

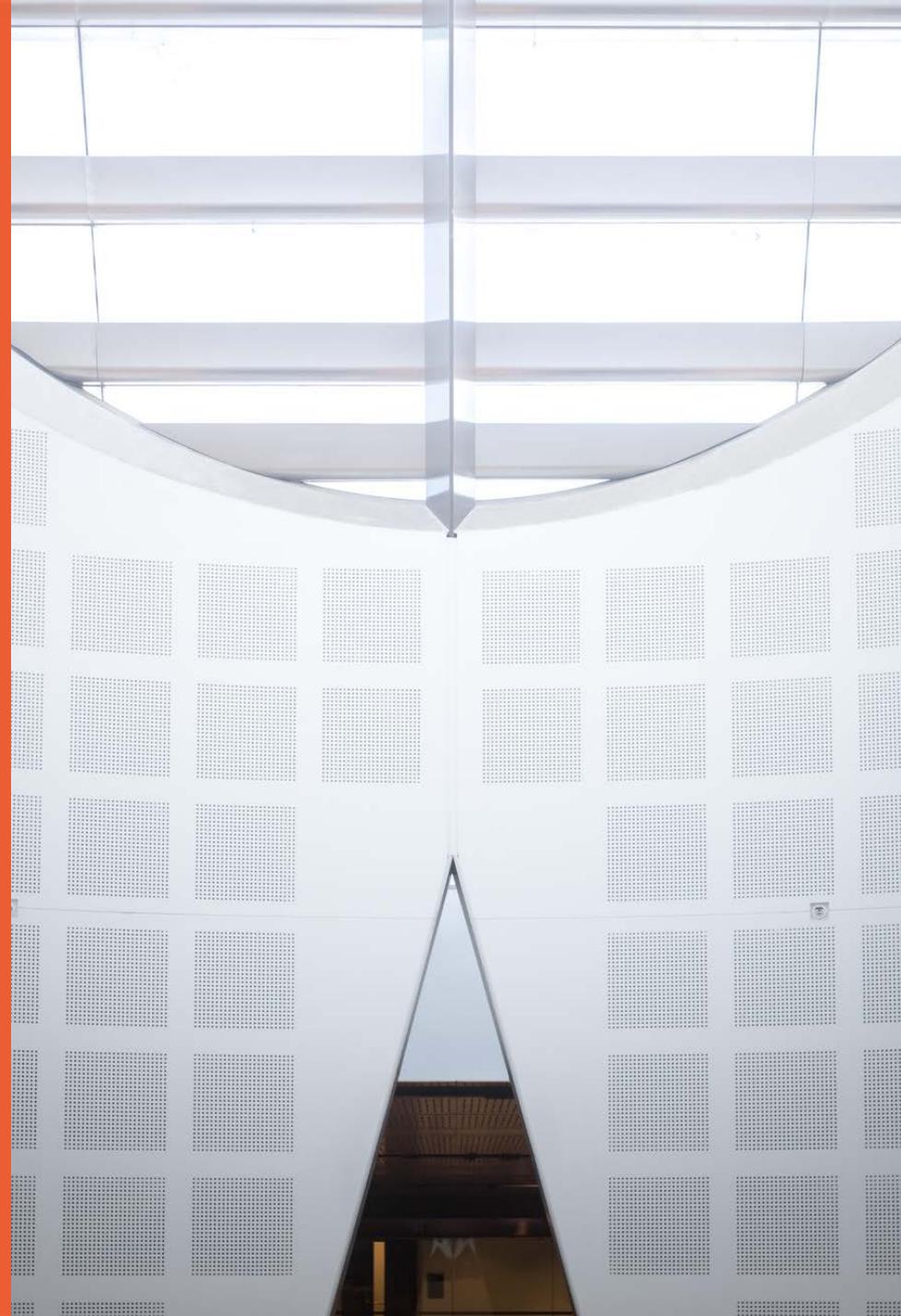
The implementation of vitamin D supplement use in Australian RACFs

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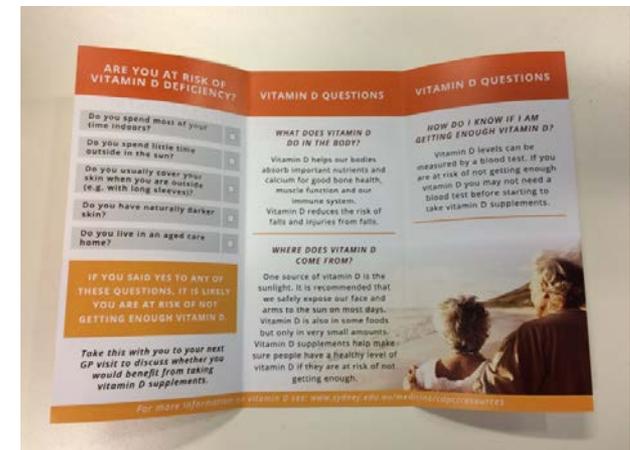


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Outline

- Background
- Methods of the Vitamin D Implementation (ViDAus) Study
- Key Findings
- Influence of the Partnership Model
- Key Messages
- Opportunities for Future Research and Implementation



Background



- Trend in fall related hospitalisations for RACF residents is increasing (Russell et al 2015)
- Between 68-86% of residents are vitamin D deficient (Sambrook et al 2002; Sambrook et al 2012; Grieger et al 2009)
- Vitamin D supplementation is a cost-effective strategy for reducing the rate falls (Church et al 2015)
- Uptake varies considerably, with an average of 47.1% of residents (range 15.9% - 85.0% by facility) prescribed adequate vitamin D in 2014 (Walker et al 2017)

Vitamin D Implementation (ViDAus) Study

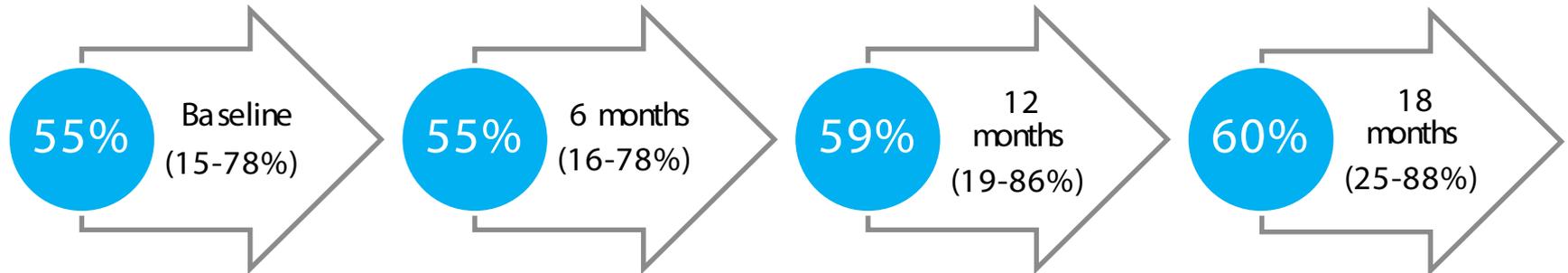
AIM: To increase the proportion of residents in Australian residential aged care facilities prescribed an adequate dose (≥ 800 IU/ day) of vitamin D.

Promoting Action on Research Implementation in Health Services (PARIHS) Framework



Key Findings

Overall proportion of residents at each facility prescribed a adequate vitamin D (facility variation) at each medication chart audit



Key findings at each health system level



Partnership Model Influence on Research Outcomes

- Conflicting priorities among partners hindered recruitment and project progress
- Partnership with aged care organisations allowed for good engagement with aged care staff, however not with GPs
- Insights on the aged care context, particularly the consumer and carer experience from our advisory group were invaluable, and influenced the overall approach to the project and the development educational resources.



Key Messages



Implementation in the residential aged care setting is complex!

Need a systems approach, with solutions considered at the policy and aged care organisational levels.

WHY?

- Uptake of vitamin D supplement use was variable
- GPs were not well engaged
- Strategies requiring system level support were poorly implemented
- Barriers primarily related to factors outside the control of facilities

Recommendations

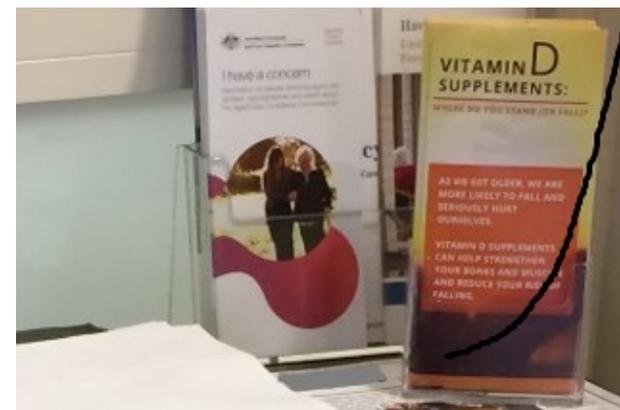


Practice or Policy Application

- Consider policy solutions to barriers identified outside the control of the aged care setting (e.g. cost of supplements, G P access)
- National awareness raising of the importance of vitamin D among older Australians and their families living in both aged care and the community using available resources
- Widespread uptake of successfully implemented strategies:
 - Staff education
 - Medication chart audits
 - Local processes to identify residents suitable for vitamin D
 - Direct follow up with G Ps.

Future Research

- Need to prioritise direct engagement with general practitioners
- Need to better understand the effects of vitamin D on falls in the community dwelling older adult population
- Need long term evaluation for sustainability of effects.



Acknowledgements



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Resources and summary report available online

<http://sydney.edu.au/medicine/cdpc/resources/vitamin-d-study.php>

References



- Church JL, Haas MR, Goodall S. Cost effectiveness of falls and injury prevention strategies for older adults living in residential aged care facilities. *Pharmacoeconomics*. 2015;33(12):1301-1310.
- Grieger JA, Nowson CA, Jarman HF, Malon R, Ackland LM. Multivitamin supplementation improves nutritional status and bone quality in aged care residents. *Eur J Clin Nutr*. 2009;63(4):558-565.
- Russell M, Clapperton A, Vu T, Day L. Trends in fall-related hospitalisations in older people living in aged care facilities. *Osteoporos Int*. 2015;26(3):1219-1224.
- Sambrook PN, Cameron ID, Cumming RG, et al. Vitamin D deficiency is common in frail institutionalised older people in northern Sydney. *Med J Aust*. 2002;176(11):560.
- Sambrook PN, Cameron ID, Chen JS, et al. Does increased sunlight exposure work as a strategy to improve vitamin D status in the elderly: a cluster randomised controlled trial. *Osteoporos Int*. 2012;23(2):615-624.
- Walker P, Miller Amberber A, Kurrle S, Kifley A, Cameron ID. Prevalence of vitamin D supplement use in Australian residential aged care facilities in November 2014. *BMC Res Notes*. 2017;10(1):385.