



Australian Healthcare and Hospitals Association

Sustainability of Primary Care in Small Towns and Communities Initiative:

**Models and strategies for general practice in rural and
remote communities**

23 January 2020

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Executive summary

General practice and primary health care in small towns in the Western NSW Primary Health Network (PHN) region has reached a critical point. Projections show that '41 towns, and approximately a quarter of the population in the Western NSW PHN region are at risk of not having a general practitioner (GP) practising in those communities over the next 10 years unless remedial action is taken now.'¹

The challenges facing rural and remote health services are widely recognised.^{2,3,4} While the primary focus of this work is the sustainability of general practice in the Western NSW PHN region, it is clear that models and strategies have to be considered in the context of sustainable primary health care and the broader health sector.

A number of models have been pursued in Australia and internationally to address these challenges. In general, learnings from the pursuit of these models reflect the importance of: engaging with the local community; understanding that solutions will be dependent on the unique circumstances of each community; working with stakeholders across the system; building a shared purpose with providers; and appreciating that not all changes occur instantly.

Five essential requirements for sustainable primary health services in rural and remote Australia have been identified:

- Governance, management and leadership
- Workforce organisation and supply
- Funding
- Linkages
- Infrastructure.

Following a review of models and strategies used elsewhere against these essential requirements, and consultation with key stakeholders across the Western NSW PHN region, the following immediate requirements, within the parameters of the purpose and objectives for PHNs, are proposed for consideration:

1. Governance structures

Formalise and promote a transparent governance structure that enables joint service and workforce design and coordination at the regional, sub-regional and community level, with a shared understanding of:

- Recognising the health system as a whole, with partners as stewards of their communities
- Defined and prioritised regions, sub-regions and communities
- Accountability to communities, not just individual sectors or services
- Roles and responsibilities
- Resource availability and limitations, and capacity and willingness to pool resources.

¹ Securing the future of Primary Health Care in small towns in Western NSW. Western Health Alliance. March 2019.

² Central West Single practice service model; 2015. At: <https://ruralgeneralist.qld.gov.au/wp-content/uploads/2017/07/cwhhs-sinpracserv.pdf>

³ Improving workforce retention: developing an integrated logic model to maximise sustainability of small rural and remote health care services; 2009. At: <https://rsph.anu.edu.au/research/projects/improving-workforce-retention-developing-integrated-logic-model-maximise>

⁴ A systematic review of primary health care delivery models in rural and remote Australia 1993-2006; 2006. At: <https://rsph.anu.edu.au/research/projects/systematic-review-primary-health-care-delivery-models-rural-and-remote-australia>

2. Enabling GP engagement and leadership in reform

Support existing local GPs to engage in leadership roles for their communities and in the design and implementation of collaborative and integrated models of care with local services and partners.

This will require flexible funding for potentially a broad range of practice support strategies that can be adapted to the immediate and unique challenges preventing individual GPs in high risk communities from fully participating in reform. In particular, this includes support for data collection and sharing, and administration.

3. Piloting strategies accountable to communities

Pilot strategies with shared governance and pooled resources that:

- are developed at the sub-regional and community level;
- draw on existing strengths; and
- enable development of innovative service delivery models, accountable to communities.

AHHA thanks the many stakeholders who generously gave their time to contribute to this report. Interviews were conducted with over 20 stakeholders, with perspectives captured from General Practitioners in the region; representatives of peak bodies, representatives from governments at the Commonwealth and NSW level, stewards of the health system with the region, including the Local Hospital Networks and Primary Health Network, Local Government Councils, the Aboriginal Health Council and other entities implementing innovative models to secure access to quality primary care in Australia and New Zealand.

1. Background and methodology

General practice and primary health care in small towns in the Western NSW PHN region has reached a critical point. Projections show that '41 towns, and approximately a quarter of the population in the Western NSW region are at risk of not having a GP practising in those communities over the next 10 years unless remedial action is taken now.'⁵

1.1 Sustainable general practice in rural and remote communities

A range of factors influence the sustainability of general practice in small towns in rural and remote communities. Table 1 summarises these from the perspective of the GP, general practice or workplace, and health system. An understanding of these factors across the Western NSW Primary Health Network (PHN) region is necessary to identify and address the vulnerability of communities and secure their access to quality primary care. This will enable health outcome disparities between people living in cities and rural communities to be addressed.

Table 1 Factors influencing the vulnerability and viability of general practice in rural and remote communities

Perspective	Influencing factors	
General practitioner (individual level)	Stability in practice:	<ul style="list-style-type: none"> • Age • Rural background • Rural clinical school attendance • Length of service in current role • Expressed length of service remaining
	Personal, family and social satisfaction:	<ul style="list-style-type: none"> • Housing • Spouse/partner employment • Child care, schools, education
	Satisfaction with location/community:	<ul style="list-style-type: none"> • Infrastructure, e.g. sporting, educational, commercial, cultural • Community • Climate • Geographic location
Practice/workplace (micro level)	Vocational satisfaction:	<ul style="list-style-type: none"> • Role clarity, promotion and career pathways • Procedural opportunities • Workloads • On-call ratios • Availability of locums • Teamwork, collaborative models of care • Capacity to employ practice support staff • Ownership structure (sole operator, multi-GP practice, corporate practice)
	Support available:	<ul style="list-style-type: none"> • Continuing professional development • Mentoring • Recognition
	Infrastructure/physical conditions:	<ul style="list-style-type: none"> • Information and communications technology (ICT) • Equipment • Buildings • Vehicles

⁵ Securing the future of Primary Health Care in small towns in Western NSW. Western Health Alliance. March 2019.

	Financial sustainability:	<ul style="list-style-type: none"> • Business model • Salary packaging and benefits
Health system (macro level)	Recruitment pipeline:	<ul style="list-style-type: none"> • Distribution of registrars • Source of registrars (international or local medical graduates; visas vs permanent residency)
	Remuneration models	

1.2 Models to address the challenges facing rural and remote communities

A number of models have been pursued in Australia and internationally to address the challenges facing rural and remote health services.

In 2009, the Australian Primary Health Care Research Institute identified evidence-informed principles for the development of primary health care models in rural and remote Australia.⁶ The essential service requirements and environmental enablers for such models are summarised in Table 2.

Table 2. Essential service requirements and environmental enablers for primary health care models in rural and remote communities^{7,8}

Essential service requirements	
1. Governance, management and leadership	<p>This requires:</p> <ul style="list-style-type: none"> • Appropriate governance structures inclusive of community • Clearly defined management structures, roles and responsibilities, with strong, central systemic support and local flexibility • Accountability to the governing body
2. Workforce organisation and supply	<p>At a minimum, this requires:</p> <ul style="list-style-type: none"> • Sufficient numbers • A recruitment strategy • A retention strategy • Succession planning
3. Funding	<p>Financing arrangements need to be sufficiently flexible for the service to be responsive to local needs</p>
4. Linkages	<p>Within and between services, which could include:</p> <ul style="list-style-type: none"> • Integration of distinct services • Co-location • Memorandum of understanding • Cross-referrals • Common assessment procedures • Common records

⁶ Improving workforce retention: developing an integrated logic model to maximise sustainability of small rural and remote health care services; 2009. At: <https://rsph.anu.edu.au/research/projects/improving-workforce-retention-developing-integrated-logic-model-maximise>

⁷ *ibid*

⁸ A systematic review of primary health care delivery models in rural and remote Australia 1993-2006; 2006. At: <https://rsph.anu.edu.au/research/projects/systematic-review-primary-health-care-delivery-models-rural-and-remote-australia>

5. Infrastructure	<p>This could include:</p> <ul style="list-style-type: none"> • Physical infrastructure, for clinics, accommodation, equipment, vehicles and operating budget for maintenance • Information Management/Information Technology systems appropriate to the service(s) and population, with agreed monitoring and reporting
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Environmental enablers

1. Supportive policy	Appropriate government policy is a pre-requisite to sustainable government funding for service delivery
2. Commonwealth-State relations	Commonwealth-state relations facilitate a seamless health service
3. Community readiness	Any new model of health service delivery will involve change, and community readiness to manage such change is a crucial enabler

1.3 Methodology

AHHA was commissioned by Western NSW PHN to:

- Undertake a review of models and strategies that have been implemented elsewhere to address the challenges facing rural and remote health services
- Consult with a broad range of stakeholders to identify perceptions of different models and strategies, including their potential effectiveness, feasibility and priority for the Western NSW PHN region. Publicly available information about existing policy and program enablers, including evaluation reports and websites, were also reviewed.

2. Key strategies apparent in primary care models pursued in Australia and New Zealand

A number of models and strategies have been pursued in Australia and internationally to address the challenges facing rural and remote health services, including recruiting and retaining the required workforce and the sustainability of practices. Appendix 1 provides a description of each model reviewed, capturing the strategies used in each model as they relate to the requirements identified as essential⁹ for sustainable primary health care services.

Table 3 summarises the key strategies apparent in models that have been pursued in Australia to address the challenges facing rural and remote health services, including recruiting and retaining the required workforce and the sustainability of practices.

Table 3. Key strategies apparent or proposed in primary care models in Australia to address challenges facing rural and remote health services

Essential service requirements	Strategies	Australian models in which strategy is used
1. Governance, management and leadership	a. Joint service and workforce design at community level	<ul style="list-style-type: none"> Central West Single Practice Model Western NSW Integrated Care Strategy
	b. Independent entity to provide non-clinical, business operations of the general practice	<ul style="list-style-type: none"> Central West Single Practice Model The 'Easy Entry, Gracious Exit' model
2. Workforce organisation and supply	a. Shared workforce between local hospital districts (LHD) and primary care – doctors salaried by LHD with cross sector responsibilities	<ul style="list-style-type: none"> Central West Single Practice Model
	b. Shared workforce between LHD and primary care – doctors contract their services to LHD	<ul style="list-style-type: none"> The 'Easy Entry, Gracious Exit' model
3. Funding	c. Teaching (clinical placements and registrars) embedded in model and service structures	<ul style="list-style-type: none"> Central West Single Practice Model National Health Co-op
	a. Community fundraising and grant funding for infrastructure	<ul style="list-style-type: none"> Mallacoota Community Health, Infrastructure and Resilience Fund
	b. Membership fees for bulk-billing of services	<ul style="list-style-type: none"> National Health Co-op
	c. Cross-sector funding	<ul style="list-style-type: none"> Western NSW Integrated Care Strategy
	d. Pooled funding	

⁹ A systematic review of primary health care delivery models in rural and remote Australia 1993-2006; 2006. At: <https://rsph.anu.edu.au/research/projects/systematic-review-primary-health-care-delivery-models-rural-and-remote-australia>
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4. Linkages	a. Shared clinical records between LHD and general practice	<ul style="list-style-type: none"> • Central West Single Practice Model
	b. Telehealth use in skills training	<ul style="list-style-type: none"> • Central West Single Practice Model
	c. Co-location of staff	<ul style="list-style-type: none"> • Western NSW Integrated Care Strategy
5. Infrastructure	a. Shared physical infrastructure	<ul style="list-style-type: none"> • HealthOne NSW – co-location model
	b. Support for information and communications technology	

3. Stakeholder perceptions and environmental enablers around the essential service requirements

Interviews with key stakeholders in the Western NSW region were conducted from September to November 2019 to identify environmental enablers for, and perceptions of, pursuing different strategies to address the challenges facing rural and remote health services. Publicly available information about existing policy and program enablers, including evaluation reports and websites, were also reviewed.

Themes from these are summarised below as they relate to the requirements identified as essential¹⁰ for sustainable primary health care services.

3.1 Governance, management and leadership

Place-based leadership and management were supported by the majority of stakeholders interviewed. The significant contextual variation across the Western NSW PHN region was acknowledged, including between the Western NSW LHD and Far West LHD in terms of how primary health care services can be delivered, within each of these districts, and between towns and communities of varying sizes.

The need for joint service and workforce design, coordination and accountability at the regional, sub-regional and community level was recognised by most stakeholders:

- Existing collaborative relationships between the PHN, LHDs and other stakeholders were recognised and valued. These are typically project-focused. However, the persistence over decades of the challenges facing rural and remote health services was noted, with recognition of the need for formalised relationships that provide the multi-year commitment (beyond discrete projects) necessary for system change.
Experience in the evaluation of the Western NSW Integrated Care Strategy¹¹ highlighted the risk of imbalance in commitment and effort across key stakeholders and between partners when there is not proportionate investment and accountability in terms of priority setting, staff effort and resource allocation.
The Expression of Interest issued by NSW Health for collaborative commissioning between LHDs and PHN is a strategy being implemented at the state level to address this issue. However, feedback from a range of stakeholders suggested the smaller the general practice, the less capacity they had to engage in such programs.
- Feedback from GPs included an awareness of existing staff roles in the LHD that were promoted as providing or contributing to cross-sector GP workforce design and support. However, there was low awareness or recognition of outcomes being achieved.
The value in engaging with such roles was questioned when there was a perceived absence of transparency and accountability for achieving the promoted goals. For some GPs, this appeared to foster resentment towards resourcing 'administrative' activity, rather than direct service delivery.

¹⁰ A systematic review of primary health care delivery models in rural and remote Australia 1993-2006; 2006. At: <https://rsph.anu.edu.au/research/projects/systematic-review-primary-health-care-delivery-models-rural-and-remote-australia>

¹¹ Evaluation of the Western NSW Integrated Care Strategy: Final Report. April 2019
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- Feedback from a range of stakeholders proposed that the PHN required greater resourcing (particularly in terms of ‘on-the-ground’ staff) to lead and support rural workforce development across a region as geographically expansive as Western NSW.
- Transparency and accountability to individual communities and existing entities/general practices was raised by many stakeholders. The inter-relatedness of the system in rural areas means change in one part would impact upon other parts.
Caution was expressed about funding being injected into single general practices/services or ‘one size fits all’ strategies without mechanisms to identify all potential intended and unintended consequences and mitigate risks. It was suggested that attracting and retaining doctors based on a medical-centred model of care had been the focus for too long without result, and that the focus needed to change to patient-centred models of care.
- Feedback from all stakeholders identified the need to expand discussions about primary health care models of care to include other health professions, recognising they report similar trends to GPs of insufficient numbers. A subdivided workforce is not practical in rural and remote areas, and there is a need for other professions to take a greater leadership role as well. It was raised that the health workforce model selected needed to work for the community.
- The objective of councils to facilitate strong, healthy and prosperous local communities was identified. Involvement in supporting access to healthcare often used significant council resourcing when identified as a community need, despite it not being identified as their core business.
Opportunities for working with councils were recognised, with reference to the legislated guiding principles including requirements to meet ‘current and future local community needs’ through ‘strong representation, leadership, planning and decision-making’¹².
Partnering on specific components was identified as a key opportunity in the Integrated Planning and Reporting (IP&R) Framework¹³. Reference was made to NSW Government activity to establish special activation precincts and long-term influence this could have on the design of service models.

The need for local leadership and engagement in developing and implementing new models of care was recognised:

- Feedback from GPs identified the importance of the leadership of GPs and the involvement of their teams at the beginning of discussions. The Pinnacle Midlands model was highlighted as a testament to this: GP leadership initiated and controlled this model from its onset; this has been preserved through membership in the governance structures as the model has grown. With continued expansion of focus areas, governance structures have been adapted to ensure GP leadership in their primary health care models.
It was noted, however, that the capacity for existing GPs to commit time to leadership roles was limited and must be supported.
- Experiences shared about the application by the Western NSW LHD of the Multi Purpose Service model in the 4 Ts (Tottenham, Trundle, Tullamore, Trangie) highlighted the importance of community engagement – from defining health needs of the community and debating the advantages and disadvantages of alternative strategies to meet these health needs (including understanding the trade-offs), through to evaluation of strategies implemented. However, it was suggested that the cost of this level of engagement may be a barrier to broader implementation.

¹² Local Government Act 1993. At: http://www5.austlii.edu.au/au/legis/nsw/consol_act/lga1993182/s8a.html

¹³ NSW Office of Local Government. Integrated planning and reporting framework. At: <https://www.olg.nsw.gov.au/councils/integrated-planning-and-reporting/framework>

3.2 Workforce organisation and supply

A number of workforce organisation and supply issues were raised by stakeholders. Themes included:

1. Attractiveness of the professional role

Feedback from GPs highlighted the changing nature of the role over recent decades, with a perception their scope of practice was being restricted and skills wasted. It was noted that regulation and policy needed to enable safe and quality practice, not restrict it. Comments were made that, while the Rural Generalist Pathway had merit in other states and territories (Qld, NT and WA), restrictions had been created by changes in NSW hospitals that limited admitting certain population segments (e.g. children, pregnant women, mental health) or undertaking certain tasks (e.g. anaesthetics), thereby preventing GPs practising to their full scope.

GPs proposed a need for NSW Health to commit to the Rural Generalist Pathway, including through defining service scope, with nurses and allied health professionals supporting these roles. Feedback from the NSW LHDs confirmed strong commitment to the Rural Generalist Pathway, with collaborative efforts needed to ensure medical coverage for the pathway's service scope (a 'chicken and egg' dilemma).

It was also proposed that improved oversight was needed of specialist colleges and service funders restricting, rather than enabling, practice. With increasing trends of applying additional training requirements, it was suggested that specialist colleges need to better support the training/supervision/mentoring requirements for GPs. It was also suggested that funding models recognise where these skills had been gained, and pay for the service by those competent to provide them.

While greater embedding of the professional role within networks and the broader sector was supported, it was also acknowledged that the greater autonomy afforded GPs in rural practice was an attractive feature in the attraction and retention of GPs. Caution would be needed moving forward, recognising that change could be both a strength and a weakness.

Feedback from stakeholders also recognised that general practice had to be better 'sold' to medical graduates, with proposed messaging such as (tongue in cheek) 'specialising is what you do when you can't cope in general practice'.

2. Attractiveness of practice and small business management

Stakeholders and most GPs acknowledged that the historical model of rural general practice (small, owner-operated, loosely connected) could no longer meet the needs of communities, and was now a feature that both detracted from GPs being recruited to rural practice and challenged the capacity for them to participate in reform initiatives. It was noted that change in the sector is occurring at a rapid pace, and stakeholders were reporting (with a level of consensus) that there is a need to work in a different way. A number of stakeholders noted there would be value from the 'aggregation' of, or 'corporatisation-like approach' to, practices, where different models of care process can be developed, multi-professional approaches incorporated, and the change management process supported. It was also noted that the LHDs often had resources that could be leveraged to achieve/facilitate this.

It was acknowledged there would be a number of issues to work through to reflect unique community and practitioner needs, but it was generally felt that none of the challenges were insurmountable, provided collaborative governance arrangements were formalised.

Two models that currently exist in providing this support in the Western NSW PHN region were identified as:

- [Rural and Remote Medical Services Ltd \(RaRMS\)](#), a not-for-profit organisation which operates the 'Easy Entry, Gracious Exit' model of general practice; and
- [Ochre Health](#), a for-profit operator of rural and urban medical centres.

The Australian Medical Association (AMA) position statement¹⁴ on the 'Easy Entry, Gracious Exit' model also acknowledges the challenges of practice and small business management to the sustainability of general practices in rural areas. It states there is typically a shortage of people with practice management, management, IT, nursing and financial skills relevant to running a medical practice available in these areas. With remoteness, there is limited opportunity to share human resources, compounded by the increasing complexity of practice and small business management. It also notes that existing models place undue risk on small councils or not-for-profit organisations to address an issue which is primarily a Commonwealth and state/territory responsibility.

Challenges identified by stakeholders with existing models used to support practice and small business management included:

- The Medicare Benefits Schedule (MBS) fee-for-service funding model insufficient for sustaining discrete general practices in rural and remote locations. Noting, the MBS funding model has also been identified as a factor in the unsustainability of corporate models of general practice in rural and remote areas.^{15,16}
- Entities that are established to provide general practice services in rural and remote regions are drawn to pursuing more 'lucrative' opportunities in, for example, regional or coastal regions. This creates a tension with their original intended core business in the most challenging contexts.
- The RaRMS model targeting areas where there has already been failure to sustain a practice, whereas a more preventive/early intervention approach is needed to support general practice prior to failure.
- Any selected intervention needing to be careful to avoid creating or supporting monopolies or unfair business advantages.

3. Training systems

It was acknowledged by stakeholders and GPs that there was a lot of attention being paid to the medical training scheme. Despite this, there were suggestions that:

- A greater focus was needed on primary health care across the whole training scheme, e.g. requirements for rural practice needed to include mandatory time in primary health care.

¹⁴ AMA 2019, Position statement: Easy Entry, Gracious Exit Model for Provision of Medical Services in Small Rural and Remote Towns. At: https://ama.com.au/system/tdf/documents/Entry%20Gracious%20Exit%20Model%20for%20Provision%20of%20Medical%20Services%20n%20Small%20Rural%20and%20Remote%20Towns%202019_1.pdf?file=1&type=node&id=40571

¹⁵ ABC News 2019, SA hospital sacks Tristar Medical Group after four days without a doctor. At: <https://www.abc.net.au/news/2018-06-28/sa-hospital-sacks-medical-group-after-four-days-without-doctor/9921274>

¹⁶ ABC News 2019, Tristar sacked from another regional hospital, its CEO saying 'it's difficult to run with no doctors'. At: <https://www.abc.net.au/news/2019-11-11/victorian-hospital-sacks-tristar-medical-group/11690710>

- Regional training would be better delivered in communities through collaborative co-commissioning arrangements between PHNs and LHDs, rather than arrangements that support existing providers to provide training remotely. Existing training providers could provide a coordination function, noting hospitals typically provided the training anyway.
- Supervision needed to be flexible in small communities, with remote supervision supported, particularly for experienced doctors that are not yet vocationally registered.

4. Supportive team culture in hospitals for primary health care

The inter-relatedness of service models across the hospital and primary health care sectors was apparent with the importance of a cross-sector team approach at regional, sub-regional and community levels. For example, the impact of nursing staff being prepared to work in models without a doctor onsite 24/7 and for GPs to be willing to be on call. It was suggested that younger, internationally trained staff often lacked confidence to defer management of minor presentations (category 3-5) overnight to the next day resulting in avoidable or prolonged ED stays or admissions.

5. Employment arrangements

Many stakeholders identified the importance of employment arrangements for giving financial security to potential candidates likely to be attracted to moving to a rural location.

Opportunities for collaborative efforts between the LHDs and general practice could be achieved if governance and funding requirements were enabled. It was reported that the Council of Australian Governments (COAG) s19(2) Exemptions Initiative did not sufficiently support such arrangements as models of care that engaged the workforce in innovative ways were not supported. It was suggested that a sub-regional, collaborative approach would enhance access/recruitment allowing such things as:

- Over-recruitment to cover leave provisions
- Provision of a competitive package to GPs
- Optimised and coordinated use of community nurses as practice nurses
- Versatile use of staff across administration and allied health services.

3.3 Funding

Evidence suggests that a patient population of at least 5,000 is required to support a sustainable range of primary health care services in rural areas, although a greater number will increase the capacity and sustainability of the service.¹⁷ Recent media¹⁸ reports the Ochre Health Chair stating business conditions have forced Ochre to shift its focus to larger centres, now not entering a community with fewer than 10,000 people unless it also gets a contract to run a local hospital. He notes 10 small-town GPs since May had offered their practices for free if Ochre can find them a doctor. However, the offers have been turned down as 'there is just no way they would be financially viable'. He calls on government to replace Medicare in remote areas with a new system based on capitation.

¹⁷ Wakerman, J, et al 2006, A systematic review of primary health care delivery models in rural and remote Australia. At: https://openresearch-repository.anu.edu.au/bitstream/1885/119218/3/full_report_14960.pdf

¹⁸ Call for capitation to fix 'broken' rural system. Australian Doctor. 24 October 2019.

Corporate healthcare models continue to be challenged as the best way to address rural primary health care, with recent media^{19,20} reports that relationships with the Tristar Medical Group have been terminated with hospitals in regional South Australia and Victoria. In response, the President of the AMA in Victoria suggested he thought 'general practice in regional and rural areas will be part of a community health-type service, like from a local hospital'. A spokesperson for the Department of Health was reported as saying that the Australian Government recognises the unique challenges facing the health system in regional areas and '[f]or an increasing number of small towns in rural and remote Australia, there is a need to look at tailored and flexible models to meet the healthcare needs of communities.'

Funding, available at a local level and that could be used flexibly, was recognised as a significant influencing factor by stakeholders in addressing the workforce challenges facing rural and remote health services. The COAG s19(2) Exemptions Initiative was not perceived as being sufficient enough to address the challenges of supporting a sustainable range of primary health care services in rural areas. Further, initiatives to improve access through MBS items for telehealth services provided by GPs and non-specialist medical practitioners²¹ were identified to not be practical for addressing their purpose. In particular, eligibility criteria requiring patients to be living in a Modified Monash Model 6 or 7 area and having had three face-to-face attendances in the preceding 12 months would preclude the majority of those who should benefit from the service.

Stakeholders identified that governments need to acknowledge that small towns need more funding to enable sustainable access to primary health care. It was suggested that a mechanism for pooling funds with joint governance with an intermediary is needed; transactional funding through the MBS could be retained, but then dedicated funds for service design could be introduced – such as a blended funding model, administered flexibly at the local level. It was noted that business models should not be set up that depend on the LHD subsidising primary health care.

Feedback from GPs raised the challenges with funding mechanisms that have been used in recent years to support rural practices. It was noted that grant and rebate processes were a barrier for practices in small communities to access funding. For small general practices, the time and expertise required to prepare applications for available funding, and to report against them, may require engaging consultants and typically offset the benefits of the additional funding, particularly when the support was time-limited.

3.4 Linkages

The focus of most stakeholders was addressing the immediate requirements relating to Governance, management and leadership; Workforce organisation and supply; and Funding. Addressing these first was typically considered as a priority to enabling a coordinated approach to, for example:

- Shared clinical records: It was identified that mechanisms for GPs to access clinical records held by the LHD had been pursued in the past to facilitate the continuity of care required in

¹⁹ ABC News 2019, SA hospital sacks Tristar Medical Group after four days without a doctor. At: <https://www.abc.net.au/news/2018-06-28/sa-hospital-sacks-medical-group-after-four-days-without-doctor/9921274>

²⁰ ABC News 2019, Tristar sacked from another regional hospital, its CEO saying 'it's difficult to run with no doctors'. At: <https://www.abc.net.au/news/2019-11-11/victorian-hospital-sacks-tristar-medical-group/11690710>

²¹ Commonwealth Department of Health 2019, Telehealth Services Provided by GPs and Non-Specialist Medical Practitioners to Patients in Rural and Remote Areas, updated 31 October 2019. At: <http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Factsheet-GPTeleHealth>

the Western NSW PHN region. However, progress was ceased, and the rationale was unclear to GPs as Queensland Health had been able to enable this.

- Utilising remote support: While the LHDs had or were introducing a number of models of care that were supported remotely, it was suggested that general practices were not able to adequately engage in these models.

Data was considered a key enabler by a number of stakeholders. Enthusiasm was expressed about the increasing abilities to link data between general practice and the LHD to inform activity (both within the health sector and through the local councils). Workforce data was considered a challenge; standard datasets do not support comprehensive workforce modelling in such a distributed region, as identification of individual respondents would be easily possible if data was reported at levels that would be useful for decision-making.

3.5 Infrastructure

Again, the focus of most stakeholders was addressing the immediate requirements relating to Governance, management and leadership; Workforce organisation and supply; and Funding. Addressing these first was typically considered as a priority for enabling a coordinated approach to infrastructure.

GPs reflected on the need to retain small hospitals to support larger base hospitals and facilitate local community access to healthcare. It was noted that the ability for GPs to continue care locally while admitting patients overnight or for a few days (with nursing monitoring) would relieve pressure on the base hospitals, support care closer to home and facilitate patient transitions back home and into their community more quickly and comprehensively/holistically.

The benefits from co-location of GP and hospital services was also raised by a number of stakeholders.

4. For consideration

Within the parameters of the purpose and objectives for Primary Health Networks, the following immediate requirements have been identified for consideration:

1. Governance structures

Formalise and promote a transparent governance structure that enables joint service and workforce design and coordination at the regional, sub-regional and community level, with a shared understanding of:

- Recognising the health system as a whole, with partners as stewards of their communities
- Defined and prioritised regions, sub-regions and communities
- Accountability to communities, not just individual sectors or services
- Roles and responsibilities
- Resource availability and limitations, and capacity and willingness to pool resources.

2. Enabling GP engagement and leadership in reform

Support existing local GPs to engage in leadership roles for their communities and in the design and implementation of collaborative and integrated models of care with local services and partners.

This will require flexible funding for potentially a broad range of practice support strategies that can be adapted to the immediate and unique challenges preventing individual GPs in high risk communities from fully participating in reform. In particular, this includes support for data collection and sharing, and administration.

3. Piloting strategies accountable to communities

Pilot strategies with shared governance and pooled resources that:

- are developed at the sub-regional and community level;
- draw on existing strengths; and
- enable development of innovative service delivery models, accountable to communities.

Appendix 1. Primary care models pursued to address the challenges facing rural and remote areas

Disclaimer: Region characteristics and summaries of strategies used in models have been provided to facilitate discussion. All efforts have been made to ensure the accuracy of the information for this purpose. However, if decisions are dependent on the information presented, readers should contact those involved in the model to confirm the information is complete and current.

A.1 Australian models

Nine Australian models have been examined in this report:

1. Central West Single Practice Model (Queensland)
2. The 'Easy Entry, Gracious Exit' model (NSW)
3. Integrated Health Networks (proposed by Murray PHN, Victoria)
4. National Health Co-op (ACT and NSW)
5. Mallacoota Community Health, Infrastructure and Resilience Fund (Victoria)
6. Western NSW Integrated Care Strategy (NSW)
7. HealthOne NSW – co-location model
8. HealthOne NSW – hub and spoke model
9. HealthOne NSW – virtual integration model

Model 1: Central West Single Practice Model (Queensland)

This model was introduced in 2009, with a renegotiation of contracts in 2014.

Characteristics of the region

Population size for region:	12,405 (which can double in the winter tourism season)	Distribution of population:	The largest towns are: Longreach (3,356) Barcaldine (1,655) Winton (954)
Area covered:	385,000 sq. kilometres		
General practices in region:	5 (Longreach, Barcaldine, Winton, Alpha, Blackall)	Other health services:	Outreach medical services provided by general practices RFDS doctors service
Hospitals in region:	5 hospitals: Longreach (31-bed acute hospital) Smaller hospitals in Barcaldine, Alpha, Blackall and Winton		1 Community health service (Longreach) 10 Remote nurse led Primary Health Clinics

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented through the model: For detailed information, access the report ²²
1. Governance, management and leadership	<ul style="list-style-type: none"> • Service and workforce design occur jointly between general practice and Hospital and Health Service (HHS) under a partnership based on mutuality (each party committed to the success and sustainability of the other). HHS is a co-owner of the PHN. • Private entities are responsible for the non-clinical, business operations of the general practice (practice management and back of house services). The private entity contracts with the HHS for the supply of medical workforce (responsibilities, allocation of risk and financial arrangements are defined). <p>(In some circumstances where private general practices have not been sustainable, the HHS has purchased or assumed management of local practices while progressively encouraging the establishment of private entities).</p>
2. Workforce	<ul style="list-style-type: none"> • Shared medical workforce within the district. Single employer (HHS), with numbers and availability of staff specified to provide general practice services. Although the private entity employs some nursing and allied health staff. • Doctors provide medical services without direct encumbrance of business profitability concerns, supported by common clinical business systems. • Model is designed as a teaching service to ensure continuing sustainability of the workforce.
3. Funding	<ul style="list-style-type: none"> • HHS receives block funding, primarily for acute care but can be used flexibly. • Medicare MBS payments received for eligible services through the bulk billing clinic and general practice (clinicians assign payments to HHS as their employer). • Management fees are paid to private entity for services associated with the practice. A revenue split of 50/50 between the HHS and the private entity was initially specified, with a view to moving to 60/40 over time as the number of doctors, occasions of service and revenue increased (comparable with models for splitting income of 60–70% of total billings in corporate medical practices; and recognising the lower throughput, longer consultations and higher service costs in remote areas).
4. Linkages	<ul style="list-style-type: none"> • Sharing of information records is part of the contract. • Telehealth allows application of advanced skills training across the district.
5. Infrastructure	<ul style="list-style-type: none"> • General practice facilities are leased and privately operated. • Hospital inpatient/emergency/outpatient facilities are owned and maintained by the state through the HHS.

²² Central West Single practice service model; 2015. At: <https://ruralgeneralist.qld.gov.au/wp-content/uploads/2017/07/cwhhs-sinpracserv.pdf>

Model 2: The 'Easy Entry, Gracious Exit' model (NSW)

This model was established in 2001 by the NSW RDN.²³ Variations on the model have since been used across other towns/regions.

Characteristics of region

Population size for region:	Walgett LGA: 6,107 Brewarrina LGA: 1,651	Distribution of population:	The largest towns are (urban centre and locality pop.): <ul style="list-style-type: none"> • Walgett (1,546) • Lightning Ridge (1,437) • Brewarrina (851) • Collarenebri (435)
Area covered:	Walgett LGA: 22,336 sq km Brewarrina LGA: 19,188 sq km		
General practices in region:	Walgett LGA: 3 Brewarrina LGA: 1	Other health services:	Aboriginal Medical Services: 2
Hospitals in region:	Walgett Multi-Purpose Health Service		(Closest major regional centre: Dubbo, 280km away)

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented:
	For detailed information, access the report ²⁴
1. Governance, management and leadership	<ul style="list-style-type: none"> • A third party provider (e.g. a non-profit company or local community entity) is responsible for providing the infrastructure for continuity of the practice or practice management structure. This typically includes the domestic and surgery accommodation and infrastructure for the non-clinical, business operations of the general practice (practice management and back of house services). • Community ownership creates commitment to finding solutions and driving change. • Model continues to evolve with changing conditions and opportunities; not fixed. • The third party provider: <ul style="list-style-type: none"> ○ Leases housing for GPs to sublet ○ Leases the practice building ○ Employs all the practice staff (practice manager, receptionist, practice nurse, cleaner) ○ Negotiates with local area health service and hospital on behalf of GPs; VMO services may be cashed out to provide predictable incomes ○ Handles all practice related financial transactions

²³ Easy Entry, Gracious Exit. At: https://www.nswrdn.com.au/client_images/246595.pdf

²⁴ ibid

	<ul style="list-style-type: none"> ○ Provides corporate governance and strategic direction. ● Management can be remote, but not the ideal scenario.
2. Workforce	<ul style="list-style-type: none"> ● GPs contract the third party provider to manage their practice. Flexible agreements are made with doctors. GPs determine their work arrangements, including fees.
3. Funding	<ul style="list-style-type: none"> ● Commonwealth grant funds enabled the initial establishment.
4. Linkages	
5. Infrastructure	

Model 3: Integrated Health Networks (proposed by Murray PHN, Victoria)

Characteristics of proposed regions

Population size for region:	30,000-50,000 proposed for viability	Distribution of population:	The largest towns are: Gannawarra (10,549) Loddon (7,516) Buloke (6,201).
Area covered:	Initial region proposed is a catchment within the North West and Central Victoria regions ²⁵ (with the shires for the largest towns in the catchment totalling 18,431 sq km)		
General practices in region:	11 in proposed trial area (31 General Practitioners)	Other health services:	Community care such as allied health services are mainly provided by the hospitals
Hospitals in region:	7 small rural health services in the proposed trial catchment		

Strategies addressing the essential requirements for sustainable primary health services

	<p>Strategies implemented:</p> <p>For detailed information, access the report²⁶</p>
1. Governance, management and leadership	<ul style="list-style-type: none"> • The Integrated Health Network (IHN) is a partnership of all affiliated primary care practitioners and services required for the region, encompassing individual health professionals (general practitioners, nurses and allied health professionals) and community services (e.g. maternal and child health, drug and alcohol treatment, rehabilitation, health promotion and mental health). • IHN will be initially auspiced by the PHN (but could move to a self-governing or separate organisation with maturity). Guidelines will be developed through consensus and participation by providers on: <ul style="list-style-type: none"> ○ primary and secondary prevention strategies for the population ○ referral pathways ○ clinical pathways ○ allocation of resources (across clinical and non-clinical activities) ○ workforce capacity building (training, recruitment, backfill, after hours coverage) ○ sharing corporate and business services (HR, IT, finance, patient booking). • Providers will:

²⁵ Murray PHN North West Profile. At: <https://www.murrayphn.org.au/wp-content/uploads/2015/07/Murray-PHN-North-West-Profile.pdf>

²⁶ Murray PHN Integrated Health Networks Discussion Paper; 2019.

	<ul style="list-style-type: none"> ○ maintain existing practice arrangements, with support for local autonomy and ownership of systems of care ○ work within agreed strategies on care coordination and referral pathways.
2. Workforce	<ul style="list-style-type: none"> ● The trial of an IHN will: <ul style="list-style-type: none"> ○ build capacity for retention and recruitment of health professionals that will be structured regionally and coordinated at a community level ○ transition existing individual and fragile provider models with minimum disruption. ● Workforce development will focus on new models of care with a focus on multidisciplinary teams and care coordination elements
3. Funding	<ul style="list-style-type: none"> ● A blended funding model includes: <ul style="list-style-type: none"> ○ MBS fee-for-service for episodic care ○ chronic disease care packages (Health Care Home styled packages) ○ pool funding consisting of: <ul style="list-style-type: none"> ▪ block grants for establishment and management of the network ▪ MBS incentive payments ▪ state funding for primary care activities ▪ contract funding for mental health, chronic disease management and alcohol and drug treatment.
4. Linkages	<ul style="list-style-type: none"> ● Buloke Loddon & Gannawarra Health Network ● Rural Workforce Agency Victoria ● Loddon Mallee Rural Generalist Pathway ● Murray City Country Coast GP Training (MCCC)
5. Infrastructure	The IHN will identify priorities for improving the efficiency and effectiveness of their organisational and business solutions through sharing costs or implementing new approaches.

Model 4: National Health Co-op (ACT and NSW)

Characteristics of regions^{27, 28, 29, 30}

Population size for region:	Initial practice to serve a population of 20,000, grown to 10 clinics in Canberra and regional NSW by end 2018	Distribution of population:	Regional NSW example: Yass Town population 6,506 LGA population 16,142
Area covered:	To date, typically suburban areas Regional NSW example: Yass, 4,000 sq km		
General practices in region:	Regional NSW example: Yass In town: 5 In LGA (incl town): 7	Other health services:	1 community health centre (Yass - 60km from Canberra CBD and its services; up to 120km for furthest towns in region)
Hospitals in region:	1 ten-bed hospital with 3 emergency beds and medical imaging		

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access the report ³¹
1. Governance, management and leadership	<ul style="list-style-type: none"> • Not-for-profit, member owned co-operative providing medical and healthcare services. • Operations supported centrally include: <ul style="list-style-type: none"> ○ clinical administration ○ data analytics ○ finance ○ human resources ○ information technology ○ operational support ○ site maintenance.
2. Workforce	<ul style="list-style-type: none"> • Medical and administrative staff are employed by the co-operative. • Training is a program focus, with continuous training encouraged and supported for employed registrars.
3. Funding	<ul style="list-style-type: none"> • Annual membership for individuals (\$10/month; 50% discount for concession card holders; free for children of members. • Bulk-billed MBS fee-for-service for general practitioner consultations. • Other services provided at no or low cost: psychology, diabetes education, physiotherapy, child, adolescent and aged health, and dietetics. These are funded through bulk billing, or a mixture of

²⁷ National Health Co-op. At: <https://www.nhc.coop/about>

²⁸ Australian Bureau of Statistics 2016 census

²⁹ HealthDirect. At: https://www.healthdirect.gov.au/australian-health-services/results/yass-2582/tihcs-aht-11222/general-practice?pageIndex=1&tab=SITE_VISIT

³⁰ Yass District Hospital. At: <https://www.snswhd.health.nsw.gov.au/our-facilities/yass-district-hospital>

³¹ National Health Co-op. At: <https://www.nhc.coop/about>

	cross-subsidy, business efficiencies and reinvestment of surpluses in service delivery.
4. Linkages	
5. Infrastructure	

Model 5. Mallacoota Community Health, Infrastructure and Resilience Fund (Victoria)

Established in 2016.

Characteristics of regions

Population size for region:	1,036 (which can increase to 8,000 in the summer tourism season)	Distribution of population:	A remote, geographically isolated community, 'an island in a sea of forest', MMM6
Area covered:	2,000 sq km		
General practices in region:	1	Other health services:	A state-operated ambulance service (1 paramedic + volunteers) A community health service
Hospitals in region:	2 hours away from a hospital (in NSW), 3 hours from closest ED in Vic		A community pharmacy

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ^{32, 33, 34}
1. Governance, management and leadership	<ul style="list-style-type: none"> Community Health Infrastructure and Resilience Fund (CHIRF), a local volunteer charity, established to ensure sustainability of medical services in Mallacoota. CHIRF focus is ensuring the Medical Centre is financially viable and that operations are directed at giving the GPs an expanded scope of practice. CHIRF is a Deductible gift recipients (DGR) charity, allowing access to funding sources/streams not readily accessible to private medical practices like the Medical Centre. 2 committees have been established: <ul style="list-style-type: none"> Doctor Search committee Fund-raising committee. Developed a 3-year strategic plan for 2019–2022, establishing the Medical Centre as the service hub for coordination and delivery of services.
2. Workforce	<ul style="list-style-type: none"> A Doctor Search committee was formed with the goal of increasing the number of doctors in the community. Recruitment occurred through operating a stand at major medical conferences to attract potential GPs. Support was provided for upgrading qualifications of doctors so the clinic could be a remote medical training facility. Through the Remote Vocational Training Scheme, a GP registrar was secured for the centre.

³² Mallacoota's Community Health Infrastructure and Resilience Fund. At: <https://www.chirf.org.au/a-homepage-section/about/>

³³ Rural Workforce Agency Victoria. At: <https://www.rwav.com.au/a-communitys-response-to-ensure-healthcare-survives/>

³⁴ CHIRF Strategic Plan 2019-2022. At: <https://www.chirf.org.au/dev/wp-content/uploads/2019/09/CHIRF-strategic-plan-2019-2022.pdf>

<p>3. Funding</p>	<ul style="list-style-type: none"> • Federal Government funding has been secured for the building of the new Medical Centre. • A collaboration with Mallacoota Inlet Aged Care initiated to co-fund: <ul style="list-style-type: none"> ○ a generator for the medical centre ○ an ultrasound imaging machine ○ remodelling the clinic for space for office and pathology collection ○ building the new medical centre. • Funding has also been received from the Gippsland Primary Health Network (GPHN) for the Teen Clinic Program and a Chronic Disease Program. • The Foundation for Rural and Regional Renewal (FRRR) has provided substantial support to CHIRF for administration, mental health services and occupational health support. • Rural Workforce Agency Victoria (RWAV) has supported Mallacoota Medical Centre for the past nine years by providing a no fee recruitment service for GP locum cover, to assist during annual leave and busy holiday periods, as well as providing ongoing locum grants to cover travel and subsidise locum costs. RWAV has also provided a relocation grant of \$15,000 for a new GP registrar.
<p>4. Linkages</p>	<ul style="list-style-type: none"> • Adopted a regional approach to addressing allied health workforce needs; partnerships with larger medical practices providing an outreach service.
<p>5. Infrastructure</p>	<ul style="list-style-type: none"> • All the equipment purchased through funds is community owned.

Model 6. Western NSW Integrated Care Strategy

This model was a four-year (2014-2018) region-wide innovative approach to integrated care, funded by the NSW Ministry of Health. The strategy was rolled out in waves, with regional partnerships created or strengthened in order to:

- Develop GP-led multidisciplinary models of care to manage high risk patients and those with chronic and complex illnesses
- Use agreed risk stratification to identify those patients who would most benefit from integrated care
- Embed care navigators in primary care to support and manage patients
- Implement an electronic shared care planning tool cdmNet.

Beneficial impacts from this model have been demonstration in patient experiences, patient outcomes, reduction in hospitalisations and ED presentations.

Characteristics of regions

Population size for region:	Cobar: 4,700 Cowra: 12,700 Dubbo: 52,100 Molong: 2,600 Wellington: 9,100 Blayney: 7,300 Coonamble: 4,000 Mudgee: 12,200 Walgett: 6,200 Bourke: 2,700 Brewarrina: 1,700 Condobolin: 6,700 Cowra: 12,700 Orange: 41,500	Distribution of population:	Wave 1: Cobar, Cowra, Dubbo, Molong, Wellington Wave 2: Blayney, Coonamble, Mudgee, Walgett Wave 3: Bourke, Brewarrina, Condobolin, Cowra, Orange
Area covered:			
General practices in region:	Various	Other health services:	
Hospitals in region:	Various		

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented and lessons learned: For detailed information, access ³⁵
1. Governance, management and leadership	<ul style="list-style-type: none"> • Strategy partners included the LHD, PHN and Bila Muuji Aboriginal Health Corporation. • Existing services were engaged across general practice, local LHD services and community services. Evaluation showed:

³⁵ Evaluation of the Western NSW Integrated Care Strategy: Final Report. April 2019
Australian Healthcare and Hospitals Association

	<ul style="list-style-type: none"> ○ Replicable in other small towns where population is geographically defined and limited leakage to other providers outside the system ○ Opportunity to include regional referral services in planning where small communities have an existing dependency on these. ● System redesign and change management was supported: emphasis on importance of fully developed and consulted strategic plans for implementation, shared investment across partners, redesign and change management strategy across partners.
2. Workforce	<ul style="list-style-type: none"> ● Evaluation showed: <ul style="list-style-type: none"> ○ Importance of joint training and education between partners ○ Bringing partners on journey at same pace. Where one component is perceived to be advantaged or disadvantaged, commitment and partnerships are undermined.
3. Funding	<ul style="list-style-type: none"> ● Evaluation showed: <ul style="list-style-type: none"> ○ The imbalance in fundholding between strategy partners and funds allocation between local services (general practice, hospital, community health) increased the risk of imbalance in commitment and effort across key stakeholders and between partners. Establishing proportionate investment and accountability in terms of priority setting, staff effort and resource allocation should be pursued. ○ For practices, enrolment in integrated care results in a higher number of Medicare-billable services, resulting in higher levels of Medicare rebate revenue. However, costs associated with integration (primarily care navigation, administration) are not currently met by the MBS. Participating services need real time evidence that the models do not cost more than the reimbursement generated.
4. Linkages	<ul style="list-style-type: none"> ● Evaluation showed: <ul style="list-style-type: none"> ○ Connections between general practice and care navigation would be strengthened with part-time physical co-location (navigators or community nursing staff) across all local practices ○ Importance of investing resources in developing tools for data sharing and collection for reporting and feedback on performance.
5. Infrastructure	

Model 7. HealthOne NSW – co-location model

This model has been implemented in Blayney with the general practice co-located with community health in a single building with a shared reception. More than 20 visiting services operate from HealthOne Blayney.

Characteristics of regions

Population size for region:	Blayney 7,300	Distribution of population:
Area covered:		
General practices in region:	Blayney Family Medical Practice (co-located with Multi Purpose Service)	Other health services:
Hospitals in region:	Blayney Multi Purpose Service (co-located with general practice)	

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ³⁶
6. Governance, management and leadership	
7. Workforce	<ul style="list-style-type: none"> A Clinical Integration Coordinator is responsible for coordination of care.
8. Funding	
9. Linkages	<ul style="list-style-type: none"> Service consent occurs through a single process (patients do not register separately for each service).
10. Infrastructure	<ul style="list-style-type: none"> The local hospital/Multi Purpose Service is also located in the same building but with a separate entrance.

³⁶ Guidelines for developing HealthOne NSW Services. At: https://www.health.nsw.gov.au/healthone/Documents/honswguidedevelop_11.pdf
Australian Healthcare and Hospitals Association

Model 8. HealthOne NSW – hub and spoke model

This model has been implemented with Mt Druitt as the hub, an extension to the Mt Druitt Community Health Centre, with Willmot as a spoke site where joint clinics and outreach services are provided. general practitioners collaborate with local community health services and other providers, in part virtually, to better integrate services.

The model, which began in 2006, aims to improve co-ordination of care for three groups, older people with complex health needs, children and their families and disadvantaged communities—as well as to reduce unnecessary hospitalisations and ensure appropriate referral to community and specialist health services.

Characteristics of regions

Population size for region:	A total of 245 people were enrolled in the chronic and complex arm of HOMD program from its inception in September 2007 to 30 June 2010 125 active chronic and complex patients enrolled in programme in August 2011	Distribution of population:
Area covered:	Mount Druitt, Western Sydney	
General practices in region:		Other health services:
Hospitals in region:		

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ^{37, 38, 39}
1. Governance, management and leadership	<ul style="list-style-type: none"> The service was established after extensive community and stakeholder consultation. Alliances between professionals and providers were built to co-ordinate care, based on contractual relationships between otherwise separate partners. Local GP leaders and community services came together to drive the initiative, with joint governance arrangements put in place to ensure a single line of accountability.

³⁷ Guidelines for developing HealthOne NSW Services. At:

https://www.health.nsw.gov.au/healthone/Documents/honswguideddevelop_11.pdf

³⁸ Providing integrated care for older people with complex needs Lessons from seven international case studies. At:

https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/providing-integrated-care-for-older-people-with-complex-needs-kingsfund-jan14.pdf

³⁹ Report of the Evaluation of HealthOne Mount Druitt. At: <https://ses.library.usyd.edu.au/bitstream/2123/8988/4/HOMDevaloct13.pdf>

	<ul style="list-style-type: none"> • A steering committee was set up to oversee the programme, and included representatives from a range of organisations involved, including general practitioners.
2. Workforce	<ul style="list-style-type: none"> • Two general practice liaison nurses operate across the locality and connect with up to 90 local primary care physicians. • Additionally, there is involvement by community health staff, counselling, other allied health services and hospitals. • General practice liaison nurses are HealthOne employees, while the general practitioners, community health nursing, nursing specialists, allied health and in some instances outside providers that support HealthOne clients in their own homes, are part of a broader multidisciplinary team.
3. Funding	<ul style="list-style-type: none"> • New South Wales state treasury provided funding for capital projects that were used to build a community hub from which HealthOne services were run.
4. Linkages	<ul style="list-style-type: none"> • Contractual integration between LHD and services – supports both vertical and horizontal integration. • Linkage model connecting to multiple care providers – no formal integration.
5. Infrastructure	

Model 9. HealthOne NSW – virtual integration model

In this model, separately located providers function as a team through electronic and other forms of communication. It is proposed for integrating services where relationships are linked by shared goals. No public information found about implementation.

Characteristics of regions

Population size for region:	Distribution of population:
Area covered:	
General practices in region:	Other health services:
Hospitals in region:	

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ⁴⁰
1. Governance, management and leadership	
2. Workforce	
3. Funding	
4. Linkages	
5. Infrastructure	

⁴⁰ Guidelines for developing HealthOne NSW Services. At: https://www.health.nsw.gov.au/healthone/Documents/honswguideddevelop_11.pdf
Australian Healthcare and Hospitals Association

A.2 International models

Model 1. Pinnacle Midlands Health Network (New Zealand)

The Pinnacle Midlands Health Network is made up of over 85 practices, spread across the Waikato, Lakes, Taranaki and Tairāwhiti District Health Board (DHB) regions.

The Health Care Home model of care began operation in three practices within the Network (NorthCare Grandview, NorthCare Pukete and NorthCare Thomas Road) in 2010; there are now 17 practices who have adopted the model. Partnering in a collaborative saw the model expand to over 128 practices. Its origins drew on the patient-centred medical home model of care from the US.

Characteristics of proposed regions

Population size for region:	Nearly 500,000	Distribution of population:	300 miles long and 30 miles wide
Area covered:	Gisborne, Taranaki, Rotorua, Taupo-Turangi, Thames-Coromandel and the Waikato		
General practices in region:	85–100 practices	Other health services:	-
Hospitals in region:			-

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ^{41,42,43}
1. Governance, management and leadership	<ul style="list-style-type: none"> • The Pinnacle group is comprised of a number of entities, that has grown over time, with all being not-for-profit: <ul style="list-style-type: none"> ○ <i>Pinnacle Incorporated</i> is the parent entity. Membership is comprised of all GPs in network practices. ○ <i>Pinnacle Midlands Health Network</i> is a subsidiary company providing the core support and primary health care activities. ○ <i>Midlands Regional Health Network Charitable Trust</i> is the primary health organisation (PHO) that holds the relationship with one or more district health boards (DHBs), receiving set funding from the government to support the delivery of a range of health services. The key founding partners are Pinnacle Incorporated, a Maori primary care health provider, and a community-based health and social services provider. ○ <i>Ventures</i> leads the innovation and commercial activities.

⁴¹ Pinnacle Incorporated. At: <https://www.pinnacle.co.nz/about>

⁴² Ernst & Young Health Care Home Review 2016/2017. At: <http://www.healthcarehome.co.nz/wp-content/uploads/2017/03/EY-Health-Care-Home-Evaluation-2017.pdf>

⁴³ Ernst & Young Health Care Home evaluation - updated analysis; April-September 2017. At: <http://www.healthcarehome.co.nz/wp-content/uploads/2018/05/EY-HCH-Evaluation-April-18.pdf>

	<ul style="list-style-type: none"> • The structure ensures the purpose of each organisation remains clear. • GP membership of the parent company ensures a grass roots, GP led focus. • As a PHO, the Trust enters into funding agreements with the Government which includes: <ul style="list-style-type: none"> ○ Jointly determining service priorities and models of care ○ Driving clinical-led service redesign ○ Provision or contracting of services. • There is recognition that implementation is a journey, taking 18-24 months to implement – a significant investment of time and resources is required to reach the point where noticeable change occurs in a practice.
2. Workforce	<ul style="list-style-type: none"> • The model for general practice has been redesigned to use the workforce more effectively and efficiently: <ul style="list-style-type: none"> ○ Patient Access Centre provides an extended practice receptionist team, with the team drawn from dedicated staff in each of the HCH practices. Staff take all calls and look after administration (appointments, repeat prescriptions, invoices, follow up letters, managing recalls and reminders), transferring patients requiring clinical advice to the practice team. ○ Timely unplanned care is managed via telephone triage at the beginning of each day with a GP or nurse, not a receptionist. Care may be managed remotely or a face to face appointment arranged to ensure patients with the greatest need are seen. ○ Proactive care of patients with complex needs is coordinated by an interdisciplinary team led by a practice nurse. Appointments, reviews, specialist care and social care over 6-12 months are scheduled. Patients have self-management plans and a named care coordinator to monitor the delivery of the plan and the patient experience. ○ Routine and planned care occurs through phone and video consultations, shared medical appointments and group consultations (e.g. supporting self-management, peer support) ○ Business efficiency is promoted through 15-minute whole of practice morning huddles, virtual displays of quality performance, adopting LEAN methodologies and culture. • Practice layout is consistent, with working spaces outside consulting rooms, encouraging team work, interprofessional consultation and collaboration. • Active development of new roles in the practice to re-allocate tasks that might otherwise be done by GPs and nursing staff. • The pipeline of GPs stimulated through practices becoming known for quality experiences during training.
3. Funding	<p>District Health Boards provide funding to general practices:⁴⁴</p> <ul style="list-style-type: none"> • via primary health organisations (PHOs) through capitation funding agreements (most significant proportion), as well as for primary mental health, pay for performance, additional funding for, e.g., after hours care; and

⁴⁴ Primary health care services funding and contracting. At: <https://www.health.govt.nz/our-work/primary-health-care/primary-health-care-services-funding-and-contracting>

	<ul style="list-style-type: none"> • directly for general medical services and immunisations. <p>Practices implementing the HCH model receive:</p> <ul style="list-style-type: none"> • Non-recurrent funding: A practice embarking on the HCH change receive up to \$16 per patient enrolled to support change and infrastructure set-up costs. • Recurrent funding: The HCH funding flows require practices to change their management of cash flows. Lower overall income from GP co-payments are generated under the HCH as virtual care and extended consults are introduced. Additional costs are introduced in the practice including Patient Access Centre (the telephony service) and new staff roles and staff ratios. These costs are, however, largely offset through increased flexible funding, and some increase in co-payments from virtual care and increased nursing co-payment income. • Patient co-payments are published for standard GP consultations.
4. Linkages	<ul style="list-style-type: none"> • A Patient Information System (<i>Indici</i>) enables specialist and community providers to connect virtually to a single patient record to deliver integrated care. • A Patient Portal allows patients to access their core medical information and lab results, send queries, request repeat prescriptions and track their healthcare goals — all online. Patients can also email their GP or nurse via the portal, reducing the need for face to face consultations or phone calls.
5. Infrastructure	<ul style="list-style-type: none"> • Federated telephony to enable Patient Access Centre (an extended practice receptionist team). • A cloud-based practice management system to enable the Patient Information System. • A web-based portal infrastructure to enable the Patient Portal. • A standardised practice set up – consulting rooms, communal spaces, and additional patient-free working spaces to encourage consultation and collaboration between GPs and other professionals.

Model 2. NHS Primary Care Networks proposed (UK)

The intent of primary care networks (PCNs) is to bring general practices together to work at scale. They were formally established from 1 July 2019.⁴⁵

Characteristics of proposed regions

Population size for region:	30,000–50,000 patients	Distribution of population:	
Area covered:	~1,260 networks across England (so averaging 100 sq km each?)		
General practices in region:	6,993 GP practices in England (so averaging 5-6 per network?)	Other health services:	
Hospitals in region:			

Strategies addressing the essential requirements for sustainable primary health services

	<p>Strategies implemented:</p> <p>For detailed information, access⁴⁶</p>
1. Governance, management and leadership	<ul style="list-style-type: none"> • Established by the National Health Service (NHS) to put a more formal structure around the way GP practices work together, without creating new statutory bodies. • Practices are not mandated to join the network, but joining provides access to significant extra funding. Where practices do not join, funding will be diverted to neighbouring networks to provide services to those patients. • Practices will sign a network agreement, binding how they will discharge their responsibilities as part of the network. In their first iteration, agreements capture: <ul style="list-style-type: none"> ○ Governance and decision-making arrangements ○ New roles and employment arrangements ○ New funding arrangements ○ Management and back office support arrangements ○ New service delivery arrangements. • Ambition for PCNs to be the mechanism by which primary care representation is strong in integrated care systems, with accountable clinical directors linking general practice and the wider system. • It is recognised that PCNs will continue to evolve ways of working in collaboration with local providers.

⁴⁵ Primary care networks: a quiet revolution. NHS Confederation; July 2019. At: <https://www.nhsconfed.org/-/media/Confederation/Files/Publications/Documents/Community-PCN-FINAL-v4.pdf>

⁴⁶ The primary care network handbook, BMA; 2019. At: <https://www.networks.nhs.uk/news/the-primary-care-network-handbook>

2. Workforce	<ul style="list-style-type: none"> • The wider range of primary care services will require a wider set of staff roles. • Designated funding will be available for employing specific allied health roles (pharmacists, social prescribing workers), with networks deciding numbers of each type of staff required.
3. Funding	<ul style="list-style-type: none"> • Funding will be provided to deliver a set of seven national service specifications: <ul style="list-style-type: none"> ○ structured medication reviews ○ enhanced health in care homes ○ anticipatory care (with community services) ○ personalised care ○ supporting early cancer diagnosis ○ Cardiovascular disease case-finding ○ locally agreed action to tackle inequalities.
4. Linkages	<ul style="list-style-type: none"> • PCNs will be expected to think about the wider health of their population, delivering holistic care bases on needs assessments. • It is expected that PCNs will support development of integrated community-based teams.
5. Infrastructure	

Model 3. Small Isles Medical Practice, Isle of Eigg (Scotland)

A model introduced in 2014. When the resident GP on the Isle of Eigg passed away in 2012, locum doctors were used to manage the GP practice, while community engagement occurred to develop a new model.

Characteristics of proposed regions

Population size for region:	153	Distribution of population:	Nearest island is one hour by boat from the mainland
Area covered:	4 remote islands: Canna, Eigg, Muck and Rum 470 sq km in total; 163 sq km on land		
General practices in region:	1	Other health services:	-
Hospitals in region:	-		-

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ^{47,48}
1. Governance, management and leadership	<ul style="list-style-type: none"> Led by 2 doctors on the Isle of Skye, with further support from community health services.
2. Workforce	<ul style="list-style-type: none"> 4 health and social care support workers are based within local communities on each island. They are trained to deliver care such as wound dressing, taking blood, medicine dispensing support and toenail cutting. The support workers provide continuity of care, working within a wider multidisciplinary team. GPs visit the islands on a rotating basis, twice a week. Telehealth used between these times to access services based on Isle of Skye, without necessitating travel.
3. Funding	<ul style="list-style-type: none"> NHS.
4. Linkages	<ul style="list-style-type: none"> The Red Cross delivered basic first-aid training to residents. The Scottish Ambulance Service worked with communities to develop a first responder scheme.
5. Infrastructure	<ul style="list-style-type: none"> The former doctor's house was converted into a health and wellbeing centre, with a consulting room, waiting room, dispensary, office, stores and staff accommodation.

⁴⁷ Innovative models of general practice, The King's Fund; 2018. At: https://www.kingsfund.org.uk/sites/default/files/2018-06/Innovative_models_GP_Kings_Fund_June_2018.pdf

⁴⁸ New model of GP provision on Small Isles. At: <https://www.nhshighland.scot.nhs.uk/News/Pages/NewmodelofGPprovisiononSmallIsles.aspx>

Model 4. Mount View Practice, Fleetwood (England)

Faced by the loss of GPs, and difficulty recruiting new GPs, the practice developed a model that could release the GP from certain tasks, freeing up their time to see more complex patients.

Characteristics of proposed regions

Population size for region:	25,939 (11,700 active patients)	Distribution of population:	Suburban
Area covered:	Suburban		
General practices in region:	3 (but many more within 20 mins drive)	Other health services:	
Hospitals in region:			

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ⁴⁹
1. Governance, management and leadership	<ul style="list-style-type: none"> Practice-led.
2. Workforce	<ul style="list-style-type: none"> The practice developed an 'acute access team' consisting of a paramedic practitioner, a nurse practitioner and a clinical pharmacist and an on-call general practitioner who coordinates care and provides support when required.
3. Funding	
4. Linkages	
5. Infrastructure	<ul style="list-style-type: none"> All healthcare providers have full access to the patient's notes. On-call general practitioner can be contacted for advice by telephone or video link, allowing the general practitioner to see and interact directly with the patient to aid safe management.

⁴⁹ Innovative models of general practice, The King's Fund; 2018.
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Model 5. Vulnerable practices program, St Luke's Primary Care Centre (England)

This program was developed in response to a reduction in general practitioners from 12 to 8 over 2 years, and unable to recruit to the positions, remaining general practitioners struggled to carry the higher workload.

Characteristics of proposed regions

Population size for region:	15,498 (suburb of Duston within Northampton with a population of ~215,000)	Distribution of population:	Suburban
Area covered:	Suburban		
General practices in region:	2	Other health services:	
Hospitals in region:	1 in Northampton		

Strategies addressing the essential requirements for sustainable primary health services

	Strategies implemented: For detailed information, access ⁵⁰
1. Governance, management and leadership	<ul style="list-style-type: none"> Practice-led.
2. Workforce	<ul style="list-style-type: none"> Recruited additional non-general practitioner staff to the practice, including an Advanced Nurse Practitioner. Enabled practice manager to identify and implement to reduce existing workload and redirecting unnecessary work. Restructured roles to support GPs to focus on long-term conditions.
3. Funding	<ul style="list-style-type: none"> NHS.
4. Linkages	
5. Infrastructure	

⁵⁰ Vulnerable practices programme – St Lukes Primary Care Centre, Midlands and East. At: <https://www.england.nhs.uk/gp/case-studies/st-lukes-primary-care-centre/>

Model 6. The Transalpine Health Service Model

The Transalpine Health Service model has been designed to provide safe, high-quality hospital care, as close to home as possible, for the rural West Coast community on New Zealand's South Island. The model has allowed core acute 24/7 services at the small Grey Base Hospital to be provided by West Coast Rural Hospital doctors with generalist skills across specialties, working with West Coast- and Christchurch-based specialists. Services to West Coast patients are provided in the most appropriate hospital using a 'one service, two sites' approach. An effective training structure and career path for rural generalism has been important in the success of this model.

Characteristics of proposed regions

Population size for region:	33,000	Distribution of population:	300 miles long and 30 miles wide
Area covered:	Grey Base Hospital		
General practices in region:		Other health services:	_____
Hospitals in region:	Grey Base Hospital		

Strategies addressing the essential requirements for sustainable primary health services

	<p>Strategies implemented:</p> <p>For detailed information, access⁵¹</p>
1. Governance, management and leadership	<ul style="list-style-type: none"> • Joint Chief executive for West Coast District Health Board and Canterbury District Health Board. • Fully integrated 'one service, two sites' approach. • Service model framework agreed to by chief executive, senior management and both district health boards for paediatric services, orthopaedic services, the emergency department and mental health, with general medicine, women's health surgery and anaesthetists working towards implementing the model. • Shared clinical governance, including identical standards and shared protocols, policies and procedures and morbidity and mortality processes.
2. Workforce	<ul style="list-style-type: none"> • Joint appointments of specialist paediatric staff across districts. • An effective training structure embracing employment of Rural Hospital Medicine doctors at Grey Hospital, and some also working in general practice and Westport Community Hospital. • Engagement of the workforce in designing workforce changes required—including a senior clinician working group • Shared professional education. • A collaborative approach to recruitment and training. • Introduction of post fellowship positions at Grey Hospital.

⁵¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6460203/>

3. Funding	<ul style="list-style-type: none"> • New roles and greater investment in training have been achieved within available funding, assisted by a reduction in locum costs. This independence from extra central funding has moved the system away from a series of pilots that then struggle for ongoing funding.
4. Linkages	<ul style="list-style-type: none"> • Rurally focused urban specialists (RUFUS) liaison roles developed to provide integration of clinical and service development, and to foster the shared service approach between the sites. • The rural hospital medicine training programme is governed by the Rural Hospital Medicine Faculty of the Royal New Zealand College of General Practitioners. • By training registrars at Grey Hospital and linking their tertiary centre training requirements (such as emergency medicine, intensive care medicine and paediatrics) to Christchurch rotations, the RHM doctors produced are well versed in how the service works. They are more likely to stay on the West Coast as they have developed linkages into the community while they are training.
5. Infrastructure	<ul style="list-style-type: none"> • Telehealth, videoconferencing and IT connectivity investment.