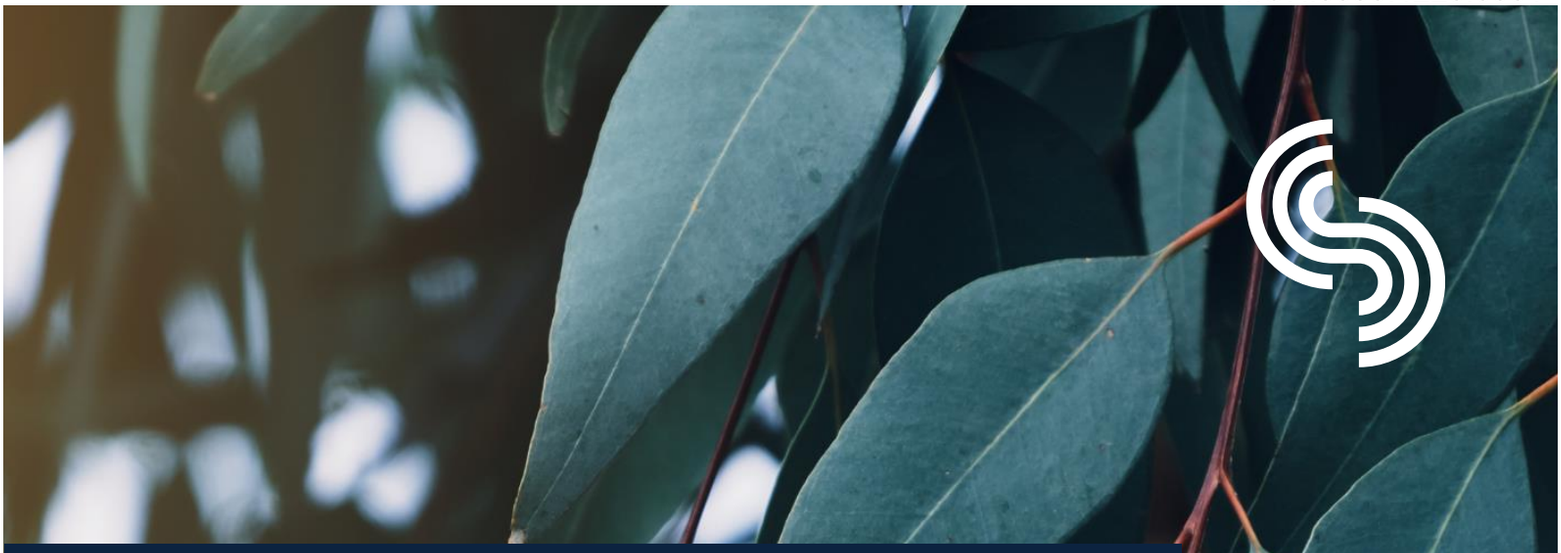
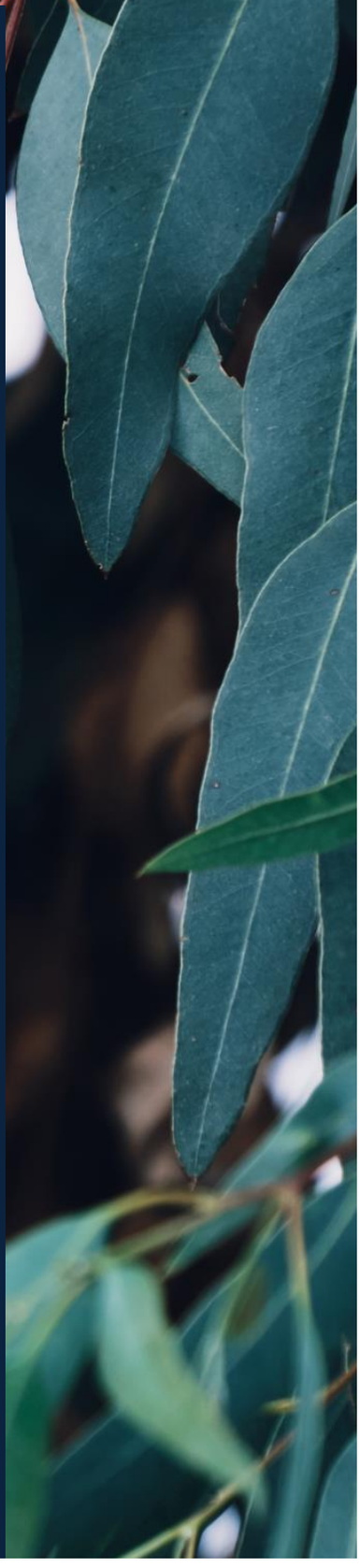


A Scalability Assessment for the Regional Health Division of the New South Wales Ministry of Health

Collaborative Care & Place-based Planning Approaches



SaxInstitute

A report by the Sax Institute for the Regional Health Division of the New South Wales Ministry of Health. December 2023.

This report was prepared by: The Sax Institute. December 2023.

Enquiries regarding this report may be directed to:

Dr Alice Knight
Director, Evaluate
The Sax Institute
www.saxinstitute.org.au
alice.knight@saxinstitute.org.au
Phone: +61 2 9188 9577

Suggested Citation:

The Sax Institute. Collaborative Care and Place-based Planning Approaches: A Scalability Assessment by the Sax Institute (www.saxinstitute.org.au) for the Regional Health Division of the New South Wales Ministry of Health, Sydney, 2023.

A report by the Sax Institute for the Regional Health Division of the Ministry of Health.
December 2023.

This report was prepared by The Sax Institute, with gratitude for the support of the NSW Regional Health Division of the Ministry of Health and the Rural Doctors' Network.

Contents

Table of Figures and Tables

Glossary & Abbreviations

ACCHO: Aboriginal Community Controlled Health

AH&MRC: Aboriginal Health & Medical Research Council

AMS: Aboriginal Medical Service

DTBC: Deliberate Team-Based Care

GPs: General Practitioners also

IMOC: Innovative Models of Care grant scheme

IT: Information Technology

LHD: Local Health District

NGOs: Non-Government Organisations

NSW: New South Wales

4Ts model: A model of healthcare within the Collaborative Care Program based in regional NSW and named after four communities in Central Western New South Wales (Tullamore, Trangie, Tottenham, and Trundle)

PHN: Primary Health Network

Place-based planning: An approach that takes into account the specific context of a geographic location through collaboration and shared decision making with the local community

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

RHD MoH: Regional Health Division at the Ministry of Health

RDN: Rural Doctor's Network

SME: Subject Matter Experts

WHO: World Health Organization

Executive summary

Background

The Regional Health Division of the Ministry of Health (the RHD MoH) commissioned the Sax Institute to complete a scalability assessment of Collaborative Care and place-based planning approaches. Collaborative Care can be considered an ***approach*** that can be put in place to support communities to develop solutions to local primary care challenges, rather than a prescriptive ***model of care*** that can be implemented similarly in different communities. A critical element of the approach is its in-built flexibility, which enables intervention at the various stages of development of site-specific models of care; from the initial planning stage, through to a model being implemented as 'business-as-usual' in a community. This flexibility ensures the approach can support communities at different stages of readiness for a model. The following report describes the aims, background, methods, and findings of the Sax Institute's scalability assessment.

Aims

This scalability assessment aims to:

1. Understand how the Collaborative Care approach works and the factors that support its success
2. Understand the role of RHD MoH in scaling the approach.

Summary of Methods

Two key data sources were used:

1. A rapid thematic review of published literature on place-based planning approaches in Australia and internationally. The review focussed on enablers and barriers of implementation and scalability.
2. Consultations with:
    a. Individuals involved in the development of the Collaborative Care Program
    b. Individuals involved in the development of one of the five specific models of care
    c. Individuals with knowledge of the NSW Health system and regional NSW context.

The ExpandNet/World Health Organization's (WHO) published framework[1], which outlines a process for scaling up, was used to organise and align emerging themes from both the review and the consultations[1].

[1] Beginning with the end in mind: planning pilot projects and other programmatic research for successful scaling up, World Health Organization, 2011

Key Findings

When examining how Collaborative Care and other place-based planning approaches function, a total of four distinct themes, each comprised of 3-4 subthemes, were identified from stakeholder consultation (n=22 people) and literature review (n=17 publications). These themes and subthemes are summarised in Table 1.

Table 1. Themes and Subthemes

Theme	Subtheme
1. Stakes / Interests	**1A:** Ensure a multidisciplinary, whole-of-system, coordinated approach (Invite everyone to collaborate)
	1B: Identify and articulate mutual interests (What is the benefit of collaborating?)
	1C: Declare and manage competing and conflicting interests (What other agendas could put collaboration at risk?)
	1D: Appoint an impartial intermediary to facilitate the collaboration (Who would treat everyone equally?)
2. Trust / Time	**2A:** Adjust project timeline to accommodate historical trust and distrust between collaborators, facilitators, and communities (How ready are we for collaboration?)
	2B: Facilitate the establishment of trust through transparent communication and consistent action over time (Always say what you will do, and do what you have said)
	2C: Prevent or manage the rapid breakdown of trust (How can we prevent or quickly resolve problems?)
3. Power / Influence	**3A:** Identify a committed local health service with sufficient capacity and flexibility for innovation (Who makes decisions about local health services?)
	3B: Identify complementary local resources and leadership (Who makes decisions about the resources that could help the health service?)
	3C: Structurally counter power imbalances between collaborators, facilitators, and communities (How can we ensure everyone contributes to decisions?)
4. Knowledge / Expertise	**4A:** Recognise local knowledge of resources and needs as essential to success (Learn the route from local drivers familiar with the roads)
	4B: Apply complementary technical and subject matter expertise to co-design solutions (Share or source an engineer's understanding of the car)
	4C: Upskill in cultural safety and support, particularly for First Nations communities (Learn how to include everyone's expertise)

When examining the NSW context into which the approach might be scaled, participants with broader experience in the NSW context (n=4) provided advice on how to be more inclusive or engaging, especially with First Nations communities. Suggestions were provided for ways existing NSW services could be leveraged, and how redundancies might be streamlined to enable the approach to be scaled

up across the state. The data also highlight the importance of allowing sufficient time and resources to successfully navigate through existing relationships.

Recommendations

The findings of this report point to the RHD MoH playing the role of the facilitator in a Collaborative Care approach. This could mean facilitating the establishment of a new collaboration or stepping in to support an existing collaboration. This facilitation role will likely be more direct and resource intensive when seeking to establish new collaborations, but there may be times during the life of a collaboration when there is minimal to no involvement required and the role of the RHD MoH is to support and empower people and organisations to actively take on the role of a facilitator.

In short, the role of the facilitator is to establish strong scaffolding for the building of a Collaborative Care approach. This scaffolding can be dis-assembled, but only once the foundations for a strong and sustainable collaboration have been established. The collaboration may need attention down the track, which may require the scaffolding to be re-assembled, and the facilitator should be available and willing to offer support should remedial action be necessary.

We offer the following recommendations, grouped by theme, to support the RHD MoH's understanding of what their role, as the facilitator of a Collaborative Care approach in NSW, could be:

Stakes / Interests

- When a new collaboration is being established, seek to identify and invite all relevant local health and community stakeholders (collaborators) to collaborate from the outset. Relevant collaborators could be identified via consultation with key individuals familiar with local resources, politics, and history of the local area, or via a snowball recruitment of groups or individuals who local community members believe should or could be involved because they have a personal or professional interest, or stake, in the outcome
- In the early establishment phase of a collaboration, clearly articulate the benefits of collaboration, encourage/foster collaborators willingness to commit in-kind time and resources, and emphasise that mutual or conflicting interests should be identified and communicated early as a foundational building block for successful collaboration
- Support the establishment of processes from the outset that allow collaborators to reflect on, formally declare and then manage, their objectives and interests in a safe and transparent manner, such as disclosure to an impartial intermediary where interests may be confidential or sensitive. These processes should be embedded in the routine operations of the collaborative so collaborators can regularly reflect on and declare any emerging interests throughout the life of the project
- Where possible, identify and support the appointment of an impartial intermediary to coordinate the collaboration (the coordinator). Specifically, someone who is not an employee or representative of the interests of any specific collaborator
- Support the development of recruitment processes for the coordinator role that emphasise the need for transparency and impartiality, and strong community engagement, leadership, and an 'arms-length' approach
- Given the importance of the coordinator role, consider not proceeding with a collaboration until a suitable appointment has been made.

Trust / Time

- Be aware of longstanding histories of competition between potential collaborators which could impact collaborative efforts. Inversely, there may be a long history of successful collaboration which could be leveraged. These preconditions will affect project timelines and budgets and therefore community readiness to participate
- Allocate time for the establishment of trust when planning collaboration timelines and budgets. If there are histories of distrust in communities, we recommend a timeline of five to seven years, and no less than three years
- Manage expectations of what can be achieved in a particular timeframe with a certain amount of funding to avoid the erosion of trust in the funder when, and if, the funding comes to an end
- Appoint coordinators with established community trust, and (where possible) ensure they are not employed by one of the collaborating parties
- Maintain integrous, transparent communication from facilitators regarding procedures
- Publicly communicate, recognise and celebrate collaborators and what has been achieved (e.g. via the media)
- Ensure evaluation of outcomes and implementation is considered at the outset of a collaboration to enable robust data collection and rigorous evaluation in the future
- Where time may not allow for trust to be developed, enshrine and communicate the values of equality and collaboration in project management and governance processes. For example, Terms of Reference, policies, funding criteria, data collection processes, and recruitment criteria
- Support the establishment of trust through transparent communication and consistent action, particularly when newly introduced collaborators are working together for the first time, or when there is distrust or broken trust between collaborators, or with the facilitator
- Proactively manage breaches of trust between collaborators by “refereeing” misaligned behaviour, and use the above governance processes (e.g. Terms of Reference) as a mechanism for managing misaligned behaviour
- Consider how to achieve balance between ‘not just meeting for meeting’s sake’, something government stakeholders traditionally value, and ensuring enough space and time for place-based ‘bottom-up’ processes to take effect.

Power / Influence

- Seek to identify a local lead health organisation (e.g., an LHD, private practice or AMS) with willingness, capacity, and ability to action a proposed health service proposal
- This lead organisation will need to have the power to alter policies or practice where appropriate to facilitate a health service innovation, but also be willing to work with community
- Identify local organisations or individuals with resources to support health service efforts with complementary resources (e.g., housing, or rental support from local council, financial or in-kind contributions from other organisations). These organisations should also be willing to work collaboratively and have power to alter policies or practice where appropriate
- Seek to structurally counter power imbalances by formalising self-determination and bottom-up decision-making in governance processes, and ensure marginalised groups and individuals are represented at upper levels of accountability and power
- Consider contributing funding to overcome imbalances in financial power. For example, if a smaller community organisation develops and is willing to deliver an innovative solution, formally acknowledge and support that group with funds that will likely protect their idea or

efforts from being duplicated by a more financially powerful party. If funds are not available, consider leveraging the funds of that more powerful party as a named funder, so that mutual interests are maintained
- Investigate whether traditional structures at a state level could be leveraged to complement collaborative approaches, such as following the Collaborative Care approach to support local communities to develop local proposals, before connecting these proposals to traditional requests for funding.

Knowledge / Expertise

- Seek to identify local individuals or groups familiar with the political history, relationships, and resources within and beyond the community
- Prioritise and invest in consulting with community, whether through traditional data collection (e.g., surveys, asset mapping) or community engagement methods (e.g., shared meals, informal coffee meetings and formal meetings)
- Seek to support community health service literacy to codesign heath solutions
- Source local or external subject matter or technical expertise to address identified needs (e.g., financial advice to redesign funding, technological advice to develop technological solutions, communications advice to develop public health messaging, health service campaigns or communication with community, operational advice to develop healthcare innovations, and evaluation advice to develop and embed evaluation at the outset of a collaboration)
- Facilitate linkages to training for collaborators in safe and appropriate engagement with First Nations communities. Prioritise locally designed training courses where available, or investigate the co-design of new training courses
- Proactively establish safe communication channels for First Nations participants, including establishing escalation mechanisms, such as to the Aboriginal Health and Medical Research Council (AH&MRC) of NSW, for consultation and support at a state level where required
- Seek to leverage existing efforts in NSW to support integration of collaborative innovations as ‘business-as-usual’ across the state, particularly as multiple collaboratives may develop in the remit of a particular PHN or LHD.

Background

Healthcare Challenges

Due to difficulty attracting and retaining General Practitioners (GPs) in rural, regional, and remote Australia and the impending retirement of the current medical workforce, it is projected that as many as 41 towns in the Western New South Wales (NSW) region alone face imminent primary healthcare collapse, with no GP in their community, by 2029[2]. Primary care challenges impact NSW Health as regional, rural and remote GPs often serve as the visiting medical officer in NSW Health Hospitals, and there can be increased emergency department presentations and flow-on effects in aged care when there is inadequate primary care in a NSW community. The need to effectively address primary care 'market failure' in regional, rural, and remote NSW is thus a highly complex and pressing concern for the state of NSW.

Existing Solutions

To equip the state to respond effectively to the potential for primary care 'market failure' at multiple and varied sites within the next few years, it may be useful to examine and learn from existing responses to primary care market failure in NSW. One such process is a place-based planning approach[2], of which a prominent example in NSW is the Collaborative Care Program. The Collaborative Care Program was piloted by the NSW Rural Doctors Network (RDN) and emerged from a longstanding town-based planning approach[3,4]. The Program works with local health professionals and communities to create access to primary healthcare that fits their needs.

From 2021-2023, the RDN was Commonwealth-funded to "carry out five proof-of-concept pilots" of Collaborative Care in NSW via the Innovative Models of Care (IMOC) grant scheme, which aims to trial, learn from or evaluate new multidisciplinary primary care models in rural and remote Australian communities[5]. The potential scalability of the approach used by the Collaborative Care Program is yet to be determined. The RDN describes Collaborative Care Program as involving the following approach[4]:

1. **Investigate needs:** What do we know about the primary health care needs in these communities?
2. **Prioritise needs:** Which of these needs should we tackle first?
3. **Co-design solutions:** Decide together how services could be made easier for local communities to access.
4. **Implement solutions:** Put the plan into practice and make sure communities know what to expect.
5. **Reflect & learn:** Look at what is working well and where improvements can still be made.

[2] For the purpose of this Scalability Assessment, we define place-based planning as an approach that takes into account the specific context of a geographic location through collaboration and shared decision making with the local community.

The RDN's visual representation of their Collaborative Care Program is supplied in Figure 1.

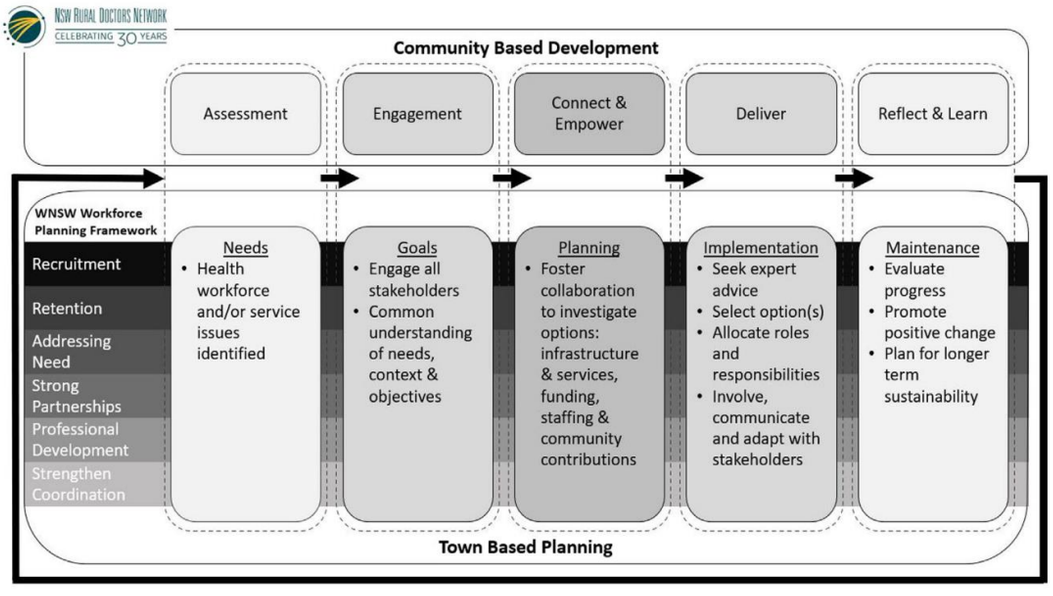


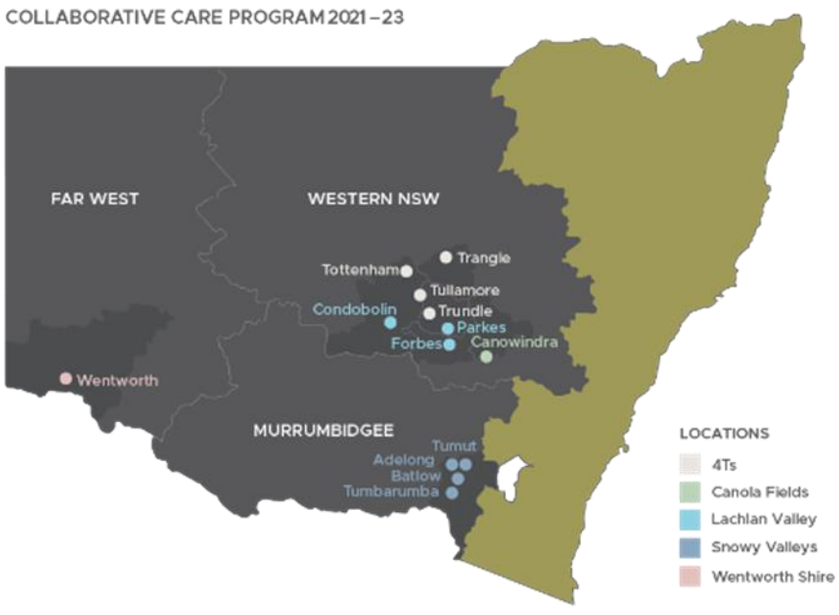
Figure 1. RDN's published description of the Collaborative Care Program[3].

The Collaborative Care Program can therefore be described as an ***approach*** that can be put in place to support communities to develop solutions to local primary care challenges, rather than a prescriptive ***model of care*** that can be implemented similarly in different communities. A critical element of the approach is its in-built flexibility, which enables intervention at the various stages of development of site-specific models of care; from the initial planning stage, through to a model being implemented as 'business-as-usual' in a community. This flexibility ensures the approach can support communities at different stages of readiness for a model.

The 2021-2023 IMOC grant funded the trial of a Collaborative Care Program that used a Collaborative Care approach to support five models of care, each at different stages of maturity and development:

(1) a Local Health District (LHD)-led central administration model of care (the '4Ts' model),
(2) a GP-led Deliberate Team-based Care (DTBC) model (Canola Fields)
(3) an Aboriginal Community Controlled Health (ACCHO)-led shared GP model (Wentworth Shire), and
(4) the development of new models of care at two additional geographical sites (Lachlan Valley and Snowy Valleys).

Information about each model is summarised in **Figure 2**.



	New South Wales, Australia "Collaborative Care Program/Approach": a community-centred approach to addressing the primary health care challenges in remote and rural NSW.				
"Project": Site-specific primary care model under trial/ development, geographically named	**Wentworth Shire**	**4Ts**	**Canola Fields**	**Lachlan Valley**	**Snowy Valleys**
"Site": Geographical location	 **Far Western NSW:** Wentworth, Dareton, Buronga and Gol Gol	 **Western NSW:** Tottenham, Tullamore, Trangie, and Trundle	 **Western NSW:** Canowindra and its surrounding towns	 **Western NSW:** Condobolin, Forbes, and Parkes	 Towns of the **Snowy Valleys Local Government Area/ Murrumbidgee area:** Tumut, Tumbarumba, Batlow and Adelong
Project/ model description	ACCHO-led (Coomealla), shared multidisciplinary primary care clinic, salaried utilising 19(2) and 19(5) exemptions.	An LHD-led (WNSWLHD), central administration, single-employer mechanism to deliver primary care via networked primary care clinics and telehealth services across four communities, utilising 19(2) exemption.	A GP-led (Dr Ros Bullock) deliberate, multidisciplinary team-based care (DTBC, a variation of integrated care) model for chronic disease management.	Regional primary health workforce needs assessment and co-design of a 5-year health workforce strategy / development of a shared GP model of care across the region.	Co-design of a shared allied health/medical appointment model for chronic disease management (diabetes).
Maturity	Model under trial, responding to market failure in 2020	Model under trial, developed in response to market failure in 2018 using methods that pre-dated the Collaborative Care approach	Model evaluation for a model trialled since 2018	Model under development	Model under development

Figure 2. Definitions and descriptions of the Collaborative Care approach and the five funded models. Photo and map source: RDN[4].

Although no formal evaluations of effectiveness of these models of care have been published, anecdotal evidence suggests that they are addressing at least some of the primary care challenges in regional, rural, and remote NSW. Given this, and the pressing nature of primary healthcare challenges in NSW, the RHD MoH commissioned the Sax Institute to undertake a scalability assessment of the Collaborative Care approach.

Understanding how to successfully scale Collaborative Care approaches supports RHD MoH to meet Priority 5 of the NSW Regional Health Strategic Plan 2022-2032 Priority Framework, '*Expand integration of primary, community and hospital care*, includes a target to '*Double the number of collaborative care models across regional local health districts by trialling and expanding on effective models*.' It also supports recommendations 10 and 43 from the NSW MoH Response to the Regional Health Inquiry:

- Recommendation 10 is for the NSW Government to work with the Federal Government to develop and trial models that support communities where existing rural health services do not meet community needs, and
- Recommendation 43 is for the NSW Government to provide relevant data to inform needs assessment and implementation of Local Health Plans.

Aims

This scalability assessment aims to:

1. Understand how the Collaborative Care approach works and the factors that support its success
2. Understand the role of RHD MoH in scaling the approach.

Methods

The following section provides a detailed outline of the methods for the scalability assessment, finalised in close consultation with members of the RHD MoH.

Rapid thematic review of the literature

A rapid thematic review was conducted to examine models developed from place-based planning[3] in Australia and internationally. The review included searching national and international peer-reviewed publications and grey literature for descriptions and evaluations of models developed from place-based planning in rural or regional locations. The review sought to answer the following research questions:

1. What models developed from place-based planning have been implemented in NSW, Australia and internationally, and what are their characteristics (i.e., context, scale, coverage)?
2. What were the factors (including policies, policy frameworks, programs, process factors and funding mechanisms) that became barriers or enablers to the sustainability, feasibility, acceptability, equity, scalability, and cost of these models?

PubMed and Scopus databases were systematically searched in June 2023. Titles, abstracts, and keywords within the electronic databases were searched. Three related strategies were used to search the literature:

1. A search for place-based planning, or models addressing chronic conditions in rural areas which were developed from place-based planning, covering the past five years (2018-2022)
2. An equivalent search for the five years prior to that (2013-2017), which focused only on Australia
3. A search covering 2017 – 2023 focused on Rural Area Community Controlled Health Organisations.

Records identified through database and grey literature searches were collated and screened using the Covidence reference management software[6]. All duplicates were removed. To select the relevant papers, the eligibility criteria presented below was used.

Inclusion Criteria

1. Descriptions and evaluations of the approach, or models developed from the approach, in rural and regional locations
2. Focused on the approach or models of primary care services developed from the approach
3. Reported on mechanisms that enabled the approach, or models developed from the approach
4. Countries and jurisdictions within scope were: Australia, New Zealand, Canada, United Kingdom

[3] For the purpose of the review, place-based planning was defined as an approach that takes into account the specific context of a geographic location through collaboration and shared decision making with the local community.

5. Peer reviewed and grey literature using a range of methodologies (e.g., quantitative, qualitative, mixed methods). Descriptive reports (e.g., grey literature evaluation reports)
6. Papers published in the last five years (though exceptions were made for papers known to be of particularly high relevance)
7. English-language publications only.

Exclusion Criteria

1. Papers describing a model which focussed on prevention or promotion
2. Papers describing a model which focussed on integrated care without place-based planning
3. Protocol papers
4. Expert opinions and book chapters
5. Specific sub-populations e.g., veterans
6. Review papers.

Further information on the search strategy can be found in Appendix A.

Data extraction was initially trialled with three papers, and subsequently involved iterative revisions to ensure the data appropriately addressed the project needs. Papers for extraction were split among three team members and frequent discussions were shared to check extraction approaches as a quality assurance measure. When extracting, the relevant information to answer the research questions was taken mostly from the results sections of individual studies, particularly when identifying enablers and barriers. However, the background and discussion sections were also at times used as they contained relevant information required for our review.

Five criteria, defined in Table 2, were used to synthesise the findings from the literature review: feasibility, acceptability, sustainability and scalability, and cost considerations. The descriptive findings relating to geographic characteristics, types of models used, and target population demographics were summarised (see Appendix B). Similarly, findings regarding the enablers and barriers for feasibility, acceptability, sustainability and scalability, and cost considerations relating to the approach or models developed from the approach, were thematically analysed[7]. Equity considerations were also considered in the context of each of the five criteria. Notably, the enablers and barriers were synthesised to be relevant to the approach and its scalability, rather than the individual models and their success factors to address the research aims. Cross-cutting high-level themes and their relevant subthemes were summarised. To aid with transparency in the findings, a table mapping the records which reported enablers and/or barriers for the five criteria in line with the themes, was developed.

Table 2. Definition of the five criteria that guided the assessment of the included records[8].

Criteria	Definition
Feasibility	The extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting.
Acceptability	The perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory. Acceptability should be assessed based on the stakeholder's knowledge of or direct experience with various dimensions of the treatment to be implemented, such as its content, complexity, or comfort.

Sustainability	The extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations.
Scalability	The ability of a health innovation to be expanded under real-world conditions to reach a greater proportion of the eligible population, or be replicated, transferred, or sustained.
Cost	(Incremental or implementation cost) the cost impact of an implementation effort.

Stakeholder consultations

Individual or group consultations were undertaken with three stakeholder groups:

1. Individuals involved in the development of the Collaborative Care Program
2. Individuals involved in the development of one of the five specific models of care
3. Individuals with knowledge of the NSW Health system and regional NSW context.

RDN made an initial approach to potential interview participants from the first and second stakeholder groups (except for First Nations participants) to ask them if they would be willing to participate in a voluntary interview. The RHD MoH team approached potential participants from the third stakeholder group. Potential First Nations participants were approached by the Sax Institute's Aboriginal Senior Advisor. Potential participants who agreed and consented to being interviewed were invited by email to participate in a 60-minute interview via Microsoft Teams videoconferencing facility. Participants were offered the option of participating alone or with another member of their organisation. Interviews were conducted between the 31st of August 2023 until the 18th of October 2023. Interviews were recorded via Microsoft Teams. Interviewees were given options not to be recorded, to speak "off the record", for access to recordings to be restricted to the interviewer, and for varying degrees of detail to be communicated. First Nations interviewees were jointly interviewed by a project team member and the Sax Institute Aboriginal Senior Advisor to ensure cultural safety and appropriateness. Discussion guides detailing the questions asked of interview participants can be found in Appendix C and Appendix D.

A thematic analysis of interview data was conducted to identify common themes and learnings.

Synthesis of findings from the literature and stakeholder consultations

The ExpandNet/World Health Organization's (WHO) published framework, which outlines a process for scaling up, was used to organise and align emerging themes from both the review and the consultations.

Reporting Considerations

Given the potential to identify individuals, the RHD MoH confirmed that verbatim quotations from stakeholders were not appropriate for inclusion in this report. Rather, paraphrasing has been used to represent the views and recommendations of participants.

This report refers to ‘collaborators’, ‘facilitators’ and ‘coordinators’. These are defined as:

1. **Collaborator**: all relevant local health and/or community stakeholders who could be involved in a collaboration because they have a stake in the outcome
2. **Facilitator**: the organisation or individual(s) responsible for facilitating the establishment of a new collaboration, or strengthening an existing collaboration
3. **Coordinator**: an individual or organisation responsible for the ongoing coordination of the collaboration.

Findings

Reviewed studies

As summarised in Figure 3, a total of 17 studies were reviewed. Of the 17 papers included for review, the majority (n=14) described models located in Australia, three models were implemented in Canada, and one in Spain. Eleven records described healthcare or place-based models, programs, or approaches (model, n=8; program, n=2; approach, n=1) involving First Nations populations. Some comprised multi-site models and the papers describing them reported findings from rural, regional, and urban settings (n=4). The demography of the towns in which the models were set was diverse and not always described. Appendix B summarises the findings of the review, specifically, the context, populations of interest and models developed from the approach.

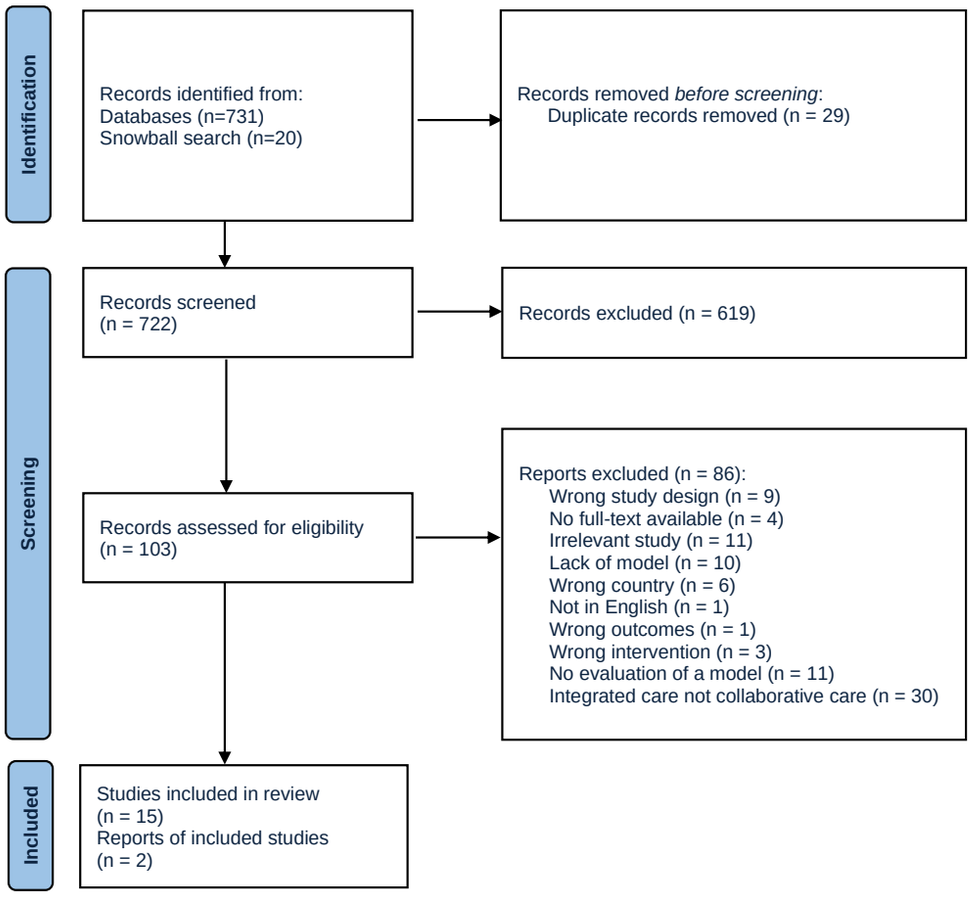


Figure 3. PRISMA diagram.

Stakeholder sample

A total of 22 stakeholder consultations were completed. Given the small size of the organisation's participants represented, and the potential for identification, no further information is provided about the characteristics of the participants in the consultations.

Synthesis of review and stakeholder consultations

The four distinct themes to emerge from the thematic analysis were:1) Stakes / Interests; 2) Trust / Time; 3) Power / Influence; and 4) Knowledge / Expertise. The below section provides further detail on these themes. A high-level summary is provided in Table 3.

Theme 1: Stakes / Interests

The first theme, *"Stakes / Interests"*, was inductively derived from four subthemes: (1A) Ensure a multidisciplinary, whole-of-system, coordinated approach (Invite everyone to collaborate); (1B) Identify and articulate mutual interests (What is the benefit of collaborating?); (1C) Declare and manage competing and conflicting interests (What other agendas could put collaboration at risk?); and (1D) Appoint an impartial intermediary to facilitate the collaboration (Who would treat everyone equally?).

Subtheme 1A: Ensure a multidisciplinary, whole-of-system, coordinated approach (Invite everyone to collaborate)

An inclusive, whole-of-system approach that ensures collective responsibility of all relevant stakeholders was a common enabler throughout different stages of model development (i.e., in developing strategic milestones, setting action plans) or deployment (co-driving model delivery with community, resource mobilisation under the model). Partnership investment and success involved examples such as taking a 'whole-of-government' approach to funding, implementing targeted 'whole-of-community' case management, engaging in multi-sector collaboration to mobilise various resources and operate on multiple levels, and having community as co-drivers from the beginning of model/project deployment[9–18]. Descriptions of an inclusive approach included sectors/stakeholders such as: industry, government, post-secondary institutions, philanthropic foundations, not for profits, existing health professionals, community-controlled sectors, community volunteers, informal carers, and family[12,18]. Similarly, examples of enablers for establishing and maintaining model delivery included: frequent information exchange avenues to ensure coordinated care, having clear clinical governance procedures (i.e., policies, procedures and protocols, quality and safety mechanisms), and using a single-employer model for health medical service delivery[9,19–21]. Coordinated timing of funding with national and state policies, and supplementing funding with local industry also facilitated model success[12,18].

The reviewed evidence was corroborated by stakeholder reports that a successful collaboration will integrate all sectors of society affected by or influential to local healthcare innovation. It was considered essential that stakeholders had some interest or stake in outcomes for the community and its health if they were to be willing to participate in a collaboration in-kind.

The potential impacts of relevant collaborators not being identified and invited were: (1) excluded collaborators perceiving reputational loss or feeling less valued and willing to participate in the collaboration, and (2) included collaborators feeling the collaboration was less effective without them. This was because those with a stake or interest in healthcare or in the community also had the most influence to improve it (see Theme 3, Subtheme 3A and 3B).

Subtheme 1B: Identify and articulate mutual interests (What is the benefit of collaborating?)

The reviewed evidence indicated that fostering a shared vision and purpose facilitated cooperation for model development and/or delivery despite histories of competition[9,12,14,19,20]. Collaboration was enabled by the ability to effectively articulate and gain agreement on a clear action plan, including communication/reporting procedures and what partners could accomplish working inter- and intra-organisationally[9,14,17,18]. This was corroborated by stakeholders with direct experience of the Collaborative Care Program who highlighted the importance of acknowledging that there will be differences and commonalities between the interests of facilitators, collaborators and coordinators when taking a place-based planning approach. These interests can be further shared with or differentiated from the specific interests of other local parties, such as local governments, non-government organisations (NGOs), First Nations peoples, community groups and organisations, and private businesses.

Common interests may be foundational to a willingness to collaborate at all, particularly given the in-kind requirements of collaborators. Failure to acknowledge, identify and communicate each party's stakes/interests could result in:

1. Lack of clarity as to the purpose and objectives of forming a collaboration.
2. Inadequate sharing of useful resources or knowledge.

Subtheme 1C: Declare and manage competing and conflicting interests (What other agendas could put collaboration at risk?)

This sub-theme did not emerge in the reviewed literature. Stakeholders experienced the need to uncover competing or conflicting interests. They advised that any competing or conflicting interests did, and would, have a significant ongoing impact on the collaboration, regardless of whether they were formally recognised or acknowledged.

1. **Competing interests** could be both historical and current. For example, two or more towns may have historically competed for resources in a subregion, or two or more services may currently be competing for clientele. Inadequate recognition and management of these competing interests could prevent the establishment of the trust required as a foundation for effective collaboration, and required proactive management. Historical distrust is explored in Theme 2 (Subtheme 2A).
2. **Conflicts of interest** need to be declared and managed transparently and fairly from the outset to prevent the eventual breakdown of trust when these conflicting interests inevitably become apparent to all parties. Breakdowns in trust are explored in Theme 2 (Subtheme 2C).

Therefore, both Subtheme 1B and 1C require collaborators, facilitators and coordinators to be transparent regarding their own specific needs, objectives, and values, and to then consider how these agendas may impact the broader aims of the collaboration, whether positive (mutual) or negative if undeclared (conflicting and competing).

Subtheme 1D: Appoint an impartial intermediary to coordinate the collaboration (Who would treat everyone equally?)

This sub-theme did not emerge in the reviewed literature. Stakeholders suggested that ongoing coordination of the collaboration should be the responsibility of a coordinator who can act as an impartial intermediary, to

avoid fundamentally establishing a conflict between the interests of an employing organisation and the interests of the community. For example, when the coordinator role was rotated between organisations, interview participants observed that the objectives of the collaboration could become aligned with that individual's employing organisation, even when that organisation may view themselves as being an impartial collaborator.

Stakeholders reflected that a local community member from a sector adjacent to health, such as education, without preconceptions or prior history of organisational distrust, may be better situated to coordinate to ensure a good outcome for their community, and may be better able to successfully engage the perspectives of stakeholders both within and outside the health sector, such as local government and First Nations or community groups.

Where the recruitment of a suitably impartial coordinator from the local community was not possible, stakeholders highlighted the need for self-reflection, honesty and transparency regarding the organisation or individual's motives for initiating and taking on responsibility for coordination of the collaboration, and how much they do, or do not, align with the community's interests. For example, coordinators could declare and transparently communicate their own individual or organisational objectives or funding priorities, and how the objectives of place-based planning align with their own organisational interests, as these would inevitably become apparent to collaborators even if they were not declared.

Facilitating organisations could also support development of recruitment processes to protect the impartiality of the coordinator. Such as developing templates for recruitment materials that specify that community engagement skills, local leadership, and the ability to take an 'arms-length' approach to coordination of the collaboration as essential requirements for the role, and health system experience as non-essential. Should the coordinator not have health system experience, however, the facilitator should consider how they might build the coordinators health system literacy. The facilitator could also support the development of strong governance processes and tools, such as draft Terms of Reference, that emphasise the need for transparency and impartiality.

Theme 2: Trust / Time

The second theme, *"Trust / Time"*, was based on three subthemes: (2A) Adjust project timeline to accommodate historical trust and distrust between collaborators, facilitators, and communities (How ready are we for collaboration?); (2B) Facilitate the establishment of trust through transparent communication and consistent action over time (Always say what you will do and do what you have said); and (2C) Prevent or manage the rapid breakdown of trust (How can we prevent or quickly resolve problems?).

Subtheme 2A: Adjust project timeline to accommodate historical trust and distrust between collaborators, facilitators, and communities (How ready are we for collaboration?)

The second theme was the concept of trust over time. Trust was essential to establish and progress an initiative. However, participants described a spectrum of historical trust between collaborators. Some described experiencing the benefits of (1) strong, long-established trust, with effective and rapid collaboration outcomes as a result, and (2) trust being conferred to newcomers as a trusted third party, with similarly effective outcomes when there was inadequate time to develop historical trust. Others described (3) acting in good faith when there was inadequate opportunity to establish historical trust among parties encountering each other for the first time, and others acknowledged (4) historical distrust, or (5) the rapid breakdown of trust during the collaboration (particularly through undeclared conflicts of interest as explored in Theme 1, Subtheme 1C).

This spectrum of trust can exist not only between collaborators, but between collaborating organisations, local communities, coordinators and facilitators. In addition to historical distrust between towns, there may be a sense of historical distrust between a facilitating organisation and a local community, between the coordinator and collaborators, between the collaborators and communities, and between governments and First Nations peoples. For example, the reviewed literature indicated that building trust with First Nations people over time was enabling due to past negative experiences with health services[19]. Inversely, negative patient perceptions

and past experiences of health services, and community resistance due to complex social, political and cultural environments involving First Nations populations, were a barrier[16,22].

Likewise, organisations or individuals coordinating the collaboration needed a degree of trust from collaborators; stakeholders described coordinators with a long history and existing respect in the local community as being an enabler of successful collaboration, but the high turnover of the coordinator roles, and the challenge of having to re-establish trust, as a barrier.

Histories of trust could be leveraged, with collaborators who had a history of successful collaboration working together readily on new initiatives, and individuals who were already well-respected or trusted in the community facilitating collaborations easily. Leveraging pre-existing histories of trust was therefore an asset to collaboration, as time required to build trust was reduced. This was corroborated by the reviewed evidence: having a local champion or a key coordinator leading the model, service staff who recognised the local community needs and preferences, or someone trusted/known to the community being employed or accessible to service staff members were found to enable model delivery[9,10,15,20,23,24]. Studies elaborated that this relational process was one that required time and the development of respectful partnerships to build trust; particularly when working with First Nations people[10,15].

Subtheme 2B: Facilitate the establishment of trust through transparent communication and consistent action over time (Always say what you will do, and do what you have said)

Although limited project timelines are a consideration for the establishment of the trust required for effective collaboration, the passage of time was insufficient to establish trust, as evidenced by longstanding histories of distrust. Stakeholders note that consistent, integrous communication and action over time was key to establishing trust. In the published literature, the emphasis was on communication of model delivery efforts with the wider community, including raising awareness of the service delivery model at the community level to other health services and organisations[10]; and ensuring extensive community consultation to develop awareness and trusting relationships[18,19]. Stakeholders similarly described national recognition of local efforts as a valuable outcome of the program, but also experienced the importance of consistent communication and follow-up between collaborators and facilitators. For example, when there may be historical distrust between collaborators and facilitators, meeting agendas and minutes could detail who was invited and who attended and could be distributed to all invitees and attendees irrespective of attendance.

Subtheme 2C: Prevent or manage the rapid breakdown of trust (How can we prevent or quickly resolve problems?)

This sub-theme was not evident in the reviewed literature. Where a project timeline is inadequate to develop a long history of trust, and collaborators were therefore primarily sharing knowledge and resources in good faith, trust was precarious and rapidly broken. Therefore, a proactive, preventative approach was recommended, as well as the establishment of processes to quickly redress broken trust should it occur.

Theme 3: Power / Influence

The third subtheme concerning *"Power / Influence"* was established from three subthemes: (3A) Identify a committed local health service with sufficient capacity and flexibility for innovation (Who makes decisions about local health services?); (3B) Identify complementary local resources and leadership (Who makes decisions about the resources that could help the health service?); and (3C) Structurally counter power imbalances between collaborators, facilitators, coordinators and communities (How can we ensure everyone contributes to decisions?).

Subtheme 3A: Identify a committed local health service with sufficient capacity and flexibility for innovation (Who makes decisions about local health services?)

In the reviewed literature, utilising existing community or health service resources and capabilities was commonly reported as an enabler for model delivery. This included joining resources and capabilities to better address rural health workforce issues, co-location of services to better understand involved stakeholders'

services and facilitate informal networks, integrating local community employment into clinical and non-clinical services, and pooling limited resources to reduce duplication and ensure continuity of care [3,14,16,18–20,23,24]. Additionally, building on the existing clinical business, administrative and Information Technology (IT) systems for the integration of the model into day-to-day services supported the health workforce to effectively maintain clinics[11,19–21]. In one instance, a barrier to model delivery was the absence of inducting the existing health service staff into the new model[23].

Another enabler included adapting and improving the model over time, with flexibility in its delivery in relation to how overall goals were implemented at regional and local levels, with appropriate progress monitoring[13,14,24]. Reducing the need for patients to travel for health services by means of mobile, drive-in-drive-out, fly-in-fly-out, or virtual health services was considered essential to providing care given the rural/remote contexts[15,22]. Expanding the services delivered (e.g., to include dental and routine pathology services) and considering social supports such as home care services or social housing assistance also helped to meet the needs of the population[10,19,23]. There were some instances where staff found adapting to the norms of overseas-trained or locum doctors challenging[12,23]. Therefore, successful healthcare innovation was a complex process that required agility, flexibility and capacity from local health services and wider healthcare systems.

Insufficient capacity was commonly reported as a barrier to health service delivery, particularly relating to staffing and resourcing; in some instances patient engagement was negatively impacted by a lack of capacity[12,15,19,22,24]. Operational, technical and logistical issues and inconsistencies (i.e., absence of or variation in electronic medical records between sites, logistical issues with running mobile clinics, inexperienced or underqualified staff, high staff turnover) were also barriers to coordinating care across the continuum and were not conducive to delivering care for chronic disease[10,14,19,22,24]. Considerations of upstream policy and funding decisions and how they could complement model resourcing particularly facilitated scalability[10,20,22].

Financial concerns were also often significant barriers to model development and delivery. Insufficient funding beyond the initial establishment phase and lack of long-term financial commitment to the collaborative approach was a commonly reported barrier[10,12,15,17,20,23,24]. Additionally, the ability to pay for ongoing services required for chronic conditions was a challenge for patients[22]. To emphasise the importance of considering the sustainability of the model/project, one study reported that despite initial success of the model/project, communities later faced similar challenges that they initially had prior to model implementation[12]. In line with this theme, the Australian Department of Health report summarising knowledge from across 118 sites recommended the need for clearer links between operational plans, models of care and project reinvestment[25].

As there were cases of unsuitable funding arrangements for small health services, funding redesign was suggested. This involved pooling funds at the sub-regional level by using revenues from clinical service delivery together with other relevant programs[25]. Removal of cost barriers for medications for chronic conditions and generally having care providers remove or minimise out-of-pocket expenses (i.e., through charging fees equal to government subsidies, or integrating additional health services to obtain additional sources of income for services), was enabling for patients[22,23].

Stakeholders reported that inflexibility in state-determined policies could sometimes be a hindrance to the development of local solutions. For example, local ambulance staff and facilities being available to provide patient intubation when emergency nurses could not, but state-determined policies not readily supporting this change.

Although collaborators may have a stake or interest in health or in a community, to be effective participants in place-based planning they should also have relevant influence in relation to health or the community to effect change, and to ensure that decisions made through the collaboration are actionable rather than theoretical. Delivery of an innovative healthcare model in a town required the commitment of a local health service with sufficient capacity and flexibility to deliver the innovative healthcare model.

Subtheme 3B: Identify complementary local resources and leadership (Who makes decisions about the resources that could help the health service?)

The literature identified enablers at the community level, including the importance of having committed local leadership, local government playing a key role in supporting the model (i.e., assisting with workforce recruitment and retention), and having support from local businesses/organisations to consider the town's future prosperity[12,18,20,21]. Similarly, flexible financing arrangements for the model was an enabler[10,12,14]. These included enhanced flexibility of government funding and having capacity to reallocate funds, supplementing funding through local industry, and engaging community assets and capacities[10,12,14].

Stakeholders described how other community organisations could contribute complementary resources to enable a collaborative approach, for example, the local council providing housing for healthcare workers, or facilities which could be used as healthcare workspaces. Other examples included local businesses providing funding, local communities supporting community-based initiatives by contributing care packages for healthcare workers, or First Nations groups taking ownership of public health messaging in schools.

Subtheme 3C: Structurally counter power imbalances between collaborators, facilitators, coordinators and communities (How can we ensure everyone contributes to decisions?).

This sub-theme did not emerge in the reviewed literature. Stakeholders noted that there will be meaningful variation in the political wherewithal and resources of each collaborator, and that the structural governance of the collaboration should therefore be organised in a manner that enabled inclusion of all parties but should not overlook or systemically exacerbate inequities. One way power imbalances could be structurally managed could be enshrining bottom-up decision-making power for traditionally less powerful collaborators such as community working groups or First Nations participants, rather than establishing traditional top-down hierarchies with steering committee oversight by non-First Nations executives. It was noted and experienced that smaller organisations who may not be as politically experienced or well-resourced would still need support to participate effectively at executive levels, where partners with greater political experience, strength, and resources may still be able to outmanoeuvre others, particularly with undeclared competing or conflicting interests. As much as possible, governance should enable self-determination (via flexible policy, exit/dissolution options, and/or autonomous self-organisation).

Theme 4: Knowledge / Experience

The fourth and final theme, *"Knowledge / Expertise"*, was developed from three subthemes: (4A) Recognise local knowledge of resources and needs as essential to success (Learn the route from local drivers familiar with the roads); (4B) Apply complementary technical and subject matter expertise to co-design solutions (share or source an engineer's understanding of the car); and (4C) Upskill in cultural safety and support, particularly for First Nations communities (learn how to include everyone's expertise).

Subtheme 4A: Recognise local knowledge of resources and needs as essential to success

The reviewed literature corroborated that having local awareness and knowledge of the systems and processes in the community was an enabler, both for the broader implementation of the model and for day-to-day health service delivery. Similarly, engaging community perspectives in the development of the model through a co-design process and integrating targeted strategies to engage relevant populations (i.e., First Nations people) facilitated service delivery and acceptance[3,10]. Lack of community consultation during the implementation of the model[15], and staff not being introduced-to or communicating the scope of practice to local communities were barriers to the acceptability of the model[20]. Examples include failing to inform staff about staff involvement in model delivery and lack of staff consultation about telehealth implementation.

Critically, local knowledge of politics, networks and history was often held by local community members, and some organisations or stakeholders engaged in that community (e.g., university researchers) may also be able to provide unique visibility of and expertise regarding services and resources in a community, in a way that could inform the design of health services (see Theme 3, Subtheme 3A and 3B regarding the resources that

might be required). Stakeholders attested to the value of community-identified needs and health services, and inversely reflected that they could not have independently identified the needs raised by the community.

Subtheme 4B: Apply complementary technical and subject matter expertise to co-design solutions

This sub-theme did not emerge in the reviewed literature. The application of externally sourced technical and subject matter expertise appeared to be a distinctive feature of the Collaborative Care approach in contrast to general place-based planning as described in the published literature. Stakeholders involved with the Collaborative Care Program recognised that community needs raised at a working group level could then be addressed with the support of subject matter experts (SME) groups with specific or technical expertise to develop solutions, such as individuals with financial, practice management or IT expertise, or First Nations community members. Health services reported that they also needed to support health service literacy in the community, as communities may not be familiar with the funding structures and governance of healthcare, and that, despite a strong understanding of the community need, a lower level of health service literacy could result in mismatched expectations of how a health service solution might operate. Therefore, knowledge of healthcare solutions and healthcare needs were often complementary, in the way drivers and engineers have necessarily complementary expertise to reach a common goal. Stakeholders, as noted in Theme 2 (Subtheme 2B), indicated a need for expertise concerning monitoring and evaluation activities to measure and demonstrate impact, and a need to obtain relevant ethical approval for such activities.

Subtheme 4C: Upskill in cultural safety and support, particularly for First Nations communities (Learn how to include everyone's expertise)

The reviewed literature confirmed that integrating cultural safety and diversity considerations into health service delivery was critical for taking a strengths-based approach, particularly when working with First Nations people. Notably, the main cultural groups that were addressed in the included literature for the review were First Nations populations. Delivering cultural awareness training for all service staff was a common enabler and was seen as an invaluable contributor for being able to make a positive impact within the community[16,19,20,22,23]. In line with this, providing culturally safe and appropriate support for First Nations people, recognising the social determinants of health, and having cultural sensitivity as a priority for service delivery, were key for improving access to health services and building trust[14,15,19,22,23]. In some instances, it was difficult to ensure community awareness and cultural safety across the continuum of health service delivery, and a lack of cultural safety and consideration of the social determinants of health were barriers for acceptability of the model/project, causing patients to discharge against medical advice[16,19,22,23]. Finally, despite efforts to address cultural safety and equity concerns, the diversity of cultural contexts and geographical coverage that was required to reach vulnerable groups remained a challenge for some; inequitable funding models were one attributed factor[15,22,25].

Stakeholders reported that a key enabler of a collaboration was training in cultural safety and appropriateness, especially when engaging with local First Nations communities. Therefore, although there was a wealth of essential local knowledge and in-kind SME in a local community, there was also a need for external facilitators of collaboration to be mindful of cultural safety and appropriateness to collaborate effectively with First Nations organisations and individuals, including Aboriginal Medical Service.

Table 3. Themes and subthemes identified from interview and review data.

Theme	Subtheme	Data Source	
		Lived Experience	Published Evidence
1. Stakes / Interests	**1A:** Ensure a multidisciplinary, whole-of-system, coordinated approach (Invite everyone to collaborate)	√	√
	1B: Identify and articulate mutual interests (What is the benefit of collaborating?)	√	√
	1C: Declare and manage competing and conflicting interests (What other agendas could put collaboration at risk?)	√	-
	1D: Appoint an impartial intermediary to facilitate the collaboration (Who would treat everyone equally?)	√	-
2. Trust / Time	**2A:** Adjust project timeline to accommodate historical trust and distrust between collaborators, facilitators, and communities (How ready are we for collaboration?)	√	√
	2B: Facilitate the establishment of trust through transparent communication and consistent action over time (Always say what you will do and do what you have said)	√	√
	2C: Prevent or manage the rapid breakdown of trust (How can we prevent or quickly resolve problems?)	√	-
3. Power / Influence	**3A:** Identify a committed local health service with sufficient capacity and flexibility for innovation (Who makes decisions about local health services?)	√	√
	3B: Identify complementary local resources and leadership (Who makes decisions about the resources that could help the health service?)	√	√
	3C: Structurally counter power imbalances between collaborators, facilitators, and communities (How can we ensure everyone contributes to decisions?)	√	-
4. Knowledge / Expertise	**4A:** Recognise local knowledge of resources and needs as essential to success (Learn the route from local drivers familiar with the roads)	√	√
	4B: Apply complementary technical and subject matter expertise to co-design solutions (Share or source an engineer's understanding of the car)	√	-
	4C: Upskill in cultural safety and support, particularly for First Nations communities (Learn how to include everyone's expertise)	√	√

Principal Findings & Recommendations

How does a Collaborative Care approach work?

Individuals with direct experience of the Collaborative Care approach referred to the tangible or visible elements of the approach when asked about how the approach works. Funding, governance structures, and processes were all commonly identified as being important when implementing the approach. This scalability assessment contributes four new elements that could be just as, if not more, important for the success of the approach.

The findings of this Scalability Assessment indicate that the Collaborative Care approach functions through a complex interplay of the collaborators, facilitators, coordinators, and communities:1) Stakes/ Interests; 2) Trust/ Time; 3) Power / Influence; and 4) Knowledge / Expertise. Figure 4 visually represents how the Collaborative Care approach works, and how the identified themes relate to each other. A tree has been used to visually represent the approach, because metaphorically, the tangible elements of the approach, such as funding, processes and governance structures, are the more visible parts (i.e., the branches and the trunk of a tree). However, the branches of a tree cannot survive when “cut off” from the roots, or if “transplanted” to another location. The roots represent the less visible and intangible elements of the approach that affect everything, and that are critical for the survival of the Collaborative Care approach.

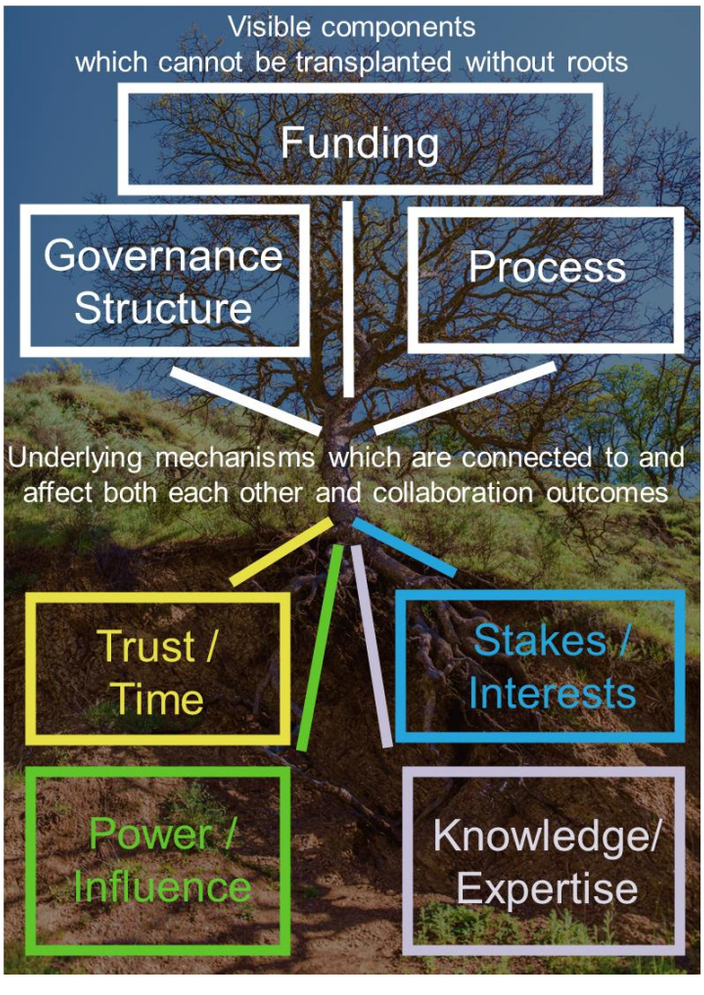


Figure 4. A visual metaphor of the Collaborative Care approach.

What is the role of RHD MoH?

The findings of this report point to the RHD MoH playing the role of the facilitator in a Collaborative Care approach. This could mean facilitating the establishment of a new collaboration or stepping in to support an existing collaboration. This facilitation role will likely be more direct and resource intensive when seeking to establish new collaborations, but there may be times during the life of the collaboration when there is minimal to no involvement required and the role of the RHD MoH is to support and empower people and organisations to actively take on the role of a facilitator.

In short, the role of the facilitator is to establish strong scaffolding for the building of a Collaborative Care approach. This scaffolding can be dis-assembled, but only once the foundations for a strong and sustainable collaboration have been established. The collaboration may need attention down the track, which may require the scaffolding to be re-assembled, and the facilitator should be available and willing to step in to support should remedial action be necessary.

We offer the following recommendations, grouped by theme, to support the RHD MoH's understanding of what their role, as the facilitator of a Collaborative Care approach in NSW, could be:

Stakes / Interests

- When a new collaboration is being established, seek to identify and invite all relevant local health and community stakeholders (collaborators) to collaborate from the outset. Relevant collaborators could be identified via consultation with key individuals familiar with local resources, politics, and history of the local area, or via a snowball recruitment of groups or individuals who local community members believe should or could be involved because they have a personal or professional interest or stake in the outcome
- In the early establishment phase of a collaboration, clearly articulate the benefits of collaboration, encourage/foster collaborators willingness to commit in-kind time and resources, and emphasise that mutual or conflicting interests should be identified and communicated early as a foundational building block for successful collaboration
- Support the establishment of processes from the outset that allow collaborators to reflect on, formally declare and then manage, their objectives and interests in a safe and transparent manner, such as disclosure to an impartial intermediary where interests may be confidential or sensitive. These processes should be embedded in the routine operations of the collaborative so collaborators can regularly reflect on and declare any emerging interests throughout the life of the project
- Where possible, identify and support the appointment of an impartial intermediary to coordinate the collaboration (the coordinator). Specifically, someone who is not an employee or representative of the interests of any specific collaborator
- Support the development of recruitment processes for the coordinator role that emphasise the need for transparency and impartiality, and strong community engagement, leadership, and an 'arms-length' approach
- Given the importance of the coordinator role, consider not proceeding with a collaboration until a suitable appointment has been made.

Trust / Time

- Be aware of longstanding histories of competition between potential collaborators which could impact collaborative efforts. Inversely, there may be a long history of successful collaboration which could be leveraged. These preconditions will affect project timelines and budgets and therefore community readiness to participate.
- Allocate time for the establishment of trust when planning collaboration timelines and budgets. If there are histories of distrust in communities, we recommend a timeline of five to seven years, and no less than three years

- Manage expectations of what can be achieved in a particular timeframe with a certain amount of funding to avoid the erosion of trust in the funder when, and if, the funding comes to an end
- Appoint coordinators with established community trust, and (where possible) ensure they are not employed by one of the collaborating parties
- Maintain integrous, transparent communication from facilitators regarding procedures
- Publicly communicate, recognise and celebrate collaborators and what has been achieved (e.g. via the media)
- Ensure evaluation of outcomes and implementation is considered at the outset of a collaboration to enable robust data collection and rigorous evaluation in the future
- Where time may not allow for trust to be developed, enshrine and communicate the values of equality and collaboration in project management and governance processes. For example, Terms of Reference, policies, funding criteria, data collection processes, and recruitment criteria
- Support the establishment of trust through transparent communication and consistent action, particularly when newly introduced collaborators are working together for the first time, or when there is distrust or broken trust between collaborators, or with the facilitator
- Proactively manage breaches of trust between collaborators by “refereeing” misaligned behaviour, and use the above governance processes (e.g. Terms of Reference) as a mechanism for managing misaligned behaviour
- Consider how to achieve balance between ‘not just meeting for meeting’s sake’, something government stakeholders traditionally value, and ensuring enough space and time for place-based ‘bottom-up’ processes to take effect.

Power / Influence

- Seek to identify a local lead health organisation (e.g., an LHD, private practice or AMS) with willingness, capacity, and ability to action a proposed health service proposal.
- The lead organisation will need to have the power to alter policies or practice where appropriate to facilitate a health service innovation, but also be willing to work with community
- Identify local organisations or individuals with resources to support health service efforts with complementary resources (e.g., housing, or rental support from local council, financial or in-kind contributions from other organisations). These organisations should also be willing to work collaboratively and have power to alter policies or practice where appropriate
- Seek to structurally counter power imbalances by formalising self-determination and bottom-up decision-making in governance processes, and ensure marginalised groups and individuals are represented at upper levels of accountability and power
- Consider contributing funding to overcome imbalances in financial power. For example, if a smaller community organisation develops and is willing to deliver an innovative solution, formally acknowledge and support that group with funds that will likely protect their idea or efforts from being duplicated by a more financially powerful party. If funds are not available, consider leveraging the funds of that more powerful party as a named funder, so that mutual interests are maintained
- Investigate whether traditional structures at a state level could be leveraged to complement collaborative approaches, such as following the Collaborative Care approach to support local communities to develop local proposals, before connecting these proposals to traditional requests for funding.

Knowledge / Expertise

- Seek to identify local individuals or groups familiar with the political history, relationships, and resources within and beyond the community
- Prioritise and invest in consulting with community, whether through traditional data collection (e.g., surveys, and asset mapping) or community engagement methods (e.g., shared meals, informal coffee meetings and formal meetings)

- Seek to support community health service literacy to codesign heath solutions
- Source local or external subject matter or technical expertise to address identified needs (e.g., financial advice to redesign funding, technological advice to develop technological solutions, communications advice to develop public health messaging, health service campaigns or communication with community, operational advice to develop healthcare innovations, and evaluation advice to develop and embed evaluation at the outset of a collaboration).
- Facilitate linkages to training for collaborators in safe and appropriate engagement with First Nations communities. Prioritise locally designed training courses where available, or investigate the co-design of new training courses
- Proactively establish safe communication channels for First Nations participants, including establishing escalation mechanisms, such as to the Aboriginal Health and Medical Research Council (AH&MRC) of NSW, for consultation and support at a state level where required
- Seek to leverage existing efforts in NSW to support integration of collaborative innovations as 'business-as-usual' across the state, particularly as multiple collaboratives may develop in the remit of a particular PHN or LHD.

Strengths & Limitations

A strength of this scalability assessment was its inclusion of both reviewed literature and consultation of stakeholder lived experience to understand the Collaborative Care approach. Stakeholder consultation contributed many novel insights that were not available in the published literature, particularly when data was collected in an ethically considerate, anonymous manner. Participants spanned all five Collaborative Care Program model sites, and a range of organisations in NSW. The interpretation of results was validated with working group stakeholders, and with an Aboriginal Senior Advisor. The results of this scalability assessment should be reviewed in tandem with evidence of the Collaborative Care Programs effectiveness, when available. However, as the focus of this scalability assessment was on scalability rather than effectiveness, the findings still provide valuable insights on how this approach works, and how it could be scaled.

Conclusions

The findings of this scalability assessment are that RHD MoH has the potential to play a critical role in the facilitation of a collaborative care approach in regional, rural, and remote NSW. There are some functions the RHD MoH is well placed to fulfill directly, and others which it can support by delegating and empowering people and organisations locally. Fulfilling both these roles effectively requires an understanding of the complex, underlying interplay of factors required to facilitate a positive, effective collaboration, which have been surfaced through lived experience of the program during its pilot and corroborated through literature review. Further insight into some of the challenges and opportunities that may lie ahead include integrating and streamlining community engagement processes and improving culturally safe engagement with First Nations communities. These recommendations will need to be interpreted in relation to primary findings regarding the time taken to establish the trust required for effective collaboration, and the power imbalances that may need to be remedied when decision-making is expedited through traditional, rather than community-centred approaches.

Appendices

Appendix A. Database search strategy.

Scopus search strategy

Database:	Scopus
Terms:	(TITLE-ABS-KEY ("chronic disease" OR "chronic illness" OR "chronic condition") AND TITLE-ABS-KEY ("collaborative care" OR "integrated care" OR "place-based" OR pbi OR "local health planning" OR locality-based OR "locally determined" OR "community activation" OR "community mobilisation" OR "community-based planning" OR "community-based care" OR ("health services" AND "market failure") OR ("health services" AND sustainable) OR ("health services" AND funding) OR "place-based health care planning" OR "rural generalist" OR "team-based care") AND TITLE-ABS-KEY (intervention* OR program* OR initiative* OR strateg* OR campaign* OR policy OR policies OR "practice model") AND TITLE-ABS-KEY (rural OR regional OR remote OR community) AND PUBYEAR > 2017) OR (TITLE-ABS-KEY ("Rural Area Community Controlled Health Organisation" OR "RACCHO") OR (TITLE-ABS-KEY (rural OR remote) AND TITLE-ABS-KEY ("primary care" OR "health workforce") AND TITLE-ABS-KEY (australia OR australian OR queensland OR tasmania OR victoria OR "Northern Territory" OR "New South Wales" OR “new Zealand” OR canada OR canadian OR ontario OR alberta OR "British Columbia" OR saskatchewan OR quebec OR manitoba OR "New Brunswick" OR "Northwest Territories" OR "Nova Scotia" OR nunavut OR "Prince Edward Island" OR yukon OR inuit OR "First Nations" OR aboriginal OR aborigine OR atsi)) AND PUBYEAR > 2017) OR (TITLE-ABS-KEY ("chronic disease" OR "chronic illness" OR "chronic condition") AND TITLE-ABS-KEY ("collaborative care" OR "integrated care" OR "place-based" OR pbi OR "local health planning" OR locality-based OR "locally determined" OR "community activation" OR "community mobilisation" OR "community-based planning" OR "community-based care" OR ("health services" AND "market failure") OR ("health services" AND sustainable) OR ("health services" AND funding) OR "place-based health care planning" OR "rural generalist") AND TITLE-ABS-KEY (intervention* OR program* OR initiative* OR strateg* OR campaign* OR policy OR policies OR "practice model")

	AND TITLE-ABS-KEY (rural OR regional OR remote OR community) AND TITLE-ABS-KEY (australia OR australian OR queensland OR tasmania OR victoria OR "Northern Territory" OR "New South Wales" OR "First Nations" OR aboriginal OR aborigine OR atsi) AND PUBYEAR > 2012 AND PUBYEAR < 2018) AND (LIMIT-TO (SUBJAREA , "MEDI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "NURS") OR LIMIT-TO (SUBJAREA , "HEAL") OR LIMIT-TO (SUBJAREA , "BIOC") OR LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "PHAR") OR LIMIT-TO (SUBJAREA , "MULT") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "IMMU"))
Date limit:	Varied (see above)
No. hits:	561

PubMed search strategy

Database:	**PubMed**
Terms:	(('chronic disease' OR 'chronic illness' OR 'chronic condition').mp AND ('collaborative care' OR 'integrated care' OR 'place-based' OR PBI OR 'local health planning' OR locality-based OR 'locally determined' OR 'community activation' OR 'community mobilisation' OR 'community-based planning' OR 'community-based care' OR ('health services' AND 'market failure').mp OR ('health services' AND sustainable).mp OR ('health services' AND funding).mp OR 'place-based health care planning' OR 'rural generalist' OR ‘team-based care’).mp AND (intervention* OR program* OR initiative* OR strateg* OR campaign* OR policy OR policies OR 'practice model').mp AND (rural OR regional OR remote OR community).mp AND (("2018/01/01"[Date - Publication] : "3000"[Date - Publication]))).mp OR (('Rural Area Community Controlled Health Organisation' OR 'RACCHO').mp OR (Rural OR remote).mp AND ('primary care' OR 'health workforce').mp AND (Australia OR Australian OR Queensland OR Tasmania OR Victoria OR 'Northern Territory' OR 'New South Wales' OR New Zealand OR Canada OR Canadian OR Ontario OR Alberta OR 'British Columbia' OR Saskatchewan OR Quebec OR Manitoba OR 'New Brunswick' OR 'Northwest Territories' OR 'Nova Scotia' OR Nunavut OR 'Prince Edward Island' OR Yukon OR Inuit OR 'First Nations' OR Aboriginal OR Aborigine OR ATSI).mp AND (("2018/01/01"[Date - Publication] : "3000"[Date - Publication]))).mp) OR (('chronic disease' OR 'chronic illness' OR 'chronic condition').mp AND ('collaborative care' OR 'integrated care' OR 'place-based' OR PBI OR 'local health planning' OR locality-based OR 'locally determined' OR 'community activation' OR 'community mobilisation' OR 'community-based planning' OR 'community-based care' OR ('health services' AND 'market failure').mp OR ('health services' AND sustainable).mp OR ('health services' AND funding).mp OR 'place-based health care planning' OR 'rural generalist' OR ‘team-based care’).mp AND (intervention* OR program* OR initiative* OR strateg* OR campaign* OR policy OR policies OR 'practice model').mp

	AND (rural OR regional OR remote OR community).mp AND (Australia OR Australian OR Queensland OR Tasmania OR Victoria OR 'Northern Territory' OR 'New South Wales' OR 'First Nations' OR Aboriginal OR Aborigine OR ATSI).mp AND (("2013/01/01"[Date - Publication] : "2017/12/31"[Date - Publication])).mp)
Date limit:	Varied (see above)
No. hits:	64

Appendix B. Reviewed studies and findings.

Note: The availability of the relevant contextual data varied between sources, and therefore, affected extraction consistency.

Key: NR - Not reported, MMM - Modified Monash Model, NCD - Non-communicable disease.

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Australian Government Department of Health and Aged Care [25]	2021	Australia	Primary health care services	Rural and remote areas - MMM categories 5 to 7.	118 rural and remote sites across all Australian states.	An initiative or funding model that supports rural and remote communities in renumerating costs and improving access to bulk-billed primary health care at all times, including after hours at state or territory health services, such as public hospitals and multipurpose services (services which are not generally funded).
Bailie[22]	2015	Australia	Primary health care targeted at Indigenous populations	NR	Urban, regional and remote areas of Australia that have relatively large Indigenous populations.	Indigenous Chronic Disease Package - a National multicomponent program implemented through primary health care support organisations focused on NCD prevention and management for Australian Indigenous people.
Beks[10]	2022	VIC, Australia	Primary health care mobile clinics for Aboriginal Peoples	Aboriginal Community Controlled Health Organisation located in a small rural town in Victoria, Australia. The BBAC fixed clinic is located in a small rural town (MMM5).	NR	An Aboriginal Community-Controlled Health Organization model of primary health care mobile clinics facilitating the provision of general practitioner, nursing and allied health services.

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Blignault[19]	2021	NSW, Australia	Multi-site hospital-based transfer of care, linking hospital wards to community-based health and social services.	Model was developed and piloted at Campbelltown Hospital in response to the high rate of unplanned readmissions for Aboriginal patients with chronic disease and later adopted at Liverpool Hospital; both hospitals within South-Western Sydney Local Health District, which includes urban, rural and semi-rural areas.	Over a million people (roughly 12.5% of the NSW population) live within its catchment, with Aboriginal people comprising 2.1% of the population. Over a third (36.3%) of the SWSLHD Aboriginal population live in Campbelltown Local Government Area (LGA) and 18.7% live in Liverpool LGA	Multi-site hospital-based Aboriginal transfer of care model, linking hospital wards to community-based health and social services to deliver culturally appropriate care to Aboriginal Australians with chronic disease
deBatlle[11]	2021	Catalonia, Spain	Tertiary Hospital and Primary Care Centres	The study was conducted in Lleida - a large rural area of over 4300 km2, including two tertiary hospitals (University Hospital Arnau de Vilanova and University Hospital Santa Maria) and a network of 23 primary care centres spread across the whole territory, providing service to 400,000 citizens.	NR	Mobile health-enabled integrated care model for complex chronic patients. This involved a preliminary health assessment, self-management app, a digital activity tracker, a web-based platform monitored by the health care team, and an assigned case manager.
Drovandi [23]	2022	Australia	Pharmacist integration into the primary health care teams of Aboriginal community-controlled health services	The 20 urban, rural, and remote participating sites were geographically diverse across Victoria, Queensland, and the Northern Territory and recognized the diversity of Aboriginal and Torres Strait Islander peoples and models of care across Australia.	NR	Non-dispensing pharmacist integration model into primary health care teams of Aboriginal community-controlled health services to deliver patient support and education relating to chronic disease medications.
Gillespie[12]	2022	Mallacoota, VIC, Australia; Marathon, Ontario, Canada	Primary health care	Rural settings	Marathon: population of 3273, two First Nation communities. Mallacoota: population of 1063. Median age is 58, and people aged 60+ comprise over 49% of the population.	Place-based recruitment and retention projects aimed at attracting health workforce to deliver primary health care in regional/rural towns

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Harfield[24]	2021	NT, Australia	Health care clinics	NR	NR	The Miwatj Leadership Model builds Indigenous health workforce capacity and capability through leadership. It spans recruiting Yolngu people into the organisation, developing Yolngu staff who wish to take up leadership roles, and appointing and supporting staff in leadership positions. The model respects traditional forms of authority and empowers the community to develop, manage, and sustain their own health.
Hungerford[20]	2016	Australia	Community-based clinic-located practice	The Nurse Practitioner (NP) Initiative enabled the implementation of 29 NP models of practice across remote, rural, urban and metropolitan locations in each of the Australian states and territories.	The demographics of grey nomads are not representative of all older Australians, with most grey nomads being white Anglo-Australians in their early to mid-60s and in heterosexual relationships (with the woman younger than the man)16.	Grey nomad and aged care nurse practitioner clinic-located model of community-based practice. Developed to address the health needs of remote populations and seasonal tourists.
MacLeod[13]	2019	British Columbia, Canada	Primary health care services	Northern BC has a population of about 289,000 in an area of approximately 650,000 km2 that covers the northern two-thirds of the province. It encompasses a total of 31 municipalities, including 6 cities of 5,000 or more residents (of which only one has a population >50,000), 14 district municipalities with towns having 2,500-5,000 residents plus their surrounding rural areas, 1 town of approximately 5,000 people, and 10 villages with 1,000-2,500 residents	The region has the lowest population health status in the province (British Columbia Ministry of Health, 2014/2018). Approximately 17 percent of the population in Northern BC or 47,200 people are Indigenous. The Indigenous peoples are diverse: there are 54 first nations, 9 tribal councils and 17 distinct linguistic groups. Overall, the population of the region is younger than that of BC as a whole, with the population of persons 65 and over growing at twice the provincial rate	The Northern Health System of Services Working Framework - depicts the reoriented healthcare system within which primary care providers (physicians and nurse practitioners) and specialist physicians work with integrated primary healthcare teams.

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Morrin[14]	2013	Alberta, Canada	Chronic disease management units	The model has been implemented successfully in 108 communities across Alberta.	Given differences across Alberta related to population diversity, level and nature of disparities and access challenges and gaps, the Alberta Healthy Living Program (AHLP) components have been or are being modified to meet the unique needs of diverse and vulnerable populations. The priority populations for the model include: 1) ethno-cultural populations; 2) Hutterites and low-German-speaking Mennonites living in remote rural settings; 3) Aboriginal people; 4) Francophone population; 5) people experiencing homelessness.	AHLP - an integrated community-based chronic disease management approach that supports adults with, or at risk for, chronic disease to improve their health and well-being.
Osborn[15]	2022	NSW, Australia	All health-care settings	A remote town in NSW where the closest major regional city is almost 400 km away.	A town with high (>65%) Aboriginal population.	A community school-based health service model delivering health-promotion programs designed to improve health literacy, and run visiting health services including nurses, occupational therapy, speech pathology, dieticians, and testing for sight and hearing.
Quilty[16]	2019	Katherine, NT, Australia	Hospital emergency department	Katherine is a sparsely populated region in the tropics of Northern Australia (NT), covering 337,000 square kilometres and encompassing 19 tribal nations, and defined by some of the worst indicators of both social and health disparities anywhere in Australia.	The participants comprised over 29 Indigenous tribal nations, only 15% were from communities close to the Katherine town, and 85% came from communities in more remote locations. Population of town: 24,000 people. 51% Aboriginal.	The Wellness Support Pathway is set at Katherine Hospital and provides Katherine Individual Support Program: a whole-of-community, culturally appropriate case management service for frequent attenders, with threefold aims to reduce re-presentations, address social determinants of health, and improve health care utilisation in a community with a large Indigenous population.

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Ramsden[17]	2019	NSW, Australia	Primary health care	The Western NSW region covers a total area of 433,379 square kilometres. The total population of the region is estimated to be more than 313,600 people. More than a third of the Western NSW region's local government areas are classified as remote or very remote under the MMM.		Western NSW Primary Health Workforce Partnership Model and Primary Health Workforce Planning Framework developed by five organisations securing commitment for executing a collaborative action plan aiming to build a sustainable primary health workforce, and monitoring its implementation.
Ramsden[9]	2021	NSW, Australia	Primary health care and hospital settings	The 4Ts is one of 5 subregions being supported as part of the project comprising four small rural and remote communities: Tottenham, Trundle, Tullamore and Trangie in western NSW. The area covered by the western NSW LHD is one of the largest in NSW covering 246 676 km, serving approximately 276,000 people and containing some of the most vulnerable population in NSW and Australia.	Four towns of Tottenham, Trundle, Tullamore and Trangie within the Western NSW LHD, which have populations of 451, 335, 369 and 1,188 people respectively according to census data. Aboriginal and Torres Strait Islander people account for 9.3%, 8.6%, 7.3% and 21% of the populations respectively. Males constitute 50.1%, 51.6%, 50.1% and 52.3% of the populations respectively. The respective median ages are 52, 50, 50 and 45.	4Ts model: a place-based approach was used to co-design a model with community with coordination across providers, disciplines and sectors. It was a single-employer model where the state-funded LHDs became involved in the provision of primary health care workforce and services.
Reeve [18]	2015	Fitzroy Valley, WA, Australia	Primary health care targeted at Indigenous populations	Population of ~3500 people dispersed across 44 communities; 60% Aboriginal, with many of the small communities 100% Aboriginal.	Compared with the national average, the demographic profile of the Fitzroy Valley population is young, with high fertility, but exhibits a high mortality, especially among adults aged over 40 years due to the high prevalence of chronic diseases.	Primary health care-based health service partnership model targeted at Indigenous populations. Aimed at enabling two service providers to work together in a more coordinated and integrated way, building on each organisation's strengths and delineating clear roles and responsibilities in order to minimise service duplication and competition for scarce resources.

First author (citation)	Year of Publication	State, Country	Setting	Remoteness scale or info	Community Demographic	Model summary
Rimmer [21]	2015	QLD, Australia	Primary health care and hospital settings	The Central West Health and Hospital Service district covers an area of 385,000 sq. kilometres, approximately 22% of the state of Queensland. It serves a resident population of 12,405 people which can double in the winter tourism season. The population is thinly distributed across the district. Longreach (3,356) and Barcaldine (1,655) and Winton (954) are the largest towns and smaller communities are located in smaller towns and on isolated pastoral properties.	A resident population of 12,405 people which can double in the winter tourism season. The population is thinly distributed across the district.	The model entails the provision of medical workforce for both the public and private sectors by the public health service, using a single employer of all clinical staff and a shared medical workforce within the district to eliminate competition for clinical resources.

Appendix C. Interview protocol for individuals familiar with the Collaborative Care approach.

Target	Strategy Name	Collaborative Care Background	Question
Context	Create groups	The Collaborative Care approach establishes working groups with governance of the project who identifies need and establishes priorities, with the top 1-3 proceeding to the identification of barriers and enablers before developing and trialling a model and may need to address disagreement to obtain consensus on even seemingly straightforward issues e.g., credibility of Australian Bureau of Statistics data.	1) How did this site get chosen as a suitable site for the Collaborative Care approach? How would you recommend towns be chosen as suitable or unsuitable for this approach? 2) One of the first things we've heard about the Collaborative Care approach is that it establishes working groups, then that working group sets its top priorities. Is that what happened at [site]? [If not] how did it differ/ what did you do instead? 3) Who was in your working group? Why were they included? [draw and label each onscreen] 4) If the Collaborative Care approach were to be used in another place, how essential do you think working groups are to the approach? [If yes], why? [If not], what would you recommend instead?
	Change the environment	The Collaborative Care approach secured Commonwealth funding to seed site-specific collaborations and instigate in-kind support from stakeholder organisations. It might also invest resources strategically e.g., budget and run a recruitment campaign to obtain the workforce required to establish a model (attempted in Lachlan Valley).	5) What kind of funding did you need to start and maintain the Collaborative Care program at your site? [label on map] 6) What resources did other people pitch in – how much, and why? [label on map] 7) If the Collaborative Care approach were to be used in another place, how much funding do you think would be needed, and where should it go? 8) How long did the Collaborative Care process take? How many iterations were needed? What did primary healthcare services look like while this planning/establishment took place?
	Change the composition	The Collaborative Care approach aims to establish a representative sample of individuals within local working groups e.g., include local council members	9) How did you decide who would be in the working group? 10) Who wasn't in your working group, that looking back, you think now should have been? Why do you think so? 11) If the Collaborative Care approach was used in another place, who do you think would be essential to include and why? [drawn an ideal network onscreen]
Actors	Change actors' networking skills	Depending on specific local needs and abilities, the Collaborative Care approach seeks to obtain and bring in subject matter specialist skills to a community, some of which specifically focus on relationship, such as a local linkage community project	12) What were the challenges that your community was facing, that needed support from/ the benefit of a Collaborative Care approach? [label onscreen e.g., lack of collaboration or disputes between two parties] 13) What had you tried to address these issues before the establishment of working groups to start the Collaborative Care approach?

		officer (i.e., expert in relationships and local politics), conflict resolution, Aboriginal engagement expert	14) What did the Collaborative Care approach contribute to the establishment of a model at your site? (e.g., trust/ partnership, expertise in health service development/ planning) [label onscreen]
	Change actor awareness and/or knowledge of the network*	The Collaborative Care approach brings together geographically close communities and stakeholder organisations or individuals.	15) Let's check how this picture looks – is everyone who the Collaborative Care approach brought together included? Are there any other new relationships we haven't drawn? 16) Let's label - what skills/input did each person/organisation provide?
	Change actor prominence	Depending on specific local needs and abilities, the Collaborative Care approach seeks to obtain and bring in subject matter specialist skills to a community, some of which might be technical in nature e.g., Researcher, project management, a communications expert for health literacy campaign for patients who want a known model with GPs (4Ts)	17) Who provided leadership and governance? How effective do you think this was? [highlight onscreen] 18) Who do you think was really key to the success of Collaborative Care at your site? Why? [highlight onscreen] 19) What role do you think NSW Health can play in supporting Collaborative Care approaches? [draw hypothetical network onscreen]
	Change actor motivations to connect	The Collaborative Care approach aims to establish a common goal to align stakeholders.	20) How successful do you think the approach was in aligning everyone to develop, implement or sustain a primary care model at your site? 21) If the Collaborative Care approach were to be used other places, what advice would you give to align everyone to the goal of developing/implementing/sustaining the model?
Ties	Change specific ties	The Collaborative Care approach identifies relevant relational barriers to the establishment of a model e.g., Lack of trust between key partners (e.g., Parkes and Forbes in Lachlan Valley)	22) If the Collaborative Care approach were to be used other places, what challenges do you think a community would face? How do you think they should be overcome?

Appendix D. Interview protocol for NSW health system stakeholders.

Target	Question
Innovation	Overview to be provided to orient the interviewee to the program, using the overall and site-specific maps as a visual prompt.
User organisation	1) From [interviewee's organisation]'s perspective, is there a perceived need or priority for Collaborative Care in NSW? 2) Within [interviewee's organisation] is there likely to be any opposition to a Collaborative Care approach? If so, who and at what level? What would need to be done to strengthen perceived need and/or reduce opposition? How can new champions be mobilised? 3) What role do you think [interviewee's organisation] could play in scaling up NSW? What resources or limitations would ACI have in supporting Collaborative Care?
Environment	4) From [interviewee's organisation]'s perspective or experience, where do you think there is likely to be support for Collaborative Care? Where do you think there is likely to be opposition? 5) What could be done to strengthen supports for Collaborative Care? How could collaboration be established with supportive organisations? 6) What could be done to reduce opposition to Collaborative Care?

References

1. World Health Organization & ExpandNet. *Nine Steps for developing a scaling-up strategy*. https://media.publit.io/file/ExpandNet/Main/expandnet-who-nine-step-guide-published.html (2010).
2. Western Health Alliance Limited. Securing the future of Primary Health Care in small towns in Western NSW. (2019).
3. Ramsden, R. *et al.* Collaborative care: Primary health workforce and service delivery in Western New South Wales—A case study. *Australian Journal of Rural Health* **29**, 768–778 (2021).
4. Rural Doctor's Network. Collaborative Care Program - About the Program. https://nswrdn.engagementhub.com.au/about.
5. Australian Government Department of Health and Aged Care. Innovative Models of Care (IMOC) Program. *Australian Government Department of Health and Aged Care* https://www.health.gov.au/our-work/imoc-program (2023).
6. Covidence. Covidence - better systematic review management. *Covidence* https://www.covidence.org/ (2023).
7. Clarke, V. & Braun, V. Using thematic analysis in counselling and psychotherapy research: A critical reflection. *Counselling and Psychotherapy Research* **18**, 107–110 (2018).
8. Proctor, E. *et al.* Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. *Adm Policy Ment Health* **38**, 65–76 (2011).
9. Ramsden, R. *et al.* Collaborative care: Primary health workforce and service delivery in Western New South Wales—A case study. *Australian Journal of Rural Health* **29**, 768–778 (2021).
10. Beks, H., Mitchell, F., Charles, J. A., McNamara, K. P. & Versace, V. L. An Aboriginal Community-Controlled Health Organization model of service delivery: qualitative process evaluation of the Tulku wan Wininn mobile clinic. *International Journal for Equity in Health* **21**, 163 (2022).
11. Batlle, J. de *et al.* Implementing Mobile Health–Enabled Integrated Care for Complex Chronic Patients: Intervention Effectiveness and Cost-Effectiveness Study. *JMIR mHealth and uHealth* **9**, e22135 (2021).
12. Gillespie, J., Cosgrave, C. & Malatzky, C. Making the case for place based governance in rural health workforce recruitment and retention: Lessons from Canada and Australia. *Social Sciences & Humanities Open* **6**, 100356 (2022).

13. MacLeod, M. L. P., Hanlon, N., Reay, T., Snadden, D. & Ulrich, C. Partnering for change: How a health authority, physicians, and communities work together to transform primary healthcare services. *Journal of Health Organization and Management* **34**, 255–272 (2019).
14. Morrin, L., Britten, J., Davachi, S. & Knight, H. Alberta Healthy Living Program–A Model for Successful Integration of Chronic Disease Management Services. *Canadian Journal of Diabetes* **37**, 254–259 (2013).
15. Osborn, E. *et al.* "No One Manages It; We Just Sign Them Up and Do It": A Whole System Analysis of Access to Healthcare in One Remote Australian Community. *International Journal of Environmental Research and Public Health* **19**, 2939 (2022).
16. Quilty, S. *et al.* Addressing Profound Disadvantages to Improve Indigenous Health and Reduce Hospitalisation: A Collaborative Community Program in Remote Northern Territory. *International Journal of Environmental Research and Public Health* **16**, 4306 (2019).
17. Ramsden, R. *et al.* Partnering to address rural health workforce challenges in Western NSW. *Journal of Integrated Care* **28**, 145–160 (2019).
18. Reeve, C. *et al.* Community participation in health service reform: the development of an innovative remote Aboriginal primary health-care service. *Aust. J. Prim. Health* **21**, 409–416 (2015).
19. Blignault, I. *et al.* "You Can't Work with My People If You Don't Know How to": Enhancing Transfer of Care from Hospital to Primary Care for Aboriginal Australians with Chronic Disease. *International Journal of Environmental Research and Public Health* **18**, 7233 (2021).
20. Hungerford, C., Prosser, B., Davey, R. & Clark, S. The Australian 'grey nomad' and aged care nurse practitioner models of practice: a case study analysis. *Rural Remote Health* **16**, 3647 (2016).
21. Rimmer, D., Knight, S., Douyere, J. & Keating, T. Central West Single Practice Service Model. in (2015).
22. Bailie, J. *et al.* Determinants of access to chronic illness care: a mixed-methods evaluation of a national multifaceted chronic disease package for Indigenous Australians. *BMJ Open* **5**, e008103 (2015).
23. Drovandi, A. *et al.* Enablers and barriers to non-dispensing pharmacist integration into the primary health care teams of Aboriginal community-controlled health services. *Research in Social and Administrative Pharmacy* **18**, 3766–3774 (2022).
24. Harfield, S. *et al.* Building Indigenous health workforce capacity and capability through leadership – the Miwatj health leadership model. *Prim Health Care Res Dev* **22**, e52 (2021).
25. Australian Government Department of Health and Aged Care. *Evaluation of the COAG Section 19(2) Exemptions Initiative – Improving Access to Primary Care in Rural and Remote Areas Final Report*. https://www.health.gov.au/resources/publications/evaluation-of-the-coag-section-192-exemptions-initiative-improving-access-to-primary-care-in-rural-and-remote-areas-final-report?language=en (2021).