<td>IT resources to access information and enable reporting requirements (KPMG, 2008)</td>
</tr>
<tr>
<td>Inadequate use of data and research evidence (Innvær et al., 2002, Nutbeam, 2004)</td>
<td>Electronic medical records and high performing information systems (Larson, 2009, Curry and Ham, 2010, Maeng et al., 2012, McCarthy et al., 2009b)</td>
</tr>
<tr>
<td>Potential violation of anti-trust laws (ACOs) (The United States Department of Justice, 2011)</td>
<td>Ensuring IT privacy and security of data (Cumming, 2011)</td>
</tr>
<tr>
<td></td>
<td>Appropriate collection and use of data to inform improvements (New Zealand Ministry of Health, 2006, Ham et al., 2011)</td>
</tr>
<tr>
<td></td>
<td>Guidance on techniques to facilitate engagement and development of partnerships (Local Health Integration Network, 2010a).</td>
</tr>
</tbody>
</table>

6.6.5. **Funding arrangements**

Funding arrangements that are complex, insufficient, inflexible, provisional, or lead to competition and conflict are common barriers to integration efforts worldwide (Table 15). Similarly, high start-up costs, or perverse incentives that lead to over-servicing or patient ‘dumping’ are problematic. In contrast, some form of capitation or universal funding; and adequate establishment and maintenance funding to support integration were common enablers in the research literature.
Table 15: Fundin arrangements

<table>
<thead>
<tr>
<th>Challenges to integration</th>
<th>Enablers to integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Partial funding arrangements lead to lack of coherence and make links more difficult to establish and maintain (Cumming, 2011, Ham et al., 2011)</td>
<td>• Capitation and universal funding (National Health Committee, 2000); and salaried providers (Larson, 2009, Fisher et al., 2012, Enthoven, 2009, Zhou et al., 2010)</td>
</tr>
<tr>
<td>• Complex funding arrangements are confusing (General Practice Services Committee, 2012, Shinto, 2010)</td>
<td>• Adequate establishment funding and support for partnerships and administration to maintain them, particularly to achieve long-term goals (Cumming, 2011, New Zealand Ministry of Health, 2006, Center for Community Health and Evaluation, 2008)</td>
</tr>
<tr>
<td>• Insufficient funds to offer comprehensive health to all (e.g. VHA) (Curry and Ham, 2010)</td>
<td>• Financial incentives aligned with organisational goals (Curry and Ham, 2010)</td>
</tr>
<tr>
<td>• Competing funding arrangements may lead to conflict (Kendall et al., 2012)</td>
<td>• Episode-based payments encourage good quality, comprehensive, integrated care (Ham et al., 2011)</td>
</tr>
<tr>
<td>• Fixed budgets that do not allow for collaboration capacity (e.g. community health organisations) (Powell Davies et al., 2009)</td>
<td>• Adequate establishment funding and support for partnersh partnerships and administration to maintain them, particularly to achieve long-term goals (Cumming, 2011, New Zealand Ministry of Health, 2006, Center for Community Health and Evaluation, 2008)</td>
</tr>
<tr>
<td>• Funding to support partnerships not sustained (McDonald et al., 2007)</td>
<td>• Financial incentives aligned with organisational goals (Curry and Ham, 2010)</td>
</tr>
<tr>
<td>• High start-up and maintenance costs (e.g. ACOs) (FTC and the Department of Justice, 2011)</td>
<td>• Episode-based payments encourage good quality, comprehensive, integrated care (Ham et al., 2011)</td>
</tr>
<tr>
<td>• Perverse incentives may lead to over-servicing; or patient ‘dumping’ (e.g. US HMOs)</td>
<td></td>
</tr>
</tbody>
</table>

6.7. Risks and unintended consequences

While better integration to improve coordination and continuity of care, improve population health and reduce per capita cost of care is the main objective of modern health care systems, strategies and initiatives that aim to achieve those objectives may inadvertently lead to adverse outcomes.

6.7.1. Perverse incentives

Incentives (financial or non-financial) have the potential to lead to unintended consequences, such as ‘gaming, whereby the recipient develops a strategy to maximise their benefits, without achieving the objective of the incentive (Custers et al., 2008). There are five main types of financial incentives for providers and health service organisations to provide health care services. Each type may potentially lead to under- or over-servicing, rather than providing appropriate quality services where needed. The recent trend is for health systems to adopt a blended/mixed payment system to avoid unintended consequences resulting from perverse financial incentives (Rosenthal, 2008).

The changes appear to be focused on two perceived shortcomings of earlier efforts: too little impact on provider behavior and not enough focus on demonstrable benefit — including both health outcomes and spending — as opposed to process-of-care measures (Rosenthal, 2008, p 1197).

Recent proposals have included strategies that use reimbursement for evidence-based decision-making to achieve the optimal outcome for patients, while still recognising that even good decision-making may result in bad outcomes and vice versa (Diamond and Kaul, 2009). Box 4 illustrates some of the types of financial incentives that have been used and some of the potential adverse (or perverse) consequences of these incentives.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

Box 4  Financial incentives

<table>
<thead>
<tr>
<th>Payment system</th>
<th>Description</th>
<th>Potential consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>Practitioner receives annual salary for specified number of hours per week, irrespective of the number of services provided (Gosden et al., 2000)</td>
<td>Under-servicing, shirking (Hutchison et al., 2011): Prospective payment may encourage providers to reduce costs; and not encourage provision of high level of care</td>
</tr>
<tr>
<td>Capitation</td>
<td>Practitioner receives a payment for the services provide to each registered patient (Gosden et al., 2000)</td>
<td>Under-servicing, cream-skimming (Hutchison et al., 2011): Prospective payment may encourage providers to reduce costs; and encourage large patient lists to increase income, resulting in higher workload and shorter consultations</td>
</tr>
<tr>
<td>Fee-For-Service (FFS)</td>
<td>Practitioners are paid a fee for each item of care provided, such as consultations, immunisations and prescriptions (Gosden et al., 2000)</td>
<td>Over-servicing: Incentive may encourage provider to deliver more care than needed in order to increase income</td>
</tr>
<tr>
<td>Target payments</td>
<td>Practitioners are remunerated for items of care (as for FFS) only if they reach a certain target level of service (Gosden et al., 2000)</td>
<td>Over-servicing: Incentive may encourage provider to deliver more care than needed in order to increase income</td>
</tr>
<tr>
<td>Pay-for-Performance (P4P)</td>
<td>P4P differs from FFS in that incentives are linked to quality of service, rather than quantity of services (Glickman and Peterson, 2009)</td>
<td>Selective servicing: Providers may focus too much on limited performance metrics, rather than optimal care; healthcare disparities may be exacerbated if providers avoid high-risk patients</td>
</tr>
<tr>
<td>Activity Based Funding (ABF)</td>
<td>Providers (hospital services) are funded according to the number and type of ‘activities’ they perform (Cohen et al., 2012)</td>
<td>Over-servicing high-volume, low-risk patients; and under-servicing high-needs complex patients</td>
</tr>
</tbody>
</table>

Although ABF is primarily for hospital services, it is included here as it has a flow-on effect for PHC. Proponents of ABF suggest it will address the problem of inefficiencies and long waiting lists in hospitals by increasing the number of day surgeries, reducing overnight stays, shortening waiting lists and saving money. On the other hand, evidence indicates that overcrowding and long wait times are not due to a lack of ‘activity’ in hospitals, but rather due to the pressure on other parts of the health system, namely primary and community health (Cohen et al., 2012). Increasing the number of day surgeries may require additional funding for PHC and community health services to provide post-operative care for patients at home. Cohen et al. argue that focusing on ABF for hospital reform may increase activity in the most expensive part of the health system at the expense of providing a more coherent and integrated system (Cohen et al., 2012). Moreover, some evidence suggests that
ABF may lead to ‘gaming’ in the coding of activities (i.e. claiming a more complex activity to increase funding).

6.7.2. Health insurance
HMOs in the US typically service a defined population that includes a health insurance component for their members (Enthoven, 2009). Health insurance costs and coverage are influenced by two types of selection: 1) risk selection, whereby health insurers try to contain their costs by selecting only low-risk clients (e.g. ‘patient dumping’, exclusions or refusal of cover for clients with conditions related to high cost of care); and 2) adverse selection, whereby more patients with higher risk actively seek cover, thereby driving overall costs up (WHO, 2000). To avoid negative equity consequences and exclusions based on health risks, regulations and/or financial incentives may be required (WHO, 2000).

6.7.3. Change fatigue
A common unintended consequence of health care reform is resistance to change, conflict, tension and turnover of staff resulting from change fatigue (Nutting et al., 2011, Doocey and Reddy, 2010, Maruthappu et al., 2010, Coombe, 2008). There is an expectation to implement a raft of changes, often without consultation or explanation to those required to adopt the changes or manage the consequences. As a result, the receptivity and commitment to change is low, cost is high and progress is slowed.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
7 General summary

Factors that differentiate the models across Australia/internationally are:

- Governance
- Funding
- Incentives
- Partnerships where plans, providers, services remain separate but have arrangements around exclusive and interdependent contracts (i.e. MoUs or contractual arrangements)
- Co-location
- Performance indicators/benchmarking.

The research literature in this review recognises the complexity of health care systems and impediments to integration (e.g. convoluted funding and finance arrangements, competition, multi-layered organisational structures, cultural differences). Consequently, evidence suggests that attempts to introduce new structures and mechanisms to promote and enable integration should strive to not introduce additional complexity, but rather to work within a few minimum specifications to create an environment in which innovative and complex behaviours can emerge (Plsek and Greenhalgh, 2001). These specifications, or conditions, include setting directions, establishing the boundaries of roles and responsibilities, allocating resources, and providing permission/legitimacy for new behaviours and relationships. The specifications need to have intuitive appeal (‘face validity’) for the new set of ‘rules’ of engagement and integration to work and stakeholders should have direct input into establishing these minimum specifications and conditions for integrated health care. This process, however, is very dependent on the strength of existing networks amongst all the players and where the organisational and service ties are weak, much effort on strengthening networks is warranted (Fisher et al., 2012). The approach can make change attractive, enhance motivation, and reduce resistance to change and is in stark contrast to generating a new set of protocols to be imposed within a detailed plan, which often results in non-compliance and cynicism.

A corollary of this approach to complex systems is “that it is often better to try multiple approaches and let directions arise by gradually shifting time and attention towards those things that seem to be working best” (Plsek and Greenhalgh, 2001). Plsek and Greenhalgh suggest that this ‘best-fit’ perspective may, paradoxically, result in far quicker and more pronounced change for the better than any attempt at rolling out a “Rolls-Royce” fix within complex scenarios. Attendant on this approach is the need for evaluation to be built into any complex system change from the outset, with ongoing measurement and review; otherwise a descent into chaos and failure, always hovering at the margins of complex systems, is likely (Plsek and Greenhalgh, 2001). It is evident across the models for integration that have been reviewed in this report that better outcomes have been reported where considerable effort was directed at getting providers to communicate directly with each other, whereas complex restructures often lead to a new set of challenges and problems, even when making some gains.
### Five key findings

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Integration of organisations at the meso-level does not guarantee integrated health service delivery; however, some of the leading models (i.e. Integrated Delivery Systems) show significantly improved health outcomes, cost reductions and evidence of integrated health service delivery across the health system (both vertically and horizontally).</td>
<td></td>
</tr>
<tr>
<td>The mission to integrate health service delivery involves engagement of numerous health and non-health organisations and providers, across multiple levels (horizontal and vertical) involved in the delivery of health services.</td>
<td></td>
</tr>
<tr>
<td>In Australia the overlapping roles of the commonwealth and states for the delivery of health services makes identifying who is responsible and accountable difficult. The system is complex which influences its efficiency with regard to integrated service delivery.</td>
<td></td>
</tr>
<tr>
<td>Strategic and targeted financial incentives are required to deliver both long-term and short-term outcomes for integrated service delivery. Voluntary participation and goodwill facilitate health service integration.</td>
<td></td>
</tr>
<tr>
<td>Infrastructure is necessary to support coordination (e.g. shared records), needs assessments and longitudinal measurement of both population and individual health outcomes.</td>
<td></td>
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</table>
8 Conclusion

The difficulties inherent in major re-structures in the health system are well documented (e.g. organisational culture and structural differences, lack of clarity in goals, competitive approaches, limited resources and complex funding arrangements, limited engagement of stakeholders and a poor understanding of relative roles and responsibilities, restrictions on sharing of information and resources, poor evaluation) and could easily overwhelm attempts at integration.

However, there is evidence emerging that initiatives which are realistic in their ambition (not over-reaching or imposing overly complex structural reforms) and that place much emphasis on establishing and facilitating networks and partnerships are more likely to achieve integration and desired outcomes, albeit modestly at first and incrementally. The literature suggests that establishing viable electronic communication is necessary when physical co-location is not possible so that diagnostic information can be shared and collaboration occurs, with client consent, on treatment plans; performance indicators to guide attempts at integration, and measures for evaluation, should be in place at the outset; and any major change attempt should not sacrifice any strengths of the existing system and should be flexible enough to give due weight to local contexts.

The national and international literature review yielded five recurring central themes to effective and efficient integration of organisations involved in health service delivery at the meso level. The five key components were: communication, organisational culture, structural system arrangements, information technology and resources and funding arrangements. The first two elements around enabling communication between individuals and organisations (within and across sectors) and the act of influencing workplace culture are arguably the toughest challenges for policy to influence. In contrast, the latter three elements (infrastructure, resources and funding) are common drivers or levers utilised by governments. However, recognising and investing support in the first two elements is required in order to meet local needs, align resources, and promote cohesiveness between and within sectors of the health system.
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
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Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?


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10 Appendix A  

Table 16: Roles and responsibilities for funding and delivering health care services

<table>
<thead>
<tr>
<th>Roles and responsibilities</th>
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</thead>
<tbody>
<tr>
<td><strong>Australian Commonwealth Government</strong></td>
</tr>
<tr>
<td>- Fund large part of public hospital services (through NHA and NHHN)</td>
</tr>
<tr>
<td>- Provide rebates to patients for medical services provided by GPs and specialists and deliver public health programs</td>
</tr>
<tr>
<td>- Fund PBS</td>
</tr>
<tr>
<td>- Fund high level residential aged care services</td>
</tr>
<tr>
<td>- Fund private health insurance rebates</td>
</tr>
<tr>
<td>- Fund improved access to PHC, specialist services and infrastructure for rural and remote communities</td>
</tr>
<tr>
<td>- Fund Indigenous-specific PHC</td>
</tr>
<tr>
<td>- Promulgate and coordinate health regulations</td>
</tr>
<tr>
<td>- Undertake health policy research and policy coordination across the Australian, State and Territory governments</td>
</tr>
<tr>
<td>- Fund hospital services and the provision of other services through the Department of Veteran’s Affairs</td>
</tr>
<tr>
<td>- Fund hearing services for eligible Australians through the Australian Government Hearing Services Program</td>
</tr>
<tr>
<td>- Fund the Medicare Safety net.</td>
</tr>
</tbody>
</table>

| **State and Territory governments** |
| - Contribute funding for and deliver services (including Indigenous-specific services) for: |
|   - Public hospital services |
|   - Public health programs (e.g. health promotion, disease prevention) |
|   - Community health services |
|   - Public dental services |
|   - Mental health programs |
|   - Patient transport |
|   - Regulation, inspection, licensing and monitoring of premises, institutions and personnel |
|   - Health policy research and policy development |
|   - Specialist palliative care |
|   - Home and Community Care (HACC) program |
|   - Aged care. |

| **Local governments** |
| - Environmental control |
| - Range of community-based and home care services. |

| **Non-government sector** |
| - General practice |
| - Specialist medical and surgical services |
| - Dental services |
| - Other allied health services (e.g. optometry, physiotherapy) |
| - Private hospitals |
| - High level residential aged care services. |

Types of integration and integrated care

Table 17 Definitions of Integration and Integrated Care

<table>
<thead>
<tr>
<th>Original term/Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated care (Øvretveit et al., 2010)</td>
<td>The methods and type of organisation that will provide the most cost-effective preventative and caring services to those with the greatest health needs and that will ensure continuity of care and co-ordination between different services.</td>
</tr>
<tr>
<td>Integration (Leutz, 1999)</td>
<td>The search to connect the health care system (acute, primary medical and skilled) with other human service systems (e.g. long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency).</td>
</tr>
<tr>
<td>Integrated care (Gröne and Garcia-Barbero, 2001)</td>
<td>A concept bringing together inputs, delivery, management and organisation of services related to diagnosis, treatment, care, rehabilitation and health promotion ... [as] a means to improve the services in relation to access, quality, user satisfaction and efficiency.</td>
</tr>
<tr>
<td>Integrated care (Kodner and Spreeuwenberg, 2002)</td>
<td>A coherent set of methods and models on the funding, administrative, organisational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors ... [to] enhance quality of care and quality of life, consumer satisfaction and system efficiency for patients with complex problems cutting across multiple services, providers and settings.</td>
</tr>
<tr>
<td>Integrated health service delivery (WHO, 2008)</td>
<td>The management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system.</td>
</tr>
</tbody>
</table>

Source: adapted from (Kodner, 2009, p 7).
Summary of Divisions of General Practice (DGP)

Figure 11  The Divisions Network
Box 5. Summary of literature on integration in Divisions of General Practice

- 1992-2011: GP-led, regionally-based Divisions evolved out of general practice; over time, there was an increasing contribution from nurses and other health professionals to the Divisions’ programs
- 2002: Funding for DGP was derived from the Commonwealth (Smith and Sibthorpe, 2007)
- Size of Divisions ranged from eight to over 600 GPs, with over 94 per cent of GPs consistently being a member of a Division over the past 8 years (Divisions of General Practice, 2005, Carne et al., 2012)
- State Based Organisations (SBOs) were the main co-ordinating bodies for the DGP program at State and national level, while State and Territory Offices (STOs) represented the interests at State and Territory level
- Up to 2011, the Divisions network grew to consist of the Australian General Practice Network, 6 SBOs and 113 DGP including two DGP-SBOs (ACT and NT, the Division was the whole territory)
- Although funding for DGP has ceased, and many have evolved/merged into MLs, approximately 60 Divisions continue to function, relying on other sources of funding. The extent of their activity is difficult to ascertain at this time.

Strengths of Divisions’ networks regarding integrated care

- Divisions are established organisations with defined catchment area and extensive local knowledge across all Australia, not just in pockets of need.
- Divisions have experience, skills and capacity through working with many different partners and networks for almost 20 years. In 2010-2011, all Divisions reported engaging in activities to improve GP collaboration with other primary care providers (Carne et al., 2012)
- Sustained GP leadership ensures strong engagement of practitioners. Peer review and development fosters collaboration in general practice (Smith and Sibthorpe, 2007)
- Divisions implemented programs to improve access to PHC – e.g. after hours, locum services; and to other community health care providers – e.g. More Allied Health Services program to access psychologists, counsellors, dietitians, diabetes educators etc (Smith and Sibthorpe, 2007)
- Most Divisions implemented programs to integrate care – e.g. in 2010-2011, 97 per cent reported at least one shared care program (Carne et al., 2012), such as between GPs and diabetes, mental health or aged care specialists; 99 per cent reported active GP-hospital liaison, admission and discharge communication, care planning and conferencing (Carne et al., 2012, Smith and Sibthorpe, 2007)
- Divisions developed skills and experience in planning, commissioning and purchasing.

Weaknesses of Divisions’ networks regarding integrated care

- Divisions had limited role in monitoring quality of clinical care. Some resistance arose from general practice to systemic level quality improvement processes – quality assurance was not seen as Divisions’ role (Smith and Sibthorpe, 2007)
- Focus was on general practice services – i.e. little integration with the broader PHC sector (except for some Divisions as noted above).
- Divisions had limited influence over the activities of their members, yet some performance indicators included population health outcomes.
- Compared to England’s PCTs or NZ’s PCOs, Divisions lacked the scope of responsibility and authority to implement a comprehensive integrated approach to PHC (McDonald et al., 2007).
# Appendix B

## Table 18  Meso level peak bodies working in and with PHC organisations and providers

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Integration</th>
<th>Reference</th>
</tr>
</thead>
</table>
| Australian General Practice Network (AGPN) (evolved into the AML Alliance, see below) | Funded by the Australian Government Department of Health and Ageing, AGPN represented a network of 110 DGPs along with 8 SBOs. The aim of AGPN was to ensure access to a high quality health system for all Australians by delivering local health solutions through general practice. | It was believed that a cohesive, high performing network such as AGPN provided the essential regional/local infrastructure to enable integrated quality PHC delivery. Therefore AGPN’s roles included:  
- Strengthening the general practice sector through support, advocacy and representation of DGPs and SBOs to the Federal Government, to other national organisations and to the Australian public  
- Contributing to the development of national health policy in collaboration with member general practice networks and SBOs  
- Promoting cooperation and communication with other national organisations with objectives similar to AGPN’s aims  
| AML Alliance | Operational since 1 July 2012, the AML Alliance supports the development and ongoing work of the MLs. This organisation evolved from the AGPN and supports transitions from DGP into MLs. | Enacting a stewardship role requires the AML Alliance to work with stakeholders across a range of sectors within PHC and across other sectors, including all of general practice, allied health, community health, aged care and social care. At a system level the Alliance offers support with the provision of programs of organisational and leadership development; change management | [http://www.amlliance.com.au](http://www.amlliance.com.au/) |
### Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?

| **Australian Health Care Reform Alliance (AHCRA)** | AHCRA is a coalition of peak health care bodies with a key focus on advocacy and finding solutions to some of the challenges in the health system. AHCRA’s vision is for health system reform based on:  
- Equitable access  
- Equitable outcomes  
- Primary health care  
- Community engagement and consumer participation  
- Appropriate workforce  
- Efficiency. | Among the key criteria AHCRA used to analyse health reform was to assess the extent to which the reform policies would:  
- Increase integrated multidisciplinary primary health care  
- Ensure stronger consumer, carer and community engagement in care and planning  
<p>| <strong>Lead Clinician Group (LCG)</strong> | The national Lead Clinician Group has been established as part of the National Health Reform. This initiative provides a unique opportunity for multidisciplinary, multi-sectoral, bottom-up input into the stewardship of the health system (Department of Health and Ageing). | The objectives of the LCG include not only providing clinical advice but coordinating patient care by facilitating working relationships (i.e. partnerships) across disciplines and sectors, and promoting collaboration by contributing to a national network of lead clinicians. | <a href="http://www.health.gov.au/internet/publications/publishing.nsf/Content/clinicians-groups~executive-summary">http://www.health.gov.au/internet/publications/publishing.nsf/Content/clinicians-groups~executive-summary</a> |
| <strong>National Aboriginal Community Controlled Health Organisation (NACCHO)</strong> | NACCHO is the national peak body which represents over 150 Aboriginal Community Controlled Health Services (see micro level report for detail on ACCHSS). Providing a coordinated, holistic response from the community sector; NACCHO’s role includes representing local Aboriginal community control at a national level to ensure that Aboriginal people have greater access to effective health care. | Aspects of NACCHO’s work focus on integration by liaising with organisations and governments within the Aboriginal and non-Aboriginal community on health and wellbeing policy and planning issues; and fostering cooperative partnerships with agencies that respect Aboriginal community control and holistic concepts of health and wellbeing. One of NACCHO’s core values is embedded in co-ordinated and integrated activity. | <a href="http://www.naccho.org.au/">http://www.naccho.org.au/</a> |</p>
<table>
<thead>
<tr>
<th>Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allied Health Professions Australia (AHPA)</strong></td>
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<tr>
<td><strong>National Rural Health Alliance (NRHA)</strong></td>
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<tr>
<td><strong>Services for Australian Rural and Remote Allied Health (SARRAH)</strong></td>
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### Table 19  
Arms-length bodies working in and with PHC organisations and providers

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Integration</th>
<th>Reference</th>
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</table>
| Australian Health Practitioner Regulation Agency (AHPRA)             | AHPRA supports the 14 National Boards that are responsible for regulating the health professions (the National Boards set standards and policies that all registered health practitioners must meet to protect the public).  
These boards cover a range of professions including Aboriginal and Torres Strait Islander health workers, Chinese medicine practitioners, chiropractors, dentists, general practitioners, radiographers, nurses, midwives, occupational therapists, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists and psychologists. | Specifically relating to issues around integration, AHPRA not only supports a range of health professionals but also involves the consumer in the health system.  
They have offices in each State and Territory where the public can make notifications about a registered health practitioner or student; publish national registers of practitioners so important information about the registration of individual health practitioners is publically available; and work with the Health Complaints Commissions in each State and Territory to make sure the appropriate organisation investigates community concerns about individual, registered health practitioners. | http://www.ahpra.gov.au/                                                                                                           |
| Australian National Preventive Health Agency (ANPHA)                | Established on 1 January 2011, ANPHA’s role is to strengthen Australia’s investment and infrastructure in preventive health.  
This is a national structure (system level) designed to support and lead local preventive health and health promotions which will be delivered through meso (MLs) and micro levels (service delivery).  
ANPHA directly targets the National PHC Strategy priority area of increasing the focus on prevention. | ANPHA consists of two main groups: ‘Policy and Programs’ and ‘Operations and Knowledge’.  
In terms of integration, the Policy and Programs group provides advice and recommendations on health promotion and disease prevention.  
One responsibility of the group is to promote innovative and collaborative approaches by developing partnerships with industry, non-government organisations, and the health sector.  
The Operations and Knowledge group is responsible for ensuring organisational alignment with ANPHA’s strategic and operational plans, enabling ANPHA to undertake its role as policy advisor to governments. The group provides | http://anpha.gov.au/internet/anpha/publishing.nsf                                                                                   |
<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
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<tbody>
<tr>
<td>Health Workforce Australia (HWA)</td>
<td>COAG observed a need for a national, coordinated approach to workforce planning and established the HWA. The HWA addresses the challenges of providing a skilled, flexible and innovative health workforce that meets communities’ needs. The HWA directly addresses the National PHC Strategy building block of a skilled workforce.</td>
</tr>
<tr>
<td>National eHealth Transition Authority (NEHTA)</td>
<td>NEHTA was established by the Australian, State and Territory governments to develop more effective ways of electronically collecting and exchanging health information in a secure manner. NEHTA directly reflects the National PHC Strategy building block around information and technology.</td>
</tr>
<tr>
<td>Australian Health Care Reform Alliance (AHCRA)</td>
<td>The Australian Health Care Reform Alliance is a coalition of peak health organisations and groups working towards a better health system for Australia’s future.</td>
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</table>

Leadership in regards to ANPHA’s governance arrangements and has a knowledge exchange role in which they are charged with establishing an information hub and clearing house to promote national interchange of information, enabling translation of research into policy and practice.

One of HWA’s briefs is to develop solutions that integrate workforce planning, policy and reform with complementary reforms to education and training.

Supported by NEHTA, eHealth systems that can exchange data are able to improve how information (both clinical and administration-related) is communicated among health care professionals. Specifically linking to integration, NEHTA is charged with supporting the Australian health system by enabling authorised clinicians to access a patient’s integrated health care information, streamlining multidisciplinary care management and enabling seamless transitions.

Participants at the 2005 AHCRA Summit emphasised the need to focus on integration as one of the key aspects of health care reform. Each of the priority areas identified at the Summit, including integration, was examined by a committee of summit attendees, chaired by an AHCRA executive. In relation to integration, the committee proposed a National Health Care

Reform Council charged with implementing agreed changes to the health care system. The council would include community and health professional representatives as well as government officials. The council would be the instrument to drive reforms forward. Elements of these recommendations were enacted by the Australian Government. Future actions from AHCRA to ensure the recommendations from committees on all priority areas are implemented in the national health reform agenda include partnering with other stakeholders on key topics, developing strategies to support integration and advocating for better consumer engagement.

| National Primary and Community Health Network | The National Primary and Community Health Network is a coalition of government representatives, peak bodies and other organisations interested in sharing information on PHC and the important role it plays in the Australian health system. | The members of the coalition are far-reaching and include stewardship organisations, research centres and institutes, professional advocacy bodies, university departments, service providers and government departments. By including such a wide range of organisations the network is able to promote knowledge exchange and encourage future collaborations and partnerships. | http://www.latrobe.edu.au/aipca/pchnetwork/national.htm |
| National PHC Partnership (NPHCP) | The NPHCP combines 23 national peak health organisations representing more than 100 000 health professionals working in PHC and provides an advocacy body and communications platform for the sector. | The vision of the NPHCP is to facilitate the development of an integrated PHC system. That is, a system which engages the consumer as an equal partner in implementing and evaluating policy and services; provides a multidisciplinary team-based approach; and facilitates linkages between PHC and hospital, aged care, social and community sectors. | http://www.nphcp.com.au/site/index.cfm?display=30167 |
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
### Table 20: PHC organisations

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australian Association for Academic Primary Care (AAAPC)</strong></td>
<td>The AAAPC is an association of individuals either undertaking research that will add to the general practice body of knowledge or teaching from and therefore disseminating this evidence base.</td>
<td>While integrating research and academic staff, the aims of the AAAPC emphasise promotion and development of the discipline of general practice rather than making specific reference to integration. Nevertheless, the aims of this association reflect tasks that may encourage future partnerships and integrated practice, and include representing general practice and academic primary care at state and national levels, promoting research and teaching, providing a forum for exchange of information and ideas, and fostering and supporting career development among members.</td>
</tr>
<tr>
<td><strong>Australian PHC Research Institute (APHCRI)</strong></td>
<td>APHCRI (situated at the Australian National University) was established in 2003. As part of the PHC Research Evaluation and Development Strategy, APHCRI’s aim is to embed a research culture in Australian general practice specifically, and PHC generally.</td>
<td>APHCRI provides a national leadership/stewardship role, improving PHC through high quality priority-driven research, translated into best practice. APHCRI emphasises important sectoral questions around PHC organisation, financing, delivery and performance, including interactions between PHC, public health and the secondary and tertiary health care sectors. In terms of mechanisms for integration one specific goal of APHCRI is to enhance PHC research capacity through strategic partnerships with related national and international groups.</td>
</tr>
<tr>
<td><strong>PHC Research &amp; Information Service (PHCRIS)</strong></td>
<td>Funded by the Australian Government Department of Health and Ageing, PHCRIS is a national organisation, formed as part of the Primary Health Care Research, Evaluation and Development (PHC RED) Strategy, and based at Flinders University in South Australia.</td>
<td>With emphasis on knowledge exchange, PHCRIS works in partnership with stakeholders in the PHC community to generate, manage and share quality information and knowledge that informs and influences health policy and PHC performance.</td>
</tr>
<tr>
<td><strong>Research Australia</strong></td>
<td>Research Australia, an ‘alliance for discoveries in health’, represents 170 member and supporter organisations, and conducts Australia’s leading ‘whole of community’ program to raise the profile of health and medical research.</td>
<td>Research Australia’s activities involve working in partnership with the university, institute, industry and services sector to emphasise the value of research relating to health care and health systems.</td>
</tr>
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</table>
### Table 21  Attributes for successful improvement in integration

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Elements</th>
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</thead>
<tbody>
<tr>
<td><strong>Culture</strong></td>
<td>• Organization/leaders support and expect learning and innovation  &lt;br&gt; • Organization/leaders value staff and empower all members to participate  &lt;br&gt; • Organization/leaders focus on customers/patients  &lt;br&gt; • Organization/leaders value collaboration and teamwork  &lt;br&gt; • Organization/leaders are flexible</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td>• Strong administrative leadership that provides role models for organizational values  &lt;br&gt; • Leadership celebrates and even participates in improvement initiatives  &lt;br&gt; • Emphasis on developing, fostering and inclusion in decision-making for clinical leadership and champions  &lt;br&gt; • Board support: Board sets expectations by asking for reports on improvement initiatives and results  &lt;br&gt; • Board provides continuity of expectations if administrative leadership changes</td>
</tr>
<tr>
<td><strong>Strategy and policy</strong></td>
<td>• Leaders set clear priorities for improvement  &lt;br&gt; • Improvement plans are integrated in the overall strategic plan as the means to achieve key strategic goals  &lt;br&gt; • Leaders demonstrate both constancy of purpose and flexibility  &lt;br&gt; • Operational policies and procedures, including human resources policies, provide incentives, rewards and recognition  &lt;br&gt; • Incentives, rewards and recognition are aligned to support improvement work</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>• Roles and responsibilities for improvement are clearly articulated  &lt;br&gt; • Steering/oversight committees provide direction  &lt;br&gt; • Teams and teamwork are part of structure</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>• Organization provides time for staff members to learn skills and participate in improvement work  &lt;br&gt; • Financial and material resources and human resources are available for improvement  &lt;br&gt; • Quality improvement support/expertise: A core group of improvement experts is available to help teams and individuals  &lt;br&gt; • Quality improvement department coordinates and supports initiatives</td>
</tr>
<tr>
<td><strong>Information</strong></td>
<td>• Needed clinical and administrative data are readily available  &lt;br&gt; • Information is available to support improvement</td>
</tr>
<tr>
<td><strong>Communication channels</strong></td>
<td>• Organization has vehicles to communicate with stakeholders regarding priorities, initiatives, results and learning  &lt;br&gt; • Ample forms of communication, including newsletter, forums, meetings and intranet sites</td>
</tr>
<tr>
<td><strong>Skills training</strong></td>
<td>• Includes training in improvement methods, team and group work, project and meeting management, and epidemiology</td>
</tr>
<tr>
<td><strong>Physician involvement</strong></td>
<td>• Physicians are involved in planning improvement initiatives and participate as team members  &lt;br&gt; • Opportunities for physician and clinical leadership of improvement  &lt;br&gt; • Clinicians ‘own’ improvement</td>
</tr>
</tbody>
</table>

Source: (Baker et al., 2008, p 18).
Table 22  Evaluating Integration

<table>
<thead>
<tr>
<th>Approach</th>
<th>Method</th>
<th>Key Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate integration projects separately</td>
<td>• Formative (is this developing as we wanted?)  &lt;br&gt;• Summative (is this achieving our goals?)  &lt;br&gt;• Ongoing monitoring of outcomes</td>
<td><strong>Uptake</strong>: what proportion of clinicians and services are using the initiative?  &lt;br&gt;<strong>Reach</strong>: what proportion/distribution of eligible people are benefitting?  &lt;br&gt;<strong>Equity</strong>: is it reaching those most in need?  &lt;br&gt;<strong>Satisfaction</strong>: do patients and clinicians prefer the new arrangements?  &lt;br&gt;<strong>Cost and cost effectiveness</strong>: is it worth it?  &lt;br&gt;<strong>Efficiency</strong>: does it make better use of resources?  &lt;br&gt;<strong>Quality of care</strong>: improved? For whom?  &lt;br&gt;<strong>Service utilisation</strong>: changed? More appropriate?  &lt;br&gt;<strong>Health outcomes</strong>: improved?  &lt;br&gt;<strong>Sustainability</strong>: is the funding/support available to maintain the new care arrangements over time?</td>
</tr>
<tr>
<td>Assess overall progress in integrated care</td>
<td>Modified Donabedian framework  &lt;br&gt;(a three step framework for assessing quality, includes ‘structure’, ‘process’, and ‘outcome’)</td>
<td><strong>Context</strong>: do we know what systems and programs are in place? Have we identified the problem areas?  &lt;br&gt;<strong>Inputs</strong>: do we have the right partnerships, information systems in place?  &lt;br&gt;<strong>Processes</strong>: do needs assessments and planning focus on integration? Are we working with the right stakeholders?  &lt;br&gt;<strong>Outputs</strong>: what new systems have we built? Capacity developed? Programs implemented?  &lt;br&gt;<strong>Impacts</strong>: how well do services collaborate? What proportion of service providers and patients are receiving relevant models of care?  &lt;br&gt;<strong>Outcomes</strong>: what are the improvements in glycaemic control, reductions in unplanned hospital admissions?</td>
</tr>
<tr>
<td>Monitor progress in specific domains</td>
<td>Organisational integration</td>
<td>Is integration a specific priority for the ML?  &lt;br&gt;Do the ML and its partners understand each other’s circumstances and approach to health care?  &lt;br&gt;Is integration of care part of the work plan with members and with the LHN?  &lt;br&gt;Does the ML conduct its community consultation and planning and service development jointly with the LHN?  &lt;br&gt;Are there arrangements for joint clinical governance?</td>
</tr>
<tr>
<td></td>
<td>Normative integration</td>
<td>Do all working parties, training programs and community consultations involve a full mix of services, community groups, professions and sectors?  &lt;br&gt;Are there identified clinician and consumer leaders for key areas of integration of care?</td>
</tr>
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<td></td>
<td>Systemic integration</td>
<td>How does the ML learn of problems that service providers and people experience with integration of care?</td>
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<td></td>
<td>Do the ML and LHN have consistent policies and protocols to support integration of care?</td>
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| **Functional integration** | Are there systems to support referrals, including up to date service directories, standard referral forms for LHN services and a single access point for referrals?  
Can/are PHC services messaging securely to other services within the ML district? |
| **Service integration** | What is the ML doing to support co-location of services?  
What is the ML doing to support multidisciplinary team work within and between services? Is it improving?  
What networks of service providers (e.g. for refugee health) does the ML support, and what proportion of relevant service providers take part?  
Are services developed or commissioned by the ML fully integrated, internally and with other services? |
| **Clinical integration** | Have priority areas for integration been agreed within the ML and with the LHN?  
Do major transitions of care occur smoothly (e.g. between hospital and community, residential aged care and emergency departments, rehabilitation programs and follow up care)?  
Can PHC providers be involved in the care of their patients when in hospital or with a specialist service?  
Are there structured shared care arrangements for chronic and other conditions which need this level of support? What is known of their reach and effectiveness? |
| **Integrated care** | What proportion of people receives well integrated care for high priority issues (e.g. complete cycles of diabetes care)?  
Has this increased?  
Is this equitably distributed?  
What is the impact on health outcomes, satisfaction, and service use? |

*Adapted from (AMLA, 2012b).*
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?
Box 5  The Challenge of Integration at the Organisational Level

Trish was a CEO in a regional health authority. She had just had a teleconference with the state’s new Minister of Health and she was worried. The state government had been heavily criticised in the media in previous months due to the deaths of several children from asthma. The minister had decided to make asthma a new health priority and during the teleconference had asked Trish to pilot a regional asthma control strategy. She decided to form an expert group to help plan the strategy. Within a couple of hours Trish received offers of help from the head of respiratory medicine and a senior manager of a regional hospital. However, Trish drew a blank with PHC support at a local level. She contacted the PHCO (DGP) and discovered much support for chronic disease management; but program implementation, support and reporting across the states and territories was patchy. Similarly, to get the full picture she wanted to see what role was played by other sectors that impact on the PHC sphere (housing, social care), but she wasn’t sure where to start. The organic evolution of PHCOs meant that initiatives and evaluations were patchy and disparate, had insufficient performance markers, and benchmarking was difficult to ascertain. Some PHCOs were performing very well while others were not as successful.

Julie is a GP. She has just finished her shift at the emergency department. She had seen 5 children with poorly managed asthma and lack of use of preventative medications since their last admission. Two did not have a regular GP and two had been unable to get an appointment with their GP within the 2 weeks prior to their admission. Similar concerns about asthma in children had been voiced by other doctors and Julie wondered how they could approach the problem together.

Mary works for a local community health service and regularly sees the impact of poorly managed asthma. Several of her colleagues across the community health service also recognise this problem.

Trish, Julie and Mary work in a system with poor links between government and PHC providers, and similarly between PHC, allied health and community services. Adapted from (Russell et al., 2010)

Box 6  Complexity in the life of an ordinary General Practitioner

Complexity in the life of an ordinary GP

Dr Fiona Simon is a part time partner in a large health centre and the clinical governance lead for her primary care trust. After a busy morning surgery she goes on to chair a multidisciplinary educational meeting on a local initiative to establish local asthma guidelines at which an academic expert gives a talk on evidence. She emerges from the meeting somewhat irritated that the world presented by the academic is so black and white. She was surprised to hear herself described by a colleague as an “opinion leader and advocate of evidence-based medicine.” In fact, she reflects, she found herself agreeing with a group of nurses in the audience, who protested that “patients very rarely fit the textbook case or the evidence-based medicine guidelines.”

Later, during an overbooked afternoon surgery, she sees Mr Henderson, a 71 year old widower who has diabetes and little in the way of social support. He has no new physical problems and Dr Simon notes that the patient was told last time to see her in six months’ time but once again he has returned after less than two weeks. She gives him five minutes and writes “Gen. chat” in his record.

In the evening, there is a practice staff meeting to discuss a proposal that the surgery should stay open an additional 30 minutes over lunch to accommodate patients who can only leave work in their lunch breaks. Dr Simon has sent around a memo suggesting that a different duty team of doctor, nurse, and receptionist could run the service each day. The meeting was scheduled to last 20 minutes but goes on for over an hour, and the issue is not resolved. Two of the five partners are vehemently opposed and did not stay for the whole meeting. “Opening over lunch worked fine in my brother’s practice,” thinks Dr Simon on her way home. “Why the furore among the staff and my partners?”

Adapted from (Plsek and Greenhalgh, 2001)
Integrated care: What strategies and other arrangements support and influence integration at the meso/organisational level?