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Student-Led Falls Prevention Program for Community-Dwelling Older Adults in a Rural Community: A Pilot Study

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ABSTRACT

Introduction: A third of community-dwelling adults over the age of 65 years fall each year, making falls a significant concern for the elderly. Older people living in community-dwellings account for 73% of fall-related hospitalisations in older populations. Little is known about identifying, reaching at-risk people, and delivering these interventions in rural communities.

Objective: Our aim was two-fold.

1. To test the utility of a student-led program in identifying community-dwelling elderly people at high risk for falls in a rural and remote setting.
2. To determine client satisfaction with the falls prevention program.

Setting: Rural and remote community settings in Queensland, Australia.

Participants: Forty community-dwelling older adults from the MMM 4 and 6 regions.

Design: This pilot study utilised a cross-sectional design and convenience sampling approach. A validated falls risk self-reported checklist and a screening checklist for general practitioners were used to identify older adults at risk of falling. During the home visit, participants were assessed for their cognition, balance and home safety. A client satisfaction survey was completed via telephone 3 months following the home visits.

Results: Several risk factors for falls were identified, including unsafe use of equipment, absence of Medi alerts, insufficient supervision, lack of support, inappropriate footwear, behavioural concerns and environmental hazards. Most participants reported that the home assessment was valuable and made their homes safer.

Conclusion: An innovative student-led placement model has the potential to provide much-needed access to falls prevention services and minimise falls among community-dwelling older adults in rural and remote locations.

1 | Introduction

Falls are the leading cause of accidental injuries or death in Australia's older population, representing 77% of all injury hospitalisations and 71% of injury deaths. Along with physical injuries such as fractures, falls can also be associated with significant psychosocial stress because of increased fear of falling as a result of decreased mobility and lack of independence. A third of community-dwelling people over the age of 65 years falls each year, making falls a major concern for the elderly. Also, a large population-based study in Queensland reported that falls related-hospitalisations rates increases exponentially for people over 65 years [1]. Falls among older adults are a significant public health problem and have substantial consequences

Summary

- What is already known about this subject?
  - Falls are a leading cause of injury and accidental death in older adults.
  - There is clear evidence about effectiveness of falls prevention interventions.
- What does this study add?
  - This pilot study provides evidence to support the utility of a student-led clinic in identifying community-dwelling older adults at a high risk for falls.
  - Findings support the utilisation of allied health students on placements to supplement the existing healthcare workforce in fall prevention, especially in resource-limited settings.

for individual quality of life and independence. Falls injuries in older adults cost the Australian healthcare system 2.3 billion each year [2, 3]. Falls-related economic burden has been escalating, and it has been projected that, by 2051, the total annual Australian health bill for falls-related injury will increase almost threefold to AUD$1.4 billion [4].

Due to these challenges, there is a need for interventions aimed at reducing the rates of falls and minimising risk factors. Evidence from the literature suggests that primary care-based health professionals are uniquely placed to identify and provide evidence-based falls prevention services, which places General Practitioners (GPs) in an ideal position to promote falls prevention in the community. Despite the clear evidence about the effectiveness of falls prevention interventions, little is known about how to identify and reach people who are at risk and also how to deliver these interventions in the community [5], especially in rural communities. Identifying older people at high risk of falls should be a public health priority. Strategies to prevent falls and falls-related injuries within the older population must be developed and implemented.

A review of falls literature suggests that rates of falls between metropolitan and rural areas of Australia are similar [6]. However, regional and rural houses in Australia have specific environmental barriers such as a raised veranda, larger houses, outdoor toilets and uneven ground surfaces [7]. Moreover, approximately 30%–50% of all falls have been reported to be caused by an environmental hazard [8–10]. Therefore, access to timely identification and screening for older people at high risk for falls and interventions focused on minimising environmental hazards in rural and remote areas are warranted.

The shortage of allied health professionals working in rural and remote areas and limited access to allied health in rural and remote areas are also known issues, putting people living in these communities at a greater risk of poor health outcomes [11, 12]. Improving timely accessibility to quality primary and preventative care for older adults in rural and remote areas is a continuing challenge for the Australian government and policymakers, considering the country's large geography.

A potential approach to minimise falls risk in rural and remote communities is incorporating falls prevention programmes into clinical placements for allied health students from various disciplines. The literature suggests that clinical placement programs expose students to an authentic workplace experience and see a variety of clients, including those from lower socioeconomic and disadvantaged communities [13–15]. Under the supervision of an experienced practitioner, student-led clinics can deliver quality healthcare services to clients [16] and provide students with an opportunity to develop their clinical and professional skills [17, 18]. As a result, we trialled an innovative occupational therapy (OT) student-led placement based on the service-learning model in rural and remote communities to provide much-needed access to allied health services in these resource-limited locations.

Our aim for this pilot study was twofold: first, to test the utility of a student-led programme in identifying community-dwelling elderly people at high risk for falls in a rural and remote setting, and second, to determine client satisfaction over a 10-week student-led falls prevention program.

2 | Methods

2.1 | Study Design

This study used a cross-sectional design to identify community-dwelling older adults living in Queensland's MMM 4–6 (rural and remote locations) regions. The project was reviewed and approved by the James Cook University Human Research Ethics Committee (Application No H9147). Data were collected from August 2023 to February 2024.

2.2 | Study Protocol

The research and clinical education team conceptualised, designed and planned the student-led fall prevention programme and obtained ethics approval a few months before the commencement of student placement. Subsequently, two undergraduate Occupational Therapy (OT) students commenced their 10-week placement at a University Department of Rural Health in a rural area. In the first week of student placement, the focus was on orientating the students to the facility and surrounding towns and understanding the contextual factors of rural and remote living. In the second week of placement, students practised their communication and information-gathering skills and received training on all the assessment tools. Following ethics approval, the research team advertised and recruited before the students' commencement and continued recruiting and accepting referrals until week 7 of student placement. Students commenced client home visits in week 3 with their supervising occupational therapist (AM), who had more than 15 years of clinical experience as an occupational therapist. A telephone satisfaction survey (Appendix A) was conducted by an independent research team member (SB) 3 months after the initial home visits (Figure 1).

2.3 | Participants

Community-dwelling older adults over 60 and First Nations people over 50 living in MMM 4–6 regions in Queensland were

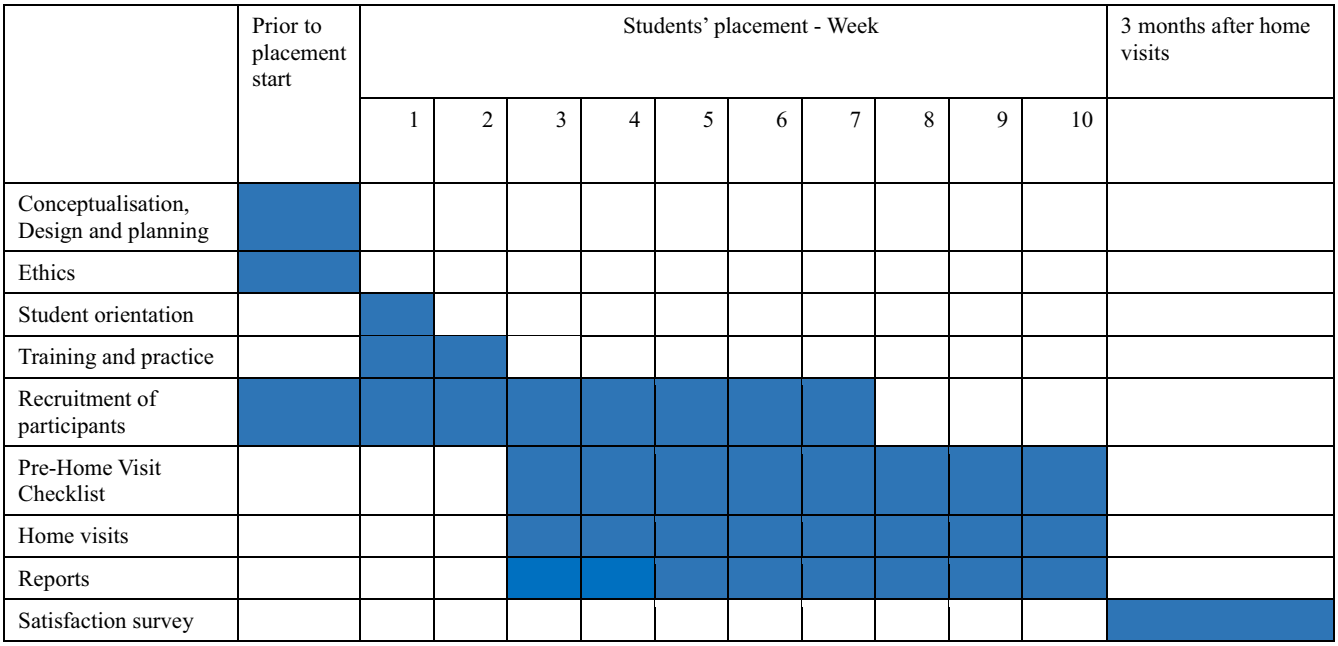

FIGURE 1 | Timelines for the student placement.

recruited into the study if they screened positive for falls on a validated falls risk checklist.

2.4 | Recruitment

A convenience sampling strategy was used. Participants were recruited through local GP practices, community aged care services and multipurpose health centres in the MMM 4 and 6 regions. Advertisement flyers were displayed in these facilities, notifying interested participants to approach their healthcare providers for more information about the program. The falls prevention program was also advertised on the social media pages of partner organisations.

2.5 | Measures

Two screening questionnaires were used to identify community-dwelling older adults at risk of falling: (a) self-referral, using a validated 12-item self-rated falls risk questionnaire [19] completed by the potential participants, (b) General Practitioner (GP) referral, with the GPs using the Falls Risk for Older People in the Community (FROP-Com) screening checklist [20]. Eligible participants were then assessed for their cognition using the Montreal Cognitive Assessment [21], balance using the Timed Up and Go Assessment [22] and home safety using the Westmead Home Assessment [23] during a scheduled home visit.

2.5.1 | Self-Rated Falls Risk Questionnaire

The 13-item self-rated falls risk questionnaire (Appendix B) was developed initially by Rubenstein et al. (2011) to assess the risk for falls in older adults [19]. The 12-item version used in our study is adapted by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates. Each question on the self-rated falls questionnaire can be scored as 0 or 1, or 0 or 2, depending on the question, and the highest possible score is 14. A higher score indicates a higher risk of falling. If a client receives a cut-off score of four or more points, their falls risk is considered to be increased.

2.5.2 | The Falls Risk for Older People in the Community (FROP-Com) Screening Checklist

The three-item FROP-Com screening checklist (Appendix C), a shortened version of the 13-item FROP-Com questionnaire, was used to identify the risk for falls in older adults [20]. The three items chosen from the FROP-Com questionnaire are the most strongly predictive of falls: the number of falls in the last year, observation of the client's balance, and assistance needed to perform activities of daily living. It is helpful for busy healthcare professionals with limited time to screen clients at high risk for falls and refer them for more detailed assessment and management if needed.

2.5.3 | The Montreal Cognitive Assessment (MoCA)

The 11-item MoCA was developed as a brief screening test for mild cognitive impairment. The MoCA assesses multiple cognitive domains, including attention, concentration, executive functions, memory, language, visuospatial skills, abstract thinking, calculation and orientation [21]. Each question on the MoCA can be scored as 1, 2, or 3, depending on the question, and the highest possible score is 30. A score of 26 and above indicates no cognitive impairment, a score between 18 and 25 indicates mild cognitive impairment, a score between 10 and 17 indicates moderate cognitive impairment, and a score less than 10 indicates severe cognitive impairment.

2.5.4 | The Timed Up and Go Test (TUG)

The TUG is a commonly used screening tool to examine balance and risk for falls in older adults [22]. The test involves the client rising from a chair of standardised height, walking three metres, returning to the chair, and sitting down. Any older adult who takes more than 12s to complete the TUG is considered at risk for falling.

2.5.5 | The Westmead Home Safety Assessment (WeHSA)-Short Form

The abbreviated version of WeHSA is a 34-item systematic and extensive guide to identifying potential environmental fall hazards in and around the home. Hazards are organised according to different sections (e.g., bedroom, bathroom, medications and footwear) that are expanded upon further detailed descriptors [23].

2.6 | Procedure

Once eligible participants are identified as at risk of falling, they can request their health professional to refer them to the falls prevention programme, which consisted of a one-off 60- to 90-min home visit. Upon receipt of the referral, eligible participants were contacted by phone and provided with additional information about the falls prevention program. A verbal consent was obtained to complete a home visit, a pre-home visit checklist (Appendix D) for staff safety was completed over the phone by OT students, and a suitable date and time for the home visit was then agreed upon. OT students under the supervision of a registered occupational therapist then conducted home visits to identify falls risks. The participant or the caregiver for the participant, if the participant had severe cognitive impairment, signed a written consent on the day of the home visit. The pre-home visit study procedure is illustrated in Figure 2.

On the day of the home visit, the falls evaluation was completed using MoCA, TUG, and WeHSA. Based on the home safety assessment, specific recommendations were made. Students provided verbal feedback to the client at the end of the home visit, after which a brief report was provided to the client and/or the referring health practitioner at the end of the study. Also, clients were referred to other services if needed.

2.7 | Data Analysis

Data were analysed using SPSS. Deidentified data were cleaned and coded before being imported into SPSS. Descriptive statistics were used to examine demographic characteristics and summarise the risks associated with falls.

3 | Results

The student-led falls prevention program received 46 referrals. Of these 46 referrals, six participants declined a home visit. All the 40 remaining participants met the inclusion criteria and consented to receive a home visit by the OT students and their supervisor. Thirty-two participants self-referred, and eight were referred by a GP (Table 1). Twenty-six (65%) participants live in an MMM6 location (remote areas), with the remaining living in an MMM4 location (medium rural town).

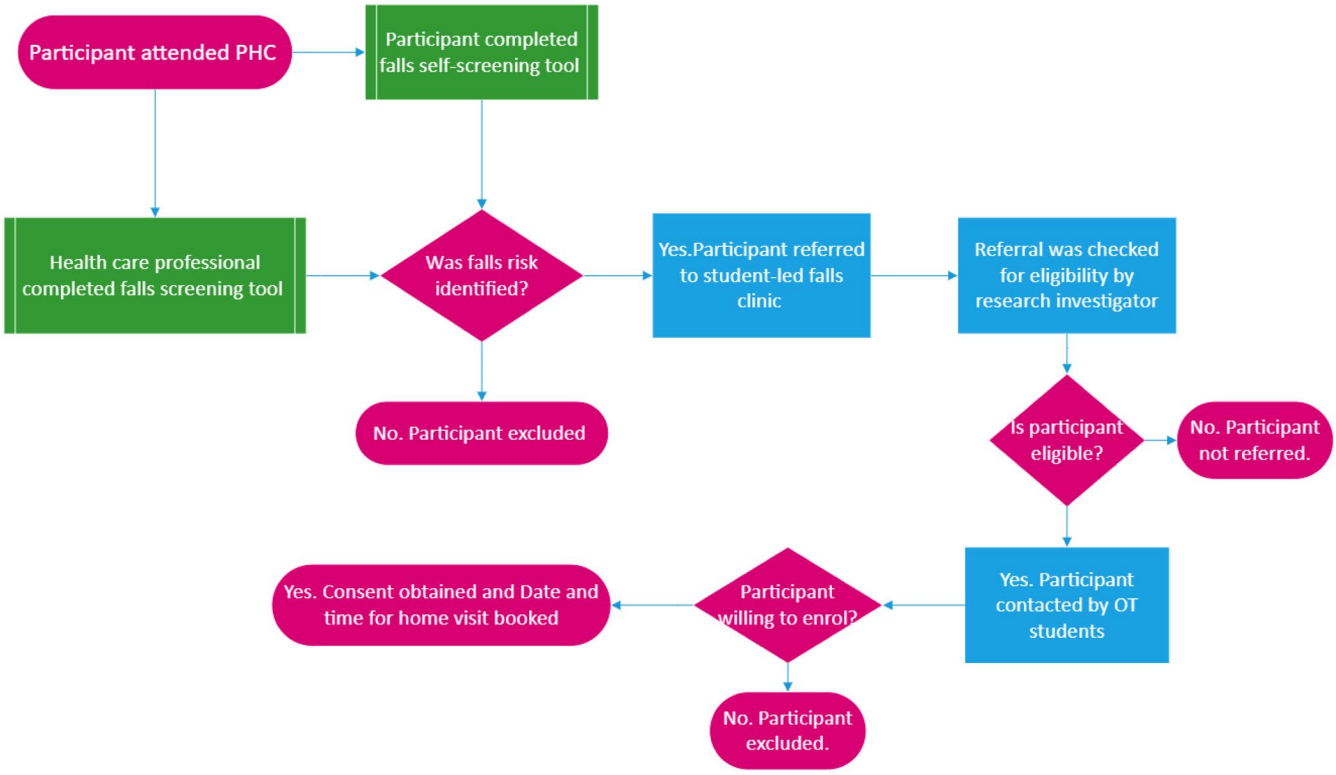

FIGURE 2 | Pre-home visit study procedure.

TABLE 1 | Demographic characteristics.

Variable ($n=40$)	Number, n (%)
Gender	
Male	13 (32.5)
Female	27 (67.5)
Indigenous status	
Indigenous	1 (2.5)
Non-indigenous	39 (97.5)
Age (years)	
50–59	1 (2.5)
60–69	1 (2.5)
70–79	13 (32.5)
80–89	21 (52.5)
90–99	4 (10.0)
Location	
MM4 (medium size rural town)	14 (35.0)
MM6 (very remote areas)	26 (65.0)
Referral source	
Self-referred	32 (80.0)
General practitioners	8 (20.0)

Participants were aged 57–97 years (mean = 80.5 ± 7.5 years). Cognition was assessed using the MoCA, which showed a mean result of 18.3 ± 6.3, with 16, 11 and 4 participants having a mild, moderate or severe cognitive impairment score respectively. Balance was assessed using the TUG, which showed that 82.5% of participants were at a high risk for falls. Finally, home safety was measured using the WeHSA, which showed that at least one hazard was identified for each participant. Identified hazards included unsafe use of equipment, absence of Medi alerts, insufficient supervision, lack of support, inappropriate footwear, behavioural concerns and environmental hazards.

Thirty-one participants completed the follow-up survey over the phone, indicating a response rate of 77.5%; seven could not be reached, and two declined to complete the survey. For the client satisfaction survey, 13 participants rated the overall service as valuable and 14 rated it as very valuable (Table 2). Eight participants (20%) received modifications to their homes since the last home visit, with all the participants indicating that modifications have been most valuable. A total of 14 participants reported that the whole visit was valuable, and seven reported that the education and recommendation component was the most valuable to them (Table 2). Six participants did not respond to this question. Of the 31 participants who completed the survey, 26 reported they had not had a fall since their last home visit. Overall, 27 survey participants reported feeling safer in their homes after the home visit (Table 2). One participant did not respond to this question.

TABLE 2 | Ten weeks client satisfaction survey.

$N=31$	Yes	No	
Received home modifications	8	23	
Modifications received perceived to be worthwhile	8	NA	
Feel safer in their home	27	3	
Have had a fall since OT student visit	5	26	
Overall rating			
	Limited to no value	Valuable	Very valuable
Participants rating of how valuable they felt the home visit was	4	13	14
Number of clients that found aspects of the visit most helpful n			
Information booklet		1	
Resource list		1	
Education/ recommendations		7	
Home modifications		2	
The whole visit		14	

Note: A three-point Likert scale was used to score how valuable the service was—1. very valuable, 2. valuable and 3. limited to no value.

4 | Discussion

This pilot study aimed to test the utility of a student-led program in identifying community-dwelling elderly people at high risk for falls and to determine client satisfaction following a 10-week student-led falls prevention program in rural and remote areas. The findings of this study provide valuable insights into the potential benefits and challenges of implementing student-led falls prevention programs in rural and remote areas for clients with limited access to healthcare services. The results of this study suggest that a student-led falls prevention program can be useful in identifying community-dwelling older adults at risk for falls. Furthermore, it may positively impact client well-being and satisfaction due to increased safety awareness, accessing resources and home modification where required.

Participation in fall prevention programs by older people has been reported to be typically less than 50% [24], and can often be as low as 10% [25]. In a mixed-methods study of a telephone-based falls prevention program for older adults who presented to an emergency department with a fall, the majority of respondents perceived the program to be acceptable and were satisfied with the program [26]. Also, in a study reporting patient satisfaction and quality outcomes for a multidisciplinary falls prevention screening clinic, clients reported high satisfaction

with the clinic format and services received [27]. These findings are consistent with most clients reporting high satisfaction with the program.

The focus of our study was on identifying community-dwelling older adults at risk for falls. This allows for proactive interventions before future falls occur, which also aligns with the goal of promoting healthy ageing and preventing adverse health outcomes of ageing [28]. Additionally, identifying community-dwelling older adults at risk for falls can significantly reduce the burden on healthcare systems [29, 30]. Moreover, early identification allows for a comprehensive assessment of various risk factors contributing to falls, such as environmental hazards, medication issues and physical limitations. This holistic approach is more effective than addressing the consequences of a fall.

Limited research focuses on identifying barriers and enablers for falls risk assessments for older adults. In a cross-sectional survey of GPs determining the factors affecting annual falls risk screening among older adults, it was found that while two-thirds of the respondents felt that the yearly screening for falls risk was useful, only a quarter of the GPs screened their clients for falls risk on an annual basis [31]. The barriers identified by the GPs were forgetting to screen, lack of time, unsuitable working conditions for screening and clients selecting not to be screened [31]. In a qualitative study of primary care providers, physicians identified a lack of awareness of the importance of falls risk screening compared to other diagnostic procedures (e.g., cancer screening), competing priorities (e.g., hypertension management) and the appropriateness of referrals for dealing with falls risk as barriers [32]. The level of physician training was identified as both a barrier and a facilitator [32].

It is estimated that around 90% of Australia's population sees a GP at least once a year, and more than 50% of these clients aged 65 years and above have five or more chronic conditions [33]. However, despite being well-positioned to promote falls prevention and access to evidence about effective falls prevention, GPs find it difficult to refer clients for falls prevention services. This was evident in our study, with a significantly low referral rate of 20% by GPs for falls prevention services. In a study by Sturmberg, among older people attending general practice, the risk for falls was identified in 50% of the clients [34], and in another study, a screening tool increased the identification for falls risk by threefold [35]. Our study used the three-item FROP-Com questionnaire, which was the most strongly predictive of falls and a quick screening tool for GPs. However, only 20% of the clients were referred by GPs in our study. Early identification of falls risk in a primary healthcare setting is possible. However, it is acknowledged that GPs may not be able to address falls risk as they are busy focusing on the immediate presenting problems of their clients [36]. As falls are not a medical diagnosis but rather a complex group of risk factors, it is unclear how GPs decide to refer to a falls prevention service. It is essential to educate and promote falls identification in primary care by GPs where feasible.

Interprofessional collaboration is essential in identifying and referring older adults at risk for falls in rural and remote areas [37–39]. This approach is essential due to the multifactorial nature of falls risks and the unique context of rural and remote areas [6]. Involving interprofessional team members such as social workers and pharmacists can work more effectively to identify and refer community-dwelling older adults at risk for falls in rural areas, ultimately improving health outcomes and reducing the incidence of falls among this vulnerable population. Also, the Scope of Practice Review highlighted the importance of health professionals working to their full scope of practice in primary care and the value of interprofessional trust [40]. Implementing effective falls prevention programs in rural and remote areas has its challenges. Rural and remote communities often lack financial resources and have limited access to health practitioners, making interprofessional collaboration even more challenging [37]. Also, because of geographical distances and technological infrastructure, establishing effective interprofessional networks in rural and remote areas is challenging [38]. While further research is warranted to identify innovative ways to identify and partner with other health professionals, the student-led falls prevention program demonstrated that a collaborative approach may have many benefits for healthcare consumers in a rural setting.

Community-based programs can reach a broader population and provide interventions in real-world environments. Community-based fall prevention services are crucial because they address the issue of falls where older adults spend most of their time—in their homes and communities, and these programs can offer tailored and multifaceted approaches. Community-based interventions also have the potential to be more cost-effective and sustainable in the long term, as they can leverage local resources and foster social connections among participants [41]. Our 10-week student-led fall prevention program appears to be cost-effective as the assessments were conducted at the client's home with readily available assessment tools, which made it accessible to reach clients in rural and remote communities devoid of transportation and service charges. Furthermore, they can help identify and support older adults who may not regularly access clinical services, filling an essential falls prevention gap.

5 | Strengths, Limitations and Future Implications

Given our small sample size and the fact that our sample was from rural areas of Queensland, the results may not be generalisable to other parts of Australia. Nonetheless, the study does provide information that may be useful to other rural and remote areas nationally.

Due to their busy schedules, we had limited communication with the GPs and the local aged-care providers. Qualitative data from participants, GPs and community aged care providers may provide valuable insights into facilitators and barriers in identifying community-dwelling older adults at risk for falls in rural and remote areas. This is an opportunity for future research. Nonetheless, it appears that limited awareness and understanding of falls may be major client barriers, with heavy clinical workload being a barrier for GPs and other health professionals.

The outcomes of this study may be relevant to other university–industry partnerships that intend to explore student-led

services designed to address placement shortages, student learning, and community needs, especially in rural or underserved areas. Additionally, the results could be relevant to organisations aiming to trial other forms of student-led programmes in rural and remote areas. However, challenges related to resource availability and healthcare accessibility need to be addressed to ensure the success and sustainability of student-led programs.

6 | Conclusion

This pilot study provides evidence to support the utility of a student-led program in identifying community-dwelling older adults at high risk for falls and the implementation of student-led falls prevention programs for these adults in rural communities. The findings suggest that such programs can improve well-being and satisfaction, improve safety awareness, and potentially reduce the risk of falls among older adults.

A coordinated, systemic approach to falls prevention in community-dwelling older adults living in rural and regional areas should be explored, including utilising allied health students on placements to supplement the existing healthcare workforce and services.

This study has provided valuable information on implementing the student-led falls prevention programme in our resource-limited region. Moreover, the findings could inform the refinement of the program model, enhancing its relevance and efficiency for future implementations.

Author Contributions

A.M. conceptualised and designed the study. A.M. collected the data and S.B. contributed to the final data collection phase. K.O. and S.B. analysed the data along with A.M. A.M. wrote the manuscript with input from K.O. and S.B. All authors reviewed and approved the final version of the manuscript.

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Ethics Statement

This study protocol was reviewed and approved by the James Cook University Human Research Ethics Committee, approval number H9147.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

1. N. M. Peel, D. J. Kassulke, and R. J. McClure, "Population Based Study of Hospitalised Fall Related Injuries in Older People," *Injury Prevention* 8 (2002): 280–283.

2. E. J. Delbaere Kim and S. Catherine, *Why Investing in Falls Prevention Across Australia Can't Wait* (Sydney: Australian and New Zealand Falls Prevention Society, 2022), 13.

3. A. J. Campbell and M. C. Robertson, "Rethinking Individual and Community Fall Prevention Strategies: A Meta-Regression Comparing Single and Multifactorial Interventions," *Age and Ageing* 36 (2007): 656–662.

4. J. Moller, *Projected Costs of Fall Related Injury to Older Persons Due to Demographic Change in Australia [Electronic Resource]: Report to the Commonwealth Department of Health and Ageing Under the National Falls Prevention for Older People Initiative* (Canberra, Austraila: Department of health and ageing, 2003).

5. L. Mackenzie, L. Clemson, and C. Roberts, "Occupational Therapists Partnering With General Practitioners to Prevent Falls: Seizing Opportunities in Primary Health Care," *Australian Occupational Therapy Journal* 60 (2013): 66–70.

6. J. Boehm, R. C. Franklin, and J. C. King, "Falls in Rural and Remote Community Dwelling Older Adults: A Review of the Literature," *Australian Journal of Rural Health* 22 (2014): 146–155.

7. L. Mackenzie, J. Byles, and N. Higginbotham, "Designing the Home Falls and Accidents Screening Tool (HOME FAST): Selecting the Items," *British Journal of Occupational Therapy* 63 (2000): 260–269.

8. AIHW, *Falls in Older Australians 2019–2020: Hospitalisations and Deaths Among People Aged 65 and Over* (Australian Institute of Health and Welfare, 2022).

9. M. L. Currin, T. A. Comans, K. Heathcote, and T. P. Haines, "Staying Safe at Home. Home Environmental Audit Recommendations and Uptake in an Older Population at High Risk of Falling," *Australasian Journal on Ageing* 31 (2012): 90–95.

10. J. A. Stevens, J. E. Mahoney, and H. Ehrenreich, "Circumstances and Outcomes of Falls Among High Risk Community-Dwelling Older Adults," *Injury Epidemiology* 1 (2014): 5.

11. M. R. McGrail and J. S. Humphreys, "Spatial Access Disparities to Primary Health Care in Rural and Remote Australia," *Geospatial Health* 10 (2015): 358.

12. A. L. Morell, S. Kiem, M. A. Millsteed, and A. Pollice, "Attraction, Recruitment and Distribution of Health Professionals in Rural and Remote Australia: Early Results of the Rural Health Professionals Program," *Human Resources for Health* 12 (2014): 15.

13. M. A. Abuzar and J. Owen, "A Community Engaged Dental Curriculum: A Rural Indigenous Outplacement Programme," *Journal of Public Health Research* 5 (2016): 668.

14. G. Chu, V. Pitt, R. Cant, A. Johnson, and K. Inder, "Students' Evaluation of Professional Experience Placement Quality in a Pre-Registration Nursing Programme: A Cross-Sectional Survey," *Nurse Education in Practice* 75 (2024): 103877.

15. R. D. Thackrah and S. C. Thompson, "Learning From Follow-Up of Student Placements in a Remote Community: A Small Qualitative Study Highlights Personal and Workforce Benefits and Opportunities," *BMC Medical Education* 19 (2019): 331.

16. L. Briggs and P. Fronek, "Student Experiences and Perceptions of Participation in Student-Led Health Clinics: A Systematic Review," *Journal of Social Work Education* 56 (2020): 238–259.

17. C. M. Stuhlmiller and B. Tolchard, "Developing a Student-Led Health and Wellbeing Clinic in an Underserved Community: Collaborative Learning, Health Outcomes and Cost Savings," *BMC Nursing* 14 (2015): 32.

18. S. Reeves, S. Fletcher, H. Barr, et al., "A BEME Systematic Review of the Effects of Interprofessional Education: BEME Guide No. 39," *Medical Teacher* 38 (2016): 656–668.

19. L. Z. Rubenstein, R. Vivrette, J. O. Harker, J. A. Stevens, and B. J. Kramer, "Validating an Evidence-Based, Self-Rated Fall Risk Questionnaire (FRQ) for Older Adults," *Journal of Safety Research* 42 (2011): 493–499.

20. M. A. Russell, K. D. Hill, L. M. Day, I. Blackberry, L. C. Gurrin, and S. C. Dharmage, "Development of the Falls Risk for Older People in the Community (FROP-Com) Screening Tool," *Age and Ageing* 38 (2009): 40–46.

21. Z. S. Nasreddine, N. A. Phillips, V. Bédirian, et al., "The Montreal Cognitive Assessment, MoCA: A Brief Screening Tool for Mild Cognitive Impairment," *Journal of the American Geriatrics Society* 53 (2005): 695–699.

22. D. Podsiadlo and S. Richardson, "The Timed "Up & Go": A Test of Basic Functional Mobility for Frail Elderly Persons," *Journal of the American Geriatrics Society* 39 (1991): 142–148.

23. L. Clemson, *Home Fall Hazards: A Guide to Identifying Fall Hazards in the Homes of Elderly People and an Accompaniment to the Assessment Tool, the Westmead Home Safety Assessment (WeHSA)* (West Brunswick, Vic: Co-Ordinates Publications, 1997).

24. M. C. Robertson, N. Devlin, M. M. Gardner, and A. J. Campbell, "Effectiveness and Economic Evaluation of a Nurse Delivered Home Exercise Programme to Prevent Falls. 1: Randomised Controlled Trial," *BMJ* 322 (2001): 697–701.

25. M. Stevens, C. D. A. J. Holman, N. Bennett, and N. De Klerk, "Preventing Falls in Older People: Outcome Evaluation of a Randomized Controlled Trial," *Journal of the American Geriatrics Society (JAGS)* 49 (2001): 1448–1455.

26. R. L. Morris, K. D. Hill, I. N. Ackerman, et al., "A Mixed Methods Process Evaluation of a Person-Centred Falls Prevention Program," *BMC Health Services Research* 19 (2019): 906.

27. K. L. Perell, M. L. P. Manzano, R. Weaver, et al., "Outcomes of a Consult Fall Prevention Screening Clinic," *American Journal of Physical Medicine & Rehabilitation* 85 (2006): 882–888.

28. E. Rudnicka, P. Napierała, A. Podfigurna, B. Męczekalski, R. Smolarczyk, and M. Grymowicz, "The World Health Organization (WHO) Approach to Healthy Ageing," *Maturitas* 139 (2020): 6–11.

29. L. E. Boright, S. K. Arena, C. M. Wilson, and L. McCloy, "The Effect of Individualized Fall Prevention Programs on Community-Dwelling Older Adults: A Scoping Review," *Curēus* 14 (2022): e23713.

30. C. G. Swift, "Identifying Risk Can Reduce Fall Rates," *Practitioner* 251 (2007): 39–45.

31. Y. Gaboreau, P. Imbert, J.-P. Jacquet, G. Royer De Vericourt, P. Couturier, and G. Gavazzi, "Barriers to and Promoters of Screening for Falls in Elderly Community-Dwelling Patients by General Practitioners: A Large Cross-Sectional Survey in Two Areas of France," *Archives of Gerontology and Geriatrics* 65 (2016): 85–91.

32. W. C. Chou, M. E. Tinetti, M. B. King, K. Irwin, and R. H. Fortinsky, "Perceptions of Physicians on the Barriers and Facilitators to Integrating Fall Risk Evaluation and Management Into Practice," *Journal of General Internal Medicine: JGIM* 21 (2006): 117–122.

33. (AIHW), "Older Australians," (2024), AIoHaW.

34. J. Sturmberg, "Health Assessments in General Practice," *Australian Family Physician* 31 (2002): 384–387.

35. N. S. Wenger, C. P. Roth, P. G. Shekelle, et al., "A Practice-Based Intervention to Improve Primary Care for Falls, Urinary Incontinence, and Dementia," *Journal of the American Geriatrics Society (JAGS)* 57 (2009): 547–555.

36. L. Mackenzie and A. McIntyre, "How Do General Practitioners (GPs) Engage in Falls Prevention With Older People? A Pilot Survey of GPs in NHS England Suggests a Gap in Routine Practice to Address Falls Prevention," *Frontiers in Public Health* 7 (2019): 32.

37. I. Baumann, F. Wieber, T. Volken, P. Rüesch, and A. Glässel, "Interprofessional Collaboration in Fall Prevention: Insights From a Qualitative Study," *International Journal of Environmental Research and Public Health* 19 (2022): 10477.

38. J. S. C. Muusse, R. Zuidema, M. C. van Scherpenseel, and S. J. T. Velde, "Influencing Factors of Interprofessional Collaboration in Multifactorial Fall Prevention Interventions: A Qualitative Systematic Review," *BMC Family Practice* 24 (2023): 116.

39. P. Baxter and M. Markle-Reid, "An Interprofessional Team Approach to Fall Prevention for Older Home Care Clients 'At Risk' of Falling: Health Care Providers Share Their Experiences," *International Journal of Integrated Care* 9 (2009): e15.

40. EAC, "Unleashing the Potential of Our Health Workforce Scope of Practice Review—Final Report," 2024.

41. A. Hanley, C. Silke, and J. Murphy, "Community-Based Health Efforts for the Prevention of Falls in the Elderly," *Clinical Interventions in Aging* 6 (2011): 19–25.

Appendix A

A telephone client satisfaction survey

1. Did you have modifications to your home following the occupational therapy student's visit?
   - Yes
   - No
2. Do you think these changes were worthwhile?
   - Yes
   - No
3. Do you feel safer in your home since the student's visit?
   - Yes
   - No
4. How valuable do you find the service?
   - Very valuable
   - Valuable
   - Limited or no value
5. What aspect of the visit did you find most useful?
   - Home modification
   - Education/recommendations
   - Resource list
   - Information booklet
   - Referral to another service
   - The whole visit
6. Have you had a fall since the visit?
   - Yes

Appendix B

Self-reported falls risk questionnaire

Check Your Risk for Falling

Circle "Yes" or "No" for each statement below			Why it matters
Yes (2)	No (0)	I have fallen in the past year.	People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely.	People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking.	Unsteadiness or needing support while walking are signs of poor balance.
Yes (1)	No (0)	I steady myself by holding onto furniture when walking at home.	This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling.	People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair.	This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb.	This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet.	Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet.	Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual.	Side effects from medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood.	These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed.	Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.
Total _____		Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor.	

This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. J Safety Res; 2011; 42(6)493-499). Adapted with permission of the authors.

Appendix C

The falls risk for older people in the community (FROP-com) screening checklist

NARI
NATIONAL AGEING RESEARCH INSTITUTE LTD
Bringing research to life

(Affix Patient ID Label)

UR No _____

Surname: _____

Given Name _____

DOB _____

Falls Risk for Older People in the Community (FROP-Com) Screen

Screen all people aged 65 years and older (50 years and older Aboriginal & Torres Strait Islander peoples)

Date of screen: / /

FALLS HISTORY		**SCORE**
1. Number of falls in the past 12 months?	o None (0) o 1 fall (1) o 2 falls (2) o 3 or more (3)	[ ]
FUNCTION: ADL status		
2. Prior to this fall, how much assistance was the individual requiring for instrumental activities of daily living (eg cooking, housework, laundry)? • *If no fall in last 12 months, rate current function*	o None (completely independent) (0) o Supervision (1) o Some assistance required (2) o Completely dependent (3)	[ ]
BALANCE		
3. When walking and turning, does the person appear unsteady or at risk of losing their balance? • *Observe the person standing, walking a few metres, turning and sitting. If the person uses an aid observe the person with the aid. Do not base on self-report.* • *If level fluctuates, tick the most unsteady rating. If the person is unable to walk due to injury, score as 3.*	o No unsteadiness observed (0) o Yes, minimally unsteady (1) o Yes, moderately unsteady (needs supervision) (2) o Yes, consistently and severely unsteady (needs constant hands on assistance) (3)	[ ]

Total Risk Score	[ ]

Total score	0	1	2	3	4	5	6	7	8	9
Risk of being a faller	0.25		0.7		1.4		4.0		7.7	
Grading of falls risk	0 - 3 Low risk				4 – 9 High risk					
Recommended actions	Further assessment and management if functional/balance problem identified (score of one or higher)				Perform the Full FROP-Com assessment and / or corresponding management recommendations					

Date: / /

Name _____ Signature _____ Designation _____

v10

Appendix D

Pre-home visit checklist

HOME VISIT RISK SCREENING TOOL

SURNAME_____

GIVEN NAMES_____

D.O.B_____

Read to client:
(Clients Name), for staff safety, we ask all our clients a few questions before visiting their homes. Some of the questions are about getting to their house, pets, firearms and smoking. It will only take a few minutes. Is this a convenient time for you?

Is this your usual address? Yes No Usual Address:_____

ACCOMMODATION – Location of visit

House Residential Care Facility Caravan Park Other _____

Flat/Unit Rooming House SRS Other _____

ACCESS TO PROPERTY

OCCUPANTS

Who do you normally live with at this address?	Alone ☐	Partner ☐	Carer ☐	Parent ☐	Children ☐	Shared ☐	Other ☐ Describe_____

Question*	Yes	No	Action/Comments
Will anyone else be home when I visit?			Who? Safe to be alone with client? Second person needed?
Would anyone at home be upset by us visiting?			Reschedule/second person?
Does anyone at home take drugs or drink a lot of alcohol?			Will the resulting behaviour place the worker at risk?
Do you have any weapons at home?			If yes, are they securely locked? Centre-based appointment?
Does anyone smoke at home?			Request as a condition of the home visit that they refrain from smoking during the home visit. If not, offer centre-based appointment...
Is there anyone in the house with a contagious illness?			Describe: Reschedule?
Do you have any animals?			What type/s? How many?

Can they be restrained/isolated prior to my visit? Note: Animals must be restrained and/or isolated away from the working environment prior to and for the duration of the visit.			Alternate venue/reschedule?
Do I need to phone ahead so you can secure animals?			

CLIENT RELATED CONSIDERATIONS

*Question**	Yes	No	*Action/Comments*
Consulted High Risk Accommodation list?			
Are there previously identified alerts/risks? Describe:			
Are there any particular behaviours of concern? Describe:			
Is there known history of aggression? Describe:			

Comments:

***NOTE: Ensure appropriate action is taken for all answers in the shaded boxes. If any risks are identified, visits should not be conduct until control measures are implemented, or these have been discussed with Manager.**

Risk	Control Measure

Risks & controls discussed with line manager ☐ **Name:** _____

EVIDENCE OF HOME/COMMUNITY VISIT RISK SCREENING TOOL BEING CURRENT

Date and Time	The Home/Community Visit Risk Screening Tool is indicative of current risk status? Yes or No If answered No then please complete a new screening tool		Name	Client Signature
	☐ Yes	☐ No		
	☐ Yes	☐ No		
	☐ Yes	☐ No		
	☐ Yes	☐ No		
	☐ Yes	☐ No		
	Yes	☐ No		
	Yes	No		
	Yes	No		
	☐	☐		
	☐	☐		

NOTES

_____

_____

_____ _____ _____

Signature **Print Name** **Designation** **Date/Time**