

THE ECONOMIC BENEFITS OF KRADAL™ FLOORING IN AGED CARE FACILITIES



Modelled using Economic Cost Benefit Analysis (CBA)

COST IMPACT ON A SINGLE FACILITY

Analysis assumes an average aged care facility size of 2500m2

Preventing fall-related deaths saves lives worth \$2.34M over 10 years

\$1.61m in hospital costs prevented over a 10 year period \$480K in ambulance service costs prevented over 10 year period. \$1.1K average ambulance service cost

Tested in Sweden

Manufactured in Australia

DEATHS PREVENTED

33% of aged care facilities experience a fall related death every year. Falls are the leading cause of injury deaths (43%) in Australia. In 2023, 6039 people aged 65+ died due to a fall. This represents 69% of all injury based deaths over 65. The 65+ population in Australia is expected to rise by over 1.4m over the next 10 years.

AVOIDED HOSPITAL COSTS

Falls are the leading cause of injury hospitalisations (43%) in Australia. In 2023, \$5.48b was spent on hospital fees for 65+ year olds admitted for falling. An average fall related hospital admission for a 65+ year old is \$37.9K. In 2023, approximately 20,830 65+ year old fall related hospitalisations came from aged care facilitlies.

AVOIDED AMBULANCE SERVICE COSTS

60% of all fall related injuries require an orthopaedic admission of over 24 hours. 31% of all fall related injuries require major surgery or ICU admission.

TESTED AND PROVEN

Testing in a Swedish nursing home over 30 months showed that the injury per fall rate was 30% for regular flooring and 17% for Kradal™ Flooring. This indicates that Kradal™ resulted in a 60% reduction in injuries compared to regular flooring. Over a 10 year period, installing Kradal™ in a 2500m2 aged care facility yields a net present value (NPV) of \$3.2m (5% discount rate) and a benefit to cost ratio (BCR) of 5.5.

AUSTRALIAN MADE

Kradal[™] is manufactured in Mortdale, NSW by an Australian family owned company.

Kradal[™] is 100% recyclable and can be installed under most vinyl and linoleum floor coverings.

APPENDIX 1: Data Sources

For data pertaining to the number and rate of injury hospitalisations by age and cause, refer to Injury hospitalisations and Emergency Department presentations (2022–23) and deaths in Australia (2021–22) Data tables A: Table H2:

For data pertaining to the number and rate of injury hospitalisations in aged care facilities, refer to Injury hospitalisations and Emergency Department presentations (2022–23) and deaths in Australia (2021–22) Data tables A: Table H7:

For data pertaining to the number and rate of deaths due to injuries, by age, cause and sex, refer to Injury hospitalisations and Emergency Department presentations (2022–23) and deaths in Australia (2021–22) Data tables A: Table D1:

For data pertaining to health expenditure for falls, by age group, sex and area of expenditure, refer to Data tables: Health system spending on disease and injury in Australia, 2022-23 Table 2:

For data on the value of statistical life, refer to Value of Statistical life (2023) as reported by the Office of Impact Analysis. Note – the statistical value of life has been adjusted to account for a lower expected life of elderly in aged care facilities. The 5.4 million AUD number reported by the Office of Impact Analysis assumes that people on average have 40 years of life remaining – this is not the case for the population of interest.

For data on the number of residential aged care services, refer to page 26 of the UARC Aged Care Sector Full Year Report 2021-22.

For data on the cost of Ambulance transportation services, refer to the Ambulance Victoria and Ambulance NSW accounts and fees. Note that the numbers used in the analysis have been slightly adjusted to account for differences in ambulance fees traveling to metropolitan vs rural aged care facilities.

Historical CPI data used for rebasing taken directly from the ABS' time series CPI tables, rebased to June 2023.

Forecast CPI taken directly from the RBA's statistics tables - Refer to Consumer Price Inflation _ G1 series.

Population projections taken from the ABS Population projections, by age and sex, Australia - medium series.

For morbidity disability weights and data pertaining to the proportion of fall related injuries that have certain characteristics (e.g. require major surgery or ICU admission), refer to Disability weights based on patient-reported data from a multinational injury cohort.

Kradal injury prevention effectiveness rate of 59% provided by Kradal based on internal research and testing.

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