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BMJ Open What is the impact of an allied health service-learning programme for rural communities: a study protocol using the RE-AIM/PRISM framework

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ABSTRACT

Introduction People in rural areas of Australia experience poorer health in almost every indicator compared with urban populations; however, rural communities have lower access to primary health, allied health and specialist healthcare. Timely access to care is compounded by persistent and widespread health workforce issues, including attracting and retaining staff.

Australian University Departments of Rural Health (UDRH) have been established to address the needs of rural populations with the goal of improving recruitment and retention of health professionals across rural and remote Australia. The work-integrated learning team within The University of Melbourne works with nursing and allied health university students on clinical placement to provide exposure to working in rural health, with a remit to build the capacity of the existing and future workforce. The service-learning model aims to provide reciprocal benefits to stakeholders through purposefully co-designed placements that respond to rural health needs by providing services to underserved communities and ensuring university students are exposed to real world, diverse practice settings.

The overarching aim of this project is to determine the impact of the SL programme for key stakeholders, predominately end users and those stakeholders involved in the delivery of the SL model. The key stakeholders are host site staff, allied health university students, allied health supervisors and the end users of the programme. End users are those individuals that have received allied health services through the programme, such as clients, residents and children.

Methods and analysis This study will adopt a convergent mixed methods methodology underpinned by a RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance)/PRISM (Practical, Robust Implementation Sustainability Model) approach. Data collection will include document review, existing programme data review and primary data collection. This will involve conducting surveys and interviews with allied health university students, host organisations and allied health supervisors, and interviews with adult recipients of the service-learning programme. Art-based consultation will be conducted with school-aged children recipients of the service-learning programme. Analysis will be underpinned by

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This is a comprehensive mixed methods design that is underpinned by robust frameworks and theoretical approaches, that involves both researchers and clinical educators as authors.
- ⇒ This study is designed to be conducted across different sectors including education (early childhood, primary school, specialist schools and university), health (health services, aged care facilities) disability services and organisations in the community sector.
- ⇒ This study is designed to involve a wide range of stakeholders from different sectors, including teachers and principals, health service leadership and front-line staff, university students and allied health professionals and 'end users' across the life span (early childhood to older age).
- ⇒ Some limitations to this study include a single centre study, the cross-sectional study design and selection bias due to purposeful sampling.

the RE-AIM/PRISM framework to inform programme learnings and impact for key stakeholders.

Ethics and dissemination This study has been approved by the University of Melbourne Human Research Ethics Committee (Project ID: 30409). Findings will be published in a stakeholder project report and peer-review journals in the fields of rural health, implementation science and work integrated learning.

INTRODUCTION

Background

People in rural areas of Australia experience poorer health in almost every indicator compared with urban populations. This includes higher levels of chronic health conditions, higher rates of health risk factors such as smoking and alcohol consumption, higher levels of injury, higher levels of burden of disease and lower life expectancy.¹ However, rural communities have lower

access to primary health,^{2 3} allied health⁴ and specialist healthcare.³

Access challenges include the availability of services, affordability, geographical isolation, appropriateness of service provision and appointment scheduling.^{4 5} Timely access to care is compounded by persistent and widespread health workforce issues, including attracting and retaining staff.⁶⁻¹⁰

Australian University Departments of Rural Health (UDRH) have been established to address the needs of rural populations through creating rurally-based academic centres to expand the multidisciplinary rural health workforce, through the Australian Government's Rural Health Multidisciplinary Training (RHMT) programme.^{11 12} The goal is to improve recruitment and retention of health professionals across rural and remote Australia.¹³ Increasing recruitment and retention may be achieved by provision of onsite rural training, increasing cultural competency of provision of health to First Nations communities and increasing networks and professional development post-completion of university studies.¹³

Funded through the RHMT programme, Going Rural Health (GRH) is the work-integrated learning (WIL) team within The University of Melbourne Department of Rural Health. The WIL team works with nursing and allied health (including psychology) university students on clinical placement to provide exposure to working in rural health. The WIL team engages with students in traditional and service-learning (SL) settings, with a remit to build the capacity of the existing and future workforce.

There are multiple definitions of SL;¹⁴ however, for the purposes of this paper, SL is defined as a structured learning experience that combines community service with preparation and reflection, as defined by Seifers and Connors.¹⁵ SL may also be referred to as 'student led' or 'student implemented services'.¹⁴

Overview of the service-learning model

With a clear intention to grow the rural allied health workforce, GRH was an early adopter of SL in 2015 as an innovative approach to WIL.

The SL model developed by GRH aims to provide reciprocal benefits to all stakeholders which includes end users, host sites, allied health students, the existing allied health workforce and enrolled universities.^{16 17} Through the development of meaningful partnerships with host sites, the SL placements are purposefully co-designed to respond to rural health needs by providing allied health services to underserved communities. In return, university students are exposed to real-world, diverse practice settings.¹⁸ Through collaborative supervision models, students experience interprofessional practice and greater autonomy, promoting their civic responsibility and career readiness.^{19 20}

The GRH SL model identified 10 elements,¹⁷ all of which are designed to be undertaken simultaneously. A flexible approach enables SL implementation into a vast range of practice areas across the life span. Practice areas have included education settings, homelessness and hardship, disability, mental health and residential aged care. Given the importance of developing work-ready graduates to respond to Australia's rural health needs, SL has presented GRH with the opportunity to develop WIL in a range of untouched sectors and services. The GRH SL conceptual model is outlined in figure 1.

Understanding the path to impact: Theory of Change Development

To improve understanding of the SL programme outcomes and assist in designing the SL evaluation, it was identified that the SL model required a Theory of Change (ToC). Four individual programme logics for four different SL host sites were developed to understand the programme inputs, activities, outputs and outcomes

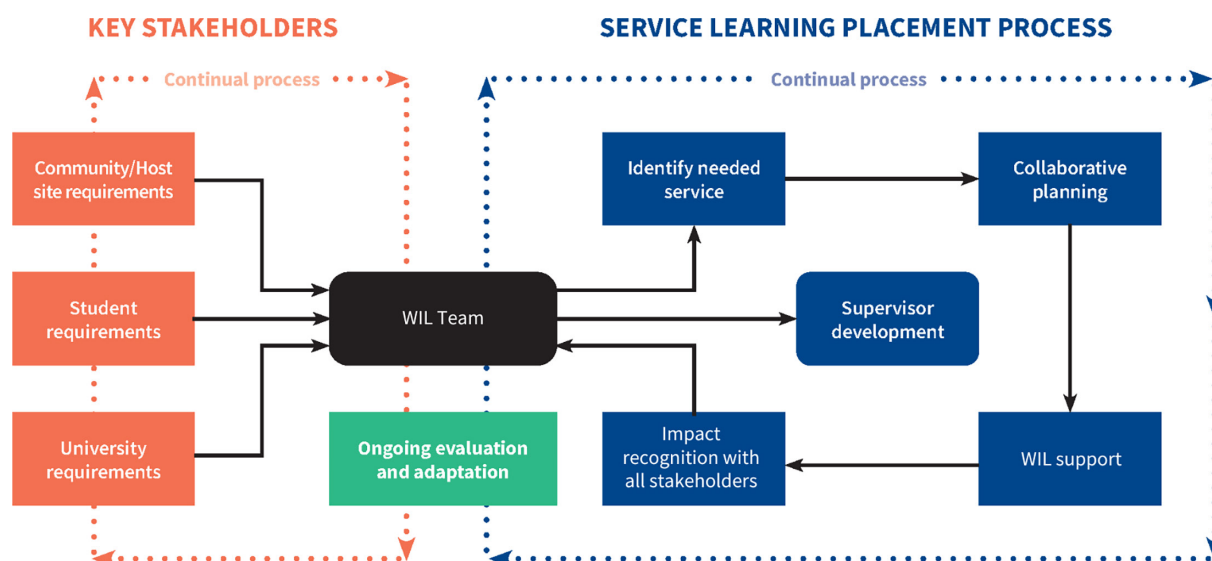


Figure 1 Going Rural Health service-learning conceptual model.¹⁷

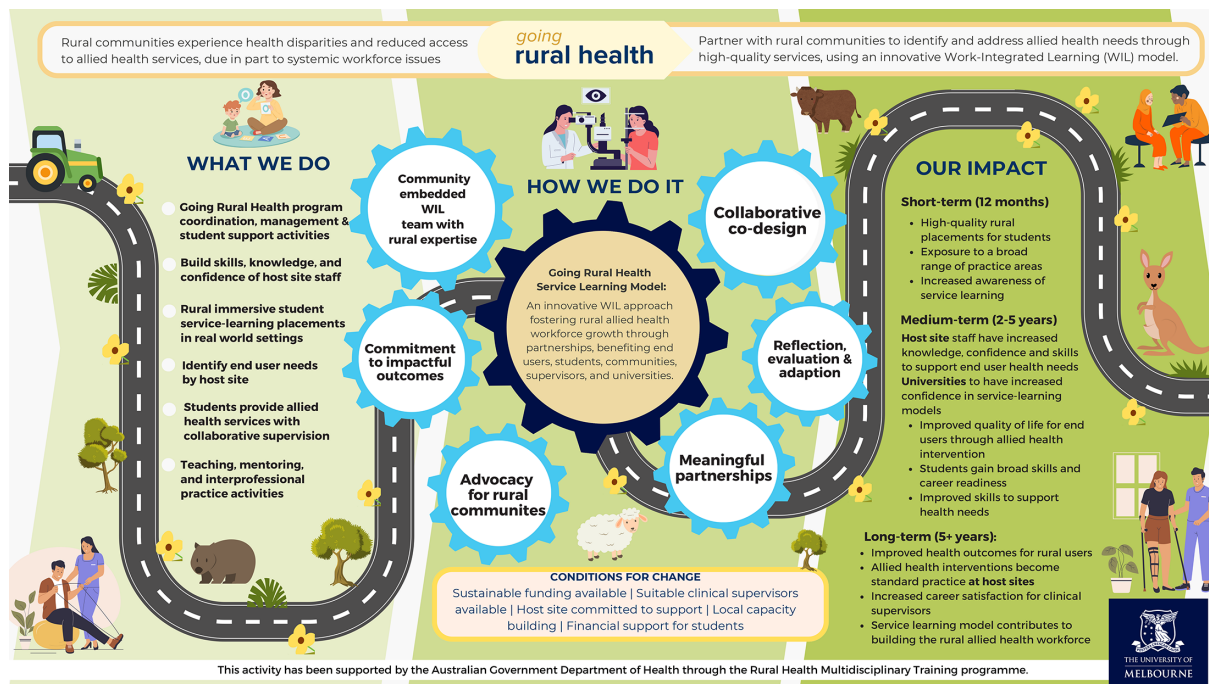


Figure 2 Going Rural Health service-learning Theory of Change.

for different stakeholders. These four programme logics had significant overlap in outcomes, although activities and outputs were site-specific. Through a facilitated workshop, GRH team members used these programme logics to develop an overarching SL programme ToC. An iterative consultation process was then undertaken to co-design the ToC content and concept, producing a visual representation of the SL model adopted by GRH, see [figure 2](#).

The overarching ToC represents the broad and flexible nature of the SL model which can be applied to different host site locations, sectors and life stages. In summary, the SL model aims to foster rural allied health workforce growth in conjunction with increased access to health services for rural communities. Through stakeholder partnerships, delivery of high-quality real-world student placement experiences and capacity building with host sites, this programme aims to improve rural health outcomes.

Aim

The overarching aim of the project is to determine the impact of the SL programme for key stakeholders, predominately end users and those stakeholders involved in the delivery of the SL model. The key stakeholders are host site staff, allied health university students, allied health supervisors and the end users of the programme. End users are those individuals that have received allied health services through the programme, such as clients, residents and children.

To address this aim, the key evaluation question is:

‘What has been the impact of the allied health SL model in rural communities for key stakeholders?’

Additional questions include:

1. What components of the model design and approach have been most effective and what areas can be improved?
2. How has the implementation of the SL model influenced its effectiveness and what areas can be improved?

Methods and analysis

Study design (evaluation approach)

This study will employ a type I hybrid effectiveness/implementation study^{21 22} which aims to collect data on the effectiveness of an intervention while concurrently collecting data on the implementation. The evaluation approach is underpinned by the RE-AIM/PRISM framework.²³ The RE-AIM framework has been used for more than two decades for programme planning, implementation and evaluation across a range of sectors including health and education.²⁴ RE-AIM is an acronym for Reach, Effectiveness, Adoption, Implementation and Maintenance. PRISM was developed as an extension of RE-AIM to assist in capturing key information regarding the context, both in terms of multilevel and multiperspectives, of the intervention under examination.^{23 25} PRISM is an acronym that stands for Practical, Robust Implementation Sustainability Model. PRISM domains include individual and organisation or setting characteristics, both individual and organisations/setting perspectives of the intervention; the external environment, such as regulation or policies that may influence implementation; and implementation and sustainability infrastructure such as resources.^{25 26}

RE-AIM/PRISM was chosen as it is a practical framework that allows for examination of the intervention



itself (SL programme), the implementation process and the programme impact for stakeholders. By collecting information regarding the intervention, the implementation and contextual issues, a comprehensive understanding of programme outcomes can be determined.

Methodological approach

The study will be conducted using a three-phase convergent mixed methods approach²⁷ underpinned by the RE-AIM PRISM framework as outlined in table 1.

All three phases of this study are situated within a pragmatic paradigm, underpinned by a transactional realist ontology and a pragmatist epistemology, which holds that a reality exists independently of our perceptions but is understood through our interactions with it.^{28 29} From this perspective, methods are chosen for suitability to address the research questions, while acknowledging that ontological and epistemological assumptions of the researchers actively shape the research design and interpretation.^{28 29}

Phase I: document review

This project will examine documentation related to host sites and the programme. This will include reports (eg, previous evaluation reports), strategic plans, key programme documents from services and relevant documents from GRH (eg, annual reports, planning documents and student feedback forms) and other stakeholders. Publicly available documents will be retrieved via Google and Google Scholar and organisational websites. Where documents are not publicly available, researchers will request access to any key documents from key stakeholder groups.

A data extraction matrix will be developed that contains information from key programme documents. Information to be extracted includes document name, year published, type of document and information relevant to constructs for the RE-AIM/PRISM framework and the SL conceptual model domains. Data will include quantitative data such as counts and frequencies, and qualitative data such as themes, descriptions and key insights related to programme implementation and impact.

Phase II: existing data sets

Two existing data sets will be used in the project which provides information regarding allied health students.

1. Student Placement Evaluation Survey (SPES).
2. StarRez.

Student Placement Evaluation Survey

The University of Melbourne Department of Rural Health SPES has been collecting student placement data since 2015, which includes data from SL placements. The instrument was modified in 2023 to reflect current literature regarding quality clinical placements.³⁰ This instrument prioritises reliable and validated measures to capture information regarding quality clinical placement,

including placement impact, clinical supervision and academic support.

Clinical placement assessment measures

Data to be used from the SPES data set will include data collected from the tools as outlined in table 2.

Service-learning measures

The SPES data set includes a specific domain regarding SL. This data has been collected prioritising psychometric instruments on three core areas related to SL: social responsibility, self-efficacy and reflective practice, as well as purposefully designed questions to gather information on work readiness and practice autonomy. More specifically, the data set contains student data information collected using:

Benefits of Academic Community Engagement scale

The Benefits of Academic Community Engagement scale³¹ is a self-report instrument designed to assess higher education students' perceptions of two specific areas related to community-based engagement through SL: personal development and social responsibility. Personal development includes assessing improvements in the areas of 'problem-solving, decision-making, and communication skills, and an increased sense of self-efficacy'.³¹ Social responsibility relates to the ability to be concerned and act on the welfare of other people. These two domains have been described as closely related outcomes when students apply their skills to have a positive impact on community. The scale has been designed to be used across multiple disciplines and sectors. The response options are on a five-point Likert scale from 'Strongly Disagree' to 'Strongly Agree' with higher scores indicating a more positive response for each of the two subscales.

Reflective Practice Questionnaire

The Reflective Practice Questionnaire (RPQ) is a 10-item short form measure of the original RPQ-Extended version.^{32 33} The RPQ is a self-reported instrument capturing information on reflective capacity, which involves people being able to assess assumptions and beliefs, including their own, to be able to interact effectively with patients or clients and improve general problem solving. The instrument has been designed to be used across disciplines. This scale is a single reflective practice construct. Response options are on a six-point Likert scale from 'Very Rarely' to 'Almost Always', with higher scores on the scale indicating a more positive response.

The SPES data set will provide data relating to the short and medium-term outcomes for allied health university students as outlined in the ToC.

StarRez™

Data will be extracted from the StarRez™ student support system, an existing data base of student support information. Data will include number of students supported, the

Table 1 Data matrix

Stakeholder group	RE-AIM domain	PRISM domain	Data type	Source
Phase I: Document review				
	Reach, Effectiveness Adoption Implementation Maintenance	Perspective on intervention Characteristics: organisation Implementation and sustainability infrastructure External environment	Qualitative and quantitative	Going Rural Health yearly planning documents, feedback forms, reports, strategic plans, key documents from services
Phase II: Programme data review				
Allied health university students	Reach	Characteristics: individual	Quantitative	StarRez
All	Reach		Quantitative	Other data (eg, occasions of service)
Allied health university students	Effectiveness		Quantitative	SPES data set Student feedback forms
Phase III: Primary data collection				
Host site staff	Effectiveness Adoption Implementation Maintenance	Perspective on intervention Characteristics: organisation Implementation and sustainability infrastructure External environment	Quantitative Qualitative	Survey Focus group/ interviews
End users (children, age care residents, etc)	Reach Effectiveness	Perspective on intervention Characteristics: individual	Qualitative	Interviews Proxy interviews with staff who work with end users Proxy interviews with parents/carers Art-based consultation
Allied health supervisors	Effectiveness	Perspective on intervention Implementation and sustainability infrastructure	Quantitative Qualitative	Survey Small group interviews
Allied health university students	Effectiveness Implementation Maintenance	Perspective on intervention Characteristics: individual External environment	Qualitative	Focus groups
PRISM, Practical, Robust Implementation Sustainability Model; RE-AIM, Reach, Effectiveness, Adoption, Implementation and Maintenance; SPES, Student Placement Evaluation Survey.				

number of placement weeks, the number and types of SL host sites, types of allied health disciplines and the home university of allied health students supported.

This data will be used to describe the RE-AIM implementation domain: reach of the programme, and PRISM domain: characteristics of the individual.

**Table 2** Clinical placement assessment measures

Construct	Measure	Description
Placement impact	Undergraduate Clinical Education Environment Measure evaluation tool ⁶⁹	This tool is a self-reported 26-item questionnaire that is designed to capture impact of the clinical placement for allied health students. It includes two overarching dimensions, (1) experiential learning and (2) social participation.
Clinical supervision	Manchester Clinical Supervision scale ⁷⁰	This tool consists of 26 items in 6 subscales related to clinical supervision based on three domains of the Proctor model of clinical supervision: normative, restorative and formative domains.
Support Peer support and academic support	Academic Support the Practicum Scale (EAPAP) ⁷¹	The tool was developed to assess the academic support received by student in a learning environment. The EAPAP contains four subscales: (1) academic institution support (five items) (2) peer support (six items) (3) preceptor support (six items) and (4) clinical facilitator support (six items) This study will use two subscales: academic institution support, which comprises instrumental and emotional support, and peer support, which comprises emotional support and information support.
Support belonging	The Belongingness Scale—Clinical Placement Experience ⁷²	This tool is a 34-item measure developed to measure students' perceptions of belonging at their host site during clinical placement.

Phase III: convergent mixed method study (primary data collection)

The third stage of the evaluation involves data collection with key stakeholder groups using mixed methods. This will include quantitative data collection (surveys) and qualitative data collections (interviews, focus groups and art-based consultation).

Key stakeholder groups to be involved in consultation are:

- ▶ Allied health university students.
- ▶ Allied health student supervisors.
- ▶ Host site leadership staff.
- ▶ Host site staff that work with clients and allied health students.
- ▶ Host site clients and their carers.

End users.

- Aged care residents.
- Community members.
- School-aged children.
- Parents and carers.

Quantitative consultation (surveys)

All sites that are currently hosting or have hosted SL placements will be invited to participate in a survey. At each participating site, surveys will be sent to:

- ▶ Host site leadership staff.
- ▶ Host site staff that work with clients and allied health students.
- ▶ Allied health student supervisors (discipline specific).

Questionnaire design

Questionnaires have been designed to capture data from all sites using a combination of psychometric measures and purposefully developed questions on the SL model, implementation and programme effectiveness/impact.

Implementation

A 'pragmatic' approach to implementation measurements was employed^{34–36} given some of the reported challenges of implementation outcome measures.^{37–40} This included measures that captured information important to stakeholders, low burden for respondents and staff, actionable and sensitive to change. Additional recommended criteria considered were those that were psychometrically strong and related to theory or a model (where feasible).³⁴ Priority was given to instruments with established reliability and validity and to previously published questionnaires. The study measures included in each of the stakeholder surveys are outlined in [table 2](#) and include validated measures of implementation outcomes: acceptability, appropriateness, feasibility and sustainability/maintenance. The three constructs of acceptability, appropriateness and feasibility were proposed by Proctor *et al*⁴¹ as the most important constructs involved in the adoption decision-making process and hypothesised to be associated with initial and ongoing adoption of interventions.^{1 41 42} Measures of cost and fidelity were deemed out of scope.

The Theoretical Framework of Acceptability questionnaire

The TFA questionnaire was developed from the Theoretical Framework of Acceptability^{43 44} which aims to assess the acceptability of an intervention. It was considered

suitable due to having a theoretical foundation, the ability to assess acceptability before, during and after the intervention and to be used from the perspective of both those delivering the intervention and recipients.⁴⁵ The scale contains eight items on a single scale with response options from ‘Strongly Disagree’ to ‘Strongly Agree’, where a higher score indicates a more positive response.

The Implementation Appropriateness Measure and the Feasibility Implementation Measure measures

These measures were chosen to capture components of implementation identified as core elements in conjunction with acceptability.⁴² These measures were designed as ‘pragmatic’ measures based on Glasgow and Riley’s recommendations. Both scales are four-item scales each with a five-point Likert scale, with response options from ‘Completely Disagree’ to ‘Completely Agree’. Higher scores indicate a more positive response.

The Clinical Sustainability Assessment Tool

The Clinical Sustainability Assessment Tool (CSAT) is designed to provide an overall assessment of the sustainability of the intervention.⁴⁶ However, the tool also provides subscales that contribute to adoption and implementation, which are determinants of sustainability such as organisational readiness (three items), engaged staff and leadership (three items), workflow integration (three items), implementation and training (three items), monitoring and evaluation (three items) and a subscale on outcomes and effectiveness (three items). The scale captures subscale scores for each domain on an eight-item Likert scale with response options from ‘To a little or no Extent’ to ‘To a very great Extent’ and includes a ‘Not Applicable’ option. Higher scores on the subscales and the overall total score indicate a more positive response.

Service-learning model concept measures

The use of a partnership analysis tool was included to objectively measure collaboration between host sites and the GRH team, as collaboration and partnerships are a

core component of collaborative planning, a key domain of the SL model.

The VicHealth Partnership Analysis Tool

The VicHealth Partnership Analysis Tool⁴⁷ was chosen given its comprehensive assessment of partnerships, and its extensive use in the Australian context, including in rural health.^{48 49} The tool contains 35 items across seven domains, with each domain containing five items. The domains are: (1) determining the need for the partnership, (2) choosing partners, (3) making sure partnerships work (4) planning collaborative action (5) implementing collaborative action (6) minimising the barriers to partnerships (7) reflecting on and continuing the partnership. Response options are on a five-point Likert Scale from ‘Strongly Disagree’ to ‘Strongly Agree’. A ‘Not applicable’ response was added for sites where the questions did not apply. Higher subscale scores and an overall total score indicate a more positive response.

Additional single item questions were specifically developed for some domains related to the SL conceptual model, implementation and programme effectiveness related to stakeholder outcomes, as defined by the ToC. Demographic questions included were age, role, host organisation and time in role. A summary of the questions included in the implementation survey area in [table 3](#).

Data collection

Data will be collected electronically using REDCap survey platform. At the completion of the survey, participants will be asked to provide contact details if they wish to participate in the qualitative component of the evaluation. All individuals’ surveys will be de-identified at the time of collection.

The leadership survey comprised 84 questions in total and takes approximately 20min to complete. The host site staff comprised 31 questions and took approximately 15min to complete. The allied health supervisors

Table 3 Implementation survey measures

Model	Construct	Questionnaire measure	Stakeholder group		
			Host site leadership	Host site staff	Allied health supervisors
Service-learning model	Collaborative planning-partnerships	VicHealth Partnership Tool	✓		
RE-AIM	Implementation-acceptability	TFA	✓	✓	✓
RE-AIM	Implementation-appropriateness	IAM	✓	✓	✓
RE-AIM	Implementation-feasibility	FIM	✓	✓	✓
RE-AIM	Sustainability	CSAT-overall score	✓		✓
RE-AIM/Theory of Change	Programme effectiveness	CSAT outcomes and effectiveness scale (end users)	✓	✓	✓

CSAT, Clinical Sustainability Assessment Tool; FIM, Feasibility Implementation Measure; IAM, Implementation Appropriateness Measure; RE-AIM, Reach, Effectiveness, Adoption, Implementation and Maintenance; TFA, Theoretical Framework of Acceptability.

**Table 4** Qualitative data collection approach

Qualitative measures	Stakeholder group					
	Allied health university students	Allied health supervisors	Host site leadership	Host site staff	End users (clients, residents, children)	Parents and carers
Interviews	✓	✓	✓	✓	✓	✓
Focus groups	✓	✓		✓	✓	✓
Art-based consultation					✓	

survey comprised 46 questions and takes approximately 15 min to complete.

Qualitative consultation

In-depth qualitative consultation will include focus groups, one-on-one or small group semi-structured interviews and art-based consultation. Consultation will be undertaken at approximately six to eight sites that have participated in the SL programme. These sites will be representative of the programme across the geographical footprint and across different life stages the programme is working (from early childhood to elderly) to enable comprehensive understanding of the programme. Sites to be considered include early childhood education centres, schools, community-based organisations and aged care services.

A summary of qualitative data collection relative to stakeholder group can be found in [table 4](#).

Interview and focus groups

Semi-structured interview schedules have been developed to collect data on constructs of the SL conceptual model (needs assessment, collaborative planning, supervisor development and WIL support), RE-AIM/PRISIM constructs and the ToC (short and medium-term) outcomes for host site staff, allied health university students, allied health supervisors and 'end user' stakeholders.

Data collection

Interviews are designed to take approximately 60 min and will be offered face-to-face, online (using Zoom or Microsoft Teams) or telephone.

Focus groups will be held face-to-face at each of the participating sites with a mix of stakeholders to explore specific sites issues, barriers and enablers and perceived impact. Focus groups are anticipated to take approximately 90 min. A separate online focus group of allied health supervisors will be conducted to explore issues for supervisors across sites, barriers and enablers and impacts of the programme. Interviews will be audio recorded and transcribed verbatim.

Art-based consultation

Consultation with children will be conducted using art-based consultation. Art-based consultation can involve a visual or performance arts methods for children to describe their experience.^{50–52} Working with each of the sites, the research team will conduct the most appropriate format of consultation to ensure it is fit for purpose for age group, the setting/context and ensure it is delivered in a familiar and trusted environment. Two methods that are popular with children that are low resource and time intensive, yet effective, are drawing-based activities and collage-based activities.^{53 54} The consultation will be underpinned and guided by the Australian Government Australian Institute for Family Studies 'Involving children in evaluation' Practice Guide.⁵⁵

Data collection

A 75–90 min workshop will be conducted by two researchers. Children who have received allied health services from the SL programme will be asked to do a drawing 'Draw and Write'^{56 57} or create a collage^{58 59} that represents their experience of being involved in the allied health SL programme. During and following the activity, the children will be asked to describe how their art creation represents their response to the question. Researchers will photograph the de-identified creations and take notes of the accompanying narrative explaining the artwork. An overview of the workshop and alignment with evaluation approach is outlined in [table 5](#).

Study population and consent

This project will purposefully recruit individuals that have been involved in the SL programme across the University of Melbourne geographical footprint. This includes a total of 38 sites, including two aged care facilities, 18 kindergartens and schools and 18 community-based sites.

The GRH staff members have trusted established relationships with each of the sites that host the SL programme and the allied health supervisors and will provide contact details and introduce key stakeholders to the research team.

Table 5 Art-based consultation approach

Consultation instruction/ research question	RE-AIM construct	PRISM construct	Service-learning conceptual model
Art activity: Please complete a drawing, or use the magazine pictures to cut and paste images onto butchers' paper. Use these images to describe: What has being involved with the visiting (allied health students) programme meant for you?	Effectiveness	Perspective of intervention	Needs assessment
Description of creation relative to evaluation question: Can you please describe what your creation means?	Effectiveness	Perspective of intervention	Needs assessment

Host sites

Researchers will work with relevant GRH representatives to facilitate an introduction to each site to explain the purpose and approach of the evaluation via email. Researchers will seek formal endorsement of the evaluation with senior staff at the site sites (eg, principals, service leadership), which will include promotion of the project and distribution of promotional material. Following endorsement, host site staff will be invited to participate in a survey and/or interview/focus group via email.

Inclusion criteria

Host site leadership staff: a staff member in a leadership or decision-making role regarding the host sites involvement in the SL programme, and/or involved in the design and implementation of the SL programme at their site. The staff member must be employed by the host site and aged 18+years. Informed consent will be required prior to completing a survey or participating in an interview or focus group. The project aims to recruit approximately 20 staff in leadership or senior roles.

Host site staff: a staff member that is directly involved in the SL programme, by working with both end users (clients, residents, children, community members) and allied health SL placement students at their site. The staff member must be employed by the host site and aged 18+years. Informed consent will be obtained prior to completing a survey or participating in an interview or focus group. The project aims to recruit approximately 30 staff in roles that work with end users and university students.

Allied health clinical supervisors

GRH team members will facilitate an introduction to the researchers to the relevant allied health supervisors via email. These introductions will include promotional material and will invite supervisors to participate in a survey and an interview/focus group.

Inclusion criteria

Allied health clinical supervisors employed in the SL programme, aged 18+years. Informed consent will be obtained prior to completing a survey or participating in an interview or focus group.

Where allied health supervisors are employed by the host site, they will be included in the engagement conversations with host sites. The project aims to recruit approximately 15 allied health supervisors.

Allied health university students

GRH team members will facilitate an introduction to the researchers to the relevant allied health university students via email. These introductions will include promotional material and will invite students to participate in an interview/focus group.

Inclusion criteria

Allied health university students undertaking a clinical placement in the SL programme, aged 18+years. Informed consent will be obtained prior to participating in an interview or focus group. The project aims to recruit approximately 15–20 allied health university students.

End users

Working with host site leadership and staff, the evaluation will be promoted to end users of the SL programme. End users are defined as individuals that receive allied health services through the SL programme such as clients in community-based programmes, residents in age care facilities; early childhood, primary, secondary and specialist school children at participating education facilities. Parents and carers of end users will also be invited to participate. Host site staff will provide researcher contact details to end users and ask end users to contact the research team directly if interested in participating.



Inclusion criteria

End user aged 18 years +: individuals who have received allied health services from the SL programme and have the cognitive ability to provide informed consent. Informed consent will be obtained prior to participating in an interview or focus group. The project aims to recruit approximately 20–30 end users over 18 years of age.

End users aged less than 18 years: parents or carers of children that have participated in the SL programme will be asked to provide informed consent for their child. Children, however, will be able to provide or remove assent to withdraw from the consultation activity at any point. Informed consent will be obtained from parents/carers prior to participating in arts-based consultation. The project aims to recruit approximately 20 end users under 18 years of age.

Setting and location

This project will take place in Victoria, in the footprint of the University of Melbourne student clinical placements. Settings include early childhood settings (eg, kindergartens), primary, secondary and specialist schools, age care facilities, health services and community organisations.

Comparators

There are no comparators for this study as it is an evaluation of the programme.

Perspective

Impact and implementation of stakeholders involved in the delivery of the SL model and the receipt of services from the SL model

Time horizon

2-year project (January 2025 to December 2026).

Data collection

Data collection will be completed by research staff from the University of Melbourne, not associated with the design or delivery of the SL model.

Data collection tools can be found in online supplemental additional files I–VI and include: additional file I–host site leadership staff: survey and interview schedule, online supplemental additional file II–host site staff: survey and interview schedule, online supplemental additional file III: allied health supervisors: survey and focus group schedule, online supplemental additional file IV: end user interview schedule, online supplemental additional file V: art-based consultation protocol, online supplemental additional file VI: allied health university students: focus group schedule.

Analysis

Quantitative

Data will be exported from REDCap to SPSS V.29 quantitative software for analysis. Descriptive statistics will be calculated for individual survey questions. Surveys will be analysed using inferential statistics such as χ^2 tests, t-tests,

analysis of variances, correlations and regression modelling. Open-ended questions will be coded, and content analysis will be used to analyse this data. Survey data will be analysed within sites, and across sites.

Outcome measures will include scores for implementation outcomes acceptability, appropriateness, feasibility and sustainability. Outcome measures for impact will include placement impact and SL outcomes scores for allied health university students, and outcome and effectiveness scores from the CSAT tool for end users.

The main outcome measure is impact, so associations and regression modelling will focus on elements of the SL conceptual model and implementation that are associated with clinical improvements for end users and effectiveness of the model for SL outcomes for allied health university students.

Qualitative

Preliminary content and thematic analyses will be conducted using NVivo V.14. Content analysis will involve the use of an a priori coding template⁶⁰ based on the RE-AIM PRISM framework constructs. Thematic analysis will follow the template analysis approach as described by King.⁶¹ Template analysis involves six stages: (1) familiarisation with the data, (2) preliminary coding, (3) organising themes, (4) defining an initial coding template, (5) applying and refining the template and (6) finalising and applying the template to the full dataset. This study will adopt a combined inductive and deductive approach to thematic analysis, using an a priori coding template based on the RE-AIM/ PRISM framework constructs during the preliminary coding stage while allowing for the identification of emerging themes.

The trustworthiness and rigour of the qualitative analysis will be strengthened through the following strategies: (1) data triangulation, (2) researcher triangulation and (3) reflexivity.⁶² Specifically, data triangulation will involve collecting and analysing data across different sites and from multiple participants at each site. For researcher triangulation, two experienced researchers will be involved in the coding and the thematic analysis to minimise single-researcher bias. Finally, reflexivity will be maintained throughout the research process by engaging in ongoing critical reflection on the researchers' potential biases, assumptions and influences on data interpretation. This will include keeping reflective journals, discussing interpretations collaboratively and incorporating reflexivity into the reporting of findings to ensure transparency and credibility.

Mixed methods integration

All quantitative and qualitative data will be triangulated and integrated to provide a cohesive understanding of the project results, with a primary focus on the outcomes for stakeholders and the secondary aim of identifying implementation determinants that facilitated stakeholder outcomes. Integration of data will use the triangulation protocol as developed by Farmer *et al.*⁶³ which involves

developing a ‘convergence coding matrix’ to compare and triangulate findings. Findings can be in agreement (convergence), partial agreement (complementing), dissonant (not in agreement) or client (only one data source contains the finding).^{64–67} In situations where there is partial agreement or dissonant, or a cohesive understanding cannot be fully achieved, the concept of data diffraction will be drawn on.⁶⁸ Rather than forcing data into a singular narrative when it does not fit, diffraction acknowledges the complexity, multiplicity and inherent messiness of social phenomena.⁶⁸

Findings from the project will inform a series of recommendations designed to improve the ongoing SL programme. It is anticipated that recommendations will include those regarding the SL conceptual model, implementation at new sites including implementation strategies, efficiency improvements, recommendations regarding the sustainability of the programme and importantly recommendations regarding effectiveness to improve stakeholder outcomes.

ETHICS AND DISSEMINATION

Ethics

This study has been approved by the University of Melbourne Human Research Ethics Committee (Project ID: 30409).

Dissemination

The findings of this study will be published in a project report that will be publicly available on the University of Melbourne GRH website and available to participating host sites and other stakeholders.

Findings will be published in peer-review journals in the fields of rural health, implementation science and WIL. The findings will also be presented at conferences and made available to other UDRH teams that may wish to replicate the approach to evaluate clinical placement programmes.

Risks and risk management

Potential identity of participants in the data is possible despite the use of de-identifiable data as some sites will have small numbers of stakeholders. To mitigate this risk, data will be aggregated for small sites where individuals are identifiable due to role, type of organisation or due to a description of a site.

There is the potential risk that children may not feel safe or comfortable with consultation. To mitigate this, consultation with children is designed to take place in an environment that is safe and familiar, with trusted adults that children have established relationship with. Researchers will not be alone with children and will have appropriate Working with Children Check documentation. Consultation will be underpinned by practice guidelines Australian Institute of Family Studies Practice Guide ‘Involving Children in Evaluation’.⁵⁵ The planned activity is similar to school-based activities and does not involve

collecting sensitive data. Although parents will provide consent for children, children can refuse assent at any time during the consultation. A full list of potential risks and risk mitigation strategies for consultation with children is available in online supplemental additional file VII.

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