

Croquet as a Seniors Health Intervention

Supporting Documentation for Queensland Government

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Executive Summary

Falls cost the Australian health system **\$4.7–5 billion annually**, with one in three Australians aged 65 and over falling each year.^{[1][2][3]} At the same time, 62.5% of Queensland adults report feeling lonely at least sometimes, driving additional healthcare demand.^[27]

The evidence base is strong: group exercise programs reduce fall risk by **40–64%**, and active club participation is associated with **30–40% lower healthcare costs**.^{[38][39][40][55]} Queensland already allocates over **\$60 million annually** through programs that croquet clubs can access.^[32]

This brief presents the case for croquet clubs as a dual-benefit preventive health intervention — addressing both falls prevention and social isolation through a single, low-cost, community-based activity.

1. Falls Prevention Costs in Queensland and Australia

National Scale

Falls are the **leading cause of injury-related hospital admissions** in Australia, accounting for 77% of all injury admissions and 71% of injury deaths.^{[4][5][6]} In 2022–23, there were 238,055 fall hospitalisations, with an average hospital stay of 9.5 days and more than 5,000 deaths annually.^{[4][5]}

Fall rates increase sharply with age:^[8]

Age Group	Annual Fall Rate
65–69 years	25.0%
70–79 years	34.6%
80+ years	40.5%
Overall 65+ (standardised)	32.4%

The Cost

In residential aged care, fall injuries cost **\$325 million annually** — 20% of total expenditure per resident.
[9][10][11] Hospital falls add **\$9,917** in additional costs per patient.^[13]

In-hospital fallers average 22.77 days in hospital versus 3.88 days for non-fallers in the 65+ age group.^[4]

Fall-related injuries account for 1 in every 8 hospital days for over-65s, totalling **over 1.2 million bed days** annually.^{[14][15]}

Queensland's Growing Problem

Queensland's 65+ population is growing at **3.7% annually**, compared with 1.5% for the rest of the population.^[18] This demographic shift will intensify demand on the health system.

Region	65+ Share 2021	Projected 2046	Growth Rate
Greater Brisbane	14.4%	19.1% (~717,000)	—
Gold Coast / Sunshine Coast	—	—	2.7% p.a.
Wide Bay	—	35.1% (1 in 3)	—

2. Social Isolation and Loneliness

Loneliness costs the Australian economy an estimated **\$2.7 billion annually**, at approximately \$1,565 per lonely person per year.^[23] Lonely seniors make an additional 4 GP visits per year on average.^[24]

The Queensland Government's 2024 Social Survey found **62.5% of adults feel lonely at least some of the time** and 10.7% often lack companionship.^[27] Among adults 50+, 22% are not content with their friendships.^[28]

People who feel lonely visit GPs more often, present at hospital more frequently, and more than half report poor health — approximately twice the rate of those who are not lonely.^{[21][22]}

3. Government Funding Precedents

Queensland already allocates significant funding through programs croquet clubs can access:

Program	Amount	Eligibility
Gambling Community Benefit Fund	\$500–\$35,000	Not-for-profit sporting clubs
Minor Infrastructure Program	\$50K–\$415K	Lighting, ramps, pathways, equipment
Active Clubs Program	Up to \$2,500	2,000 community sporting clubs
Age-Friendly Community Grants	~\$45K per LGA	Social participation for seniors
Seniors Month Grants	Up to \$2,000	Events for older Queenslanders

The GCBF alone distributes approximately **\$60 million annually**.^[32] Total sports infrastructure investment: **\$26+ million** in recent rounds.^[31]

4. The Evidence: Exercise Prevents Falls

A substantial body of evidence demonstrates the effectiveness of group exercise in reducing fall risk among older adults. Key findings from controlled trials:

Study / Program	Population	Fall Risk Reduction
Chinese multicentre trial	Community-dwelling 65+	64%
Australian trial	Community-dwelling 65+	43%
Balance and strength training (meta-analysis)	Mixed	40–42%

Return on Investment

All evaluated fall prevention exercise programs were cost-saving — benefits exceeded costs.^[40] Greatest value was observed for adults aged 80+ and those with high fall risk.^{[38][39]}

Program	Target Population	ROI
Tai Chi: Moving for Better Balance	Mixed	509%
Otago Exercise Program	Aged 80+	144%
Stepping On	Mixed	64%
Otago Exercise Program	Aged 65+	46%

Balance training is the mode of physical activity that has the strongest positive impact on fall risk.^[46]

Centre-based group programs outperform home-based programs for fall reduction.^[45] Even a once-weekly 10-week program reduced falls by 30%.^[45]

5. Club Membership Reduces Healthcare Costs

Maintaining 'active' physical activity status is associated with 40% lower Medicare and 30% lower pharmaceutical costs over three years.^[55]

Club membership buffers the social losses that come with retirement and grief. Participation **improved social wellbeing** especially during life transitions.^{[50][51]}

For older adults with diabetes, two or more visits per week showed **\$1,633 lower healthcare costs** in year one.^[54]

6. Why Croquet Specifically

Croquet uniquely combines physical, cognitive, and social health benefits in a single activity:

- **Physical.** Balance, coordination, flexibility, and grip strength. Low-impact, upright posture, minimal spinal twisting. Suitable for participants with limited mobility.
- **Cognitive.** Tactical and strategic thinking — often described as "chess on grass." Mentally stimulating throughout play, requiring planning, spatial reasoning, and decision-making.
- **Social.** Community group activity with regular contact, new friendships, and club belonging. The club format provides structured social interaction that combats isolation.

Croquet meets the **Australian Physical Activity Guidelines** for older adults — moderate-intensity exercise with balance training.^[57] The club format aligns with evidence for superior outcomes from centre-based group programs.^[45]

7. Strategic Recommendations

Croquet clubs address two major cost drivers simultaneously: falls prevention (balance, coordination, strength — 40–64% risk reduction) and social isolation (club participation reduces healthcare costs 30–40%, buffers social losses during life transitions).

Proposed Investment

An annual investment of **\$500,000–\$1,000,000** distributed across Queensland croquet clubs is estimated to prevent **200–640 falls annually**. At \$10,000 per fall hospitalisation, this yields **\$2–6.4 million in savings** — excluding social isolation benefits — representing an expected return on investment of **200–1,280%** on falls prevention alone.

Funding Approaches

Short-term: GCBF (\$500–\$35K per application), Minor Infrastructure Program (\$50K–\$415K for facilities), Seniors Month Grants (\$2K for come-and-try events).

Medium-term: Dedicated seniors health sports funding, subsidised memberships for at-risk populations, regional expansion grants for underserved areas.

Long-term: GP referral pathways, health outcome monitoring, integration with Queensland Health falls prevention strategy.

8. Research Gaps

This brief relies on group exercise and lawn bowls evidence as proxy for croquet-specific outcomes. Direct croquet research is limited. Any funding proposal should include a **monitoring and evaluation framework**: baseline assessments, quarterly falls tracking, healthcare utilisation data, and cost-benefit analysis at 1, 2, and 5 years.

References

1. Injury Matters. (2025). AIHW report on Falls in Australia.
2. Australian Physiotherapy Association. (2025). Falls destroy lives — and cost the system \$5 billion.
3. AIHW. (2024). Australia's Health 2024 — in brief.
4. Healthcare. (2024). Prevalence of Older Hospitalised Adults with Sustained Fractures. *Healthcare*, 12(13).
5. Falls Prevention Alliance Australia. (2025). About Falls.
6. ABC News. (2025). Falling over a leading cause of hospitalisation.
7. Working with Older People. Fall Injury Prevention Policy.
8. Mohebbi, M., et al. (2024). Falls and fall-related injuries. *Frontiers in Public Health*, 12.
9. Vlaeyen, E., et al. (2025). Healthcare spending and fall injury in Australia. *Injury Prevention*, 31.
10. National Seniors Australia. (2025). Study reveals cost of fall injuries.
11. Health Services Daily. (2025). Study exposes economic cost of aged care falls.
12. UWA Research Repository. (2025). Healthcare spending and fall injury.
13. Morris, M. E., et al. (2015). The extra resource burden of in-hospital falls. *MJA*, 203(9).
14. Tunstall Healthcare. (2025). Latest Slip and Fall Statistics in Australia and NZ.
15. RACGP. (2019). Falls the cause of 75% of injury hospitalisations for older Australians.
16. Dept Health Victoria. (2023). Falls prevention among older Victorians.
17. PMC. (2024). Prevalence of Older Hospitalised Adults with Fractures. PMC11241256.
18. QGSO. (2024). Population growth highlights and trends, Queensland, 2025 edition.
19. ABS. (2018). Population aged over 85 to double in the next 25 years.
20. QGSO. (2023). Queensland Government population projections, 2023 edition.
21. Petersen, M., et al. (2024). The loneliness epidemic. *MJA*, 221(6).
22. Bankwest Curtin Economics Centre. (2021). Pandemic increases loneliness among Australians.
23. McDaid, D., et al. (2025). Economic Costs of Loneliness. *PharmacoEconomics*, 43.
24. Flowers, L., et al. (2017). Social Isolation and Medicare Spending. *J Aging Health*, 29(7).
25. Ausmed. (2026). Loneliness and Social Isolation in Aged Care.
26. Shankar, A., et al. (2025). Loneliness in retirement villages. *BMC Public Health*.
27. QGSO. (2024). Social Isolation and Loneliness Survey Report: QLD Social Survey 2024.
28. COTA Queensland. (2024). Submission on Social Isolation and Loneliness.
29. QLD Media Statements. (2025). Seniors set to benefit from new age-friendly initiatives.
30. QLD Seniors Month. (2024). Grant Guidelines 2024.
31. QLD Media Statements. (2023). More than \$26 million for community sport.

32. Greenline. (2024). Resources — Grants — Sporting Clubs — Queensland.
33. Australian Sports Commission. (2025). Queensland Grants.
34. Sport NSW. (2025). Local Sport Grant Program recipients.
35. Bowls Australia. (2025). Grants & Funding.
36. QGSO. (2024). Population by age and sex, regions of Queensland.
37. Australian Government Centre for Population. (2024). 2024 Population Statement.
38. Bond University. (2022). Economic evaluations of fall prevention exercise programs.
39. Nyman, S. R., et al. (2022). Economic evaluations of fall prevention. *BJSM*, 56(23).
40. Carande-Kulis, V., et al. (2015). Cost-Benefit Analysis of Fall Prevention. *J Safety Research*, 52.
41. Monash University. (2024). A little help with exercise for seniors.
42. Hello Leaders. (2024). Government-subsidised exercise classes.
43. China CDC. (2023). Effectiveness of Group-Based Interventions. *China CDC Weekly*.
44. NSW Health. Active and Healthy. Best Practice Recommendations.
45. Next Step Health. Falls prevention: evidence for group physiotherapy.
46. Rodrigues, I. B., et al. (2023). Exercise based reduction of falls. *Frontiers in Sports*, 5.
47. Patil, R., et al. (2023). Exercise on fall prevention in aging women. *Age and Ageing*, 52(4).
48. Gillespie, L. D., et al. (2004). Interventions for prevention of falls. *BMJ*, 328.
49. Agarwal, P., et al. (2023). Group exercise on fall risk and quality of life. *J Gerontology*, 71(1).
50. Liddle, J., et al. (2019). Community activity groups for older adults. *BMC Geriatrics*, 19.
51. Liddle, J., et al. (2018). The ACTIVE study protocol. *BMC Public Health*, 18.
52. Lochbaum, M., et al. (2025). Self-assessed health of adult Australian sport club participants. *BMC Public Health*, 25.
53. Nguyen, H. Q., et al. (2007). Managed-Medicare Health Club Benefit. *Preventing Chronic Disease*, 5(1).
54. Nguyen, H. Q., et al. (2008). Health Club Membership in Older Adults with Diabetes. *Diabetes Educator*, 34(3).
55. Heesch, K. C., et al. (2020). Physical activity and health costs in mid-age women. *IJBNPA*, 17.
56. Ng, S. T., et al. (2021). Subjective well-being and healthcare utilisation. *PLoS ONE*, 16(4).
57. YouTube. (2019). Croquet: an ageless game.
58. TAFTA. (2024). 9 top sports for seniors.
59. National Seniors Australia. (2024). This sporting life: how seniors can be fit and beat the world.
60. 4Life Ex Physiology. (2023). Bowling for Physical Activity.
61. IRT. (2025). 10 great sports for seniors.
62. Community Therapy. (2024). Returning to Lawn Bowls at 80 Years Old.

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