

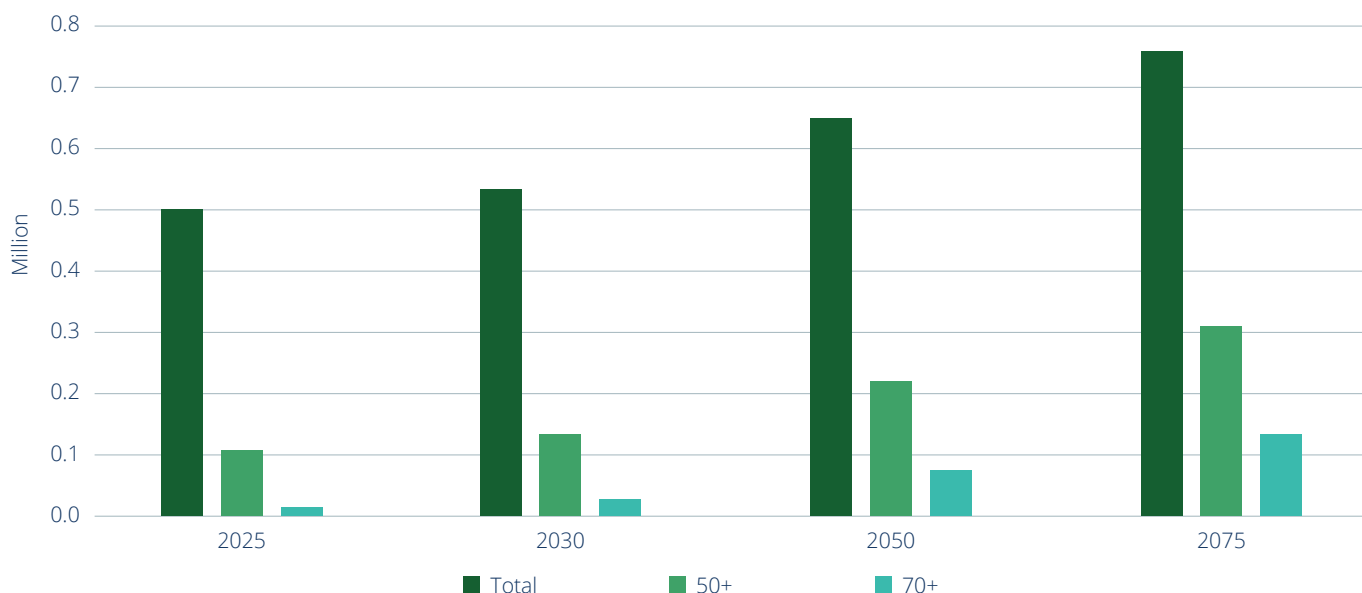
DEMOGRAPHIC TRENDS

Brunei Darussalam's population is projected to grow considerably over the coming decades, increasing by 30% from almost 499,000 in 2025 to almost 647,000 by 2050, and by a further 16% to reach 751,000 by 2075 (*Figure 1*). Bruneians currently have an average life expectancy of 75.5 years, which is expected to rise to 86.1 years by 2075, an increase of more than 11%.

The proportion of Bruneians aged 50 years or older (50+) is set to rise significantly. In 2025, this group of almost 108,000 people represents 22% of the total population. By 2075, this will increase to 41%, with numbers almost tripling to 304,000 (*Figure 1*).

The most dramatic demographic shift in Brunei Darussalam will be among those aged 70 years or older (70+), whose numbers are projected to surge from 22,000 in 2025 to 141,000 in 2075, a 322% increase in absolute terms. Equally striking is their growing share of the total population. In 2025, those aged 70+ years accounted for just 4% of Brunei Darussalam's 499,000 people. By 2075, they will make up 19% of a larger 751,000 population, reflecting a 435% relative increase in their proportion of the total population.

Figure 1. Population projections for Brunei Darussalam from 2025 to 2075 ^[1]



CLINICAL SPECIALTY RESPONSIBLE FOR MANAGEMENT OF OSTEOPOROSIS

Osteoporosis is not primarily managed by primary care physicians. Instead, it is under the care of rheumatologists, orthopaedic surgeons, endocrinologists, and geriatricians. Osteoporosis is not a standalone medical specialty. It is not a recognised component of specialty medical training.

CENTRALISED DATABASES FOR FRACTURES AND EPIDEMIOLOGY

There are no centralised databases for fractures in Brunei Darussalam.

HEALTHCARE COSTS ASSOCIATED WITH FRAGILITY FRACTURES

The *estimated* cost of hip fractures based on the average length of stay of 21 days are displayed in the table below.

Procedure	Estimated Cost (USD)
Uncemented Total Hip Arthroplasty	8,400
Cemented Bipolar Hip Hemiarthroplasty	7,400
Thompsons/Austin Moore Hemiarthroplasty	5,000
Dynamic Hip Screw	4,700
Proximal Intramedullary Nailing-Short	6,300
Proximal Intramedullary Nailing-Long	6,500

ACCESS TO DXA AND/OR ULTRASOUND AND REIMBURSEMENT

One DXA scanner is currently only available in the tertiary hospital. Request for DXA scans is currently restricted to hospital physicians.

	Waiting time (d)	30
	Cost (USD)	80
	Is it reimbursed?	Yes
	Is reimbursement a barrier to accessing treatment?	No

Quantitative ultrasound is available in Brunei Darussalam.

	Waiting time (d)	0 - 7
	Cost (USD)	Not Available
	Is it reimbursed?	Yes
	Is reimbursement a barrier to accessing treatment?	No

PATIENT SUPPORT ORGANISATIONS

Brunei Darussalam does not have any patient support organisations focused on osteoporosis.

AVAILABILITY AND REIMBURSEMENT OF MEDICATION

As shown in *Table 1*, a range of osteoporosis treatments are available in Brunei Darussalam, with alendronate designated as first-line treatment. Osteoporosis treatment is fully reimbursed through the national health system, subject to specific eligibility criteria. These conditions include factors such as prior fracture history, age, fracture risk threshold, and whether treatment is for primary or secondary prevention, as well as alignment with first- and second-line therapy recommendations. Reimbursement policies do sometimes conflict with physicians' clinical judgment or treatment recommendations for their patients. For example, treatment with zoledronic acid, denosumab or teriparatide requires application to a committee for approval which can potentially result in a 1- to 2-month delay to initiation of therapy.

Table 1. Availability and reimbursement of osteoporosis treatments in Brunei Darussalam

Treatment	Available	Reimbursed	% Reimbursed
Risedronate			
Alendronate	X	X	100%
Ibandronate			
Zoledronic acid	X	X	100%
Clodronate			
Pamidronate	X	X	100%
Raloxifene	X	X	100%
Bazedoxifene			
Denosumab	X	X	100%
Strontium Ranelate	X	X	100%
Teriparatide	X	X	100%
PTH (1-84)			
Abaloparatide			
Romosozumab			
Vitamin D/Calcium supplements	X	X	100%
Calcitonin	X	X	100%
Hormone Replacement Therapy	X	X	100%
Testosterone	X	X	100%
Alfacalcidol	X	X	100%
Calcidiol			
Calcitriol	X	X	100%
Tibolone			

FRACTURE RISK ASSESSMENT TOOLS

Brunei Darussalam uses FRAX®, but it is not widely used within the country.

QUALITY INDICATORS

There are no quality indicators for hip and other fractures in Brunei Darussalam.

OSTEOPOROSIS AS A DOCUMENTED NATIONAL HEALTH PRIORITY (NHP)

Osteoporosis is not recognised as a National Health Priority (NHP) in Brunei Darussalam.

FRACTURE LIAISON SERVICES (FLS) REIMBURSEMENT AND AVAILABILITY

No FLS have been established in hospitals in Brunei Darussalam.

WAITING TIME FOR HIP SURGERY

Average waiting time for hip surgery after hip fracture	> 3 days
% of hip fractures surgically managed	> 90%

GUIDELINES FOR OSTEOPOROSIS MANAGEMENT

There are no guidelines for osteoporosis management in Brunei Darussalam.

OVERVIEW OF OSTEOPOROSIS IN BRUNEI DARUSSALAM



While awareness of osteoporosis is gradually gaining momentum, significant efforts are still required to elevate it as a national health priority. At present, there are no established clinical guidelines or quality indicators specific to osteoporosis in the country. Additionally, data on osteoporosis remains limited, and there is no national fracture registry in place. This represents a critical gap, as reliable data is essential for informing policy, guiding clinical practice, and driving quality improvement initiatives. Establishing standardised fracture data collection and ensuring regular publication of such data is a pressing need. Although the country's electronic health record (EHR) system has the potential to serve as a valuable data source, its utility is currently hindered by limitations in the accuracy and consistency of ICD-10 coding for osteoporosis and related fractures. Future plans include setting-up a Fracture Liaison Service, establishing guidelines and standards of care for osteoporosis, and data collection on osteoporosis.

REFERENCES

1. US Census Bureau International Database (IDB) Website. 2025.
https://www.census.gov/data-tools/demo/idb/#/dashboard?dashboard_page=country&COUNTRY_YR_ANIM=2025. Accessed 22 May 2025.

This document highlights the key findings for Brunei Darussalam, published in "The Asia Pacific Regional Audit: Epidemiology, costs and burden of osteoporosis in 2025". View the complete report at: <https://www.osteoporosis.foundation/asia-pacific-audit-2025>

ACKNOWLEDGMENTS

APAC Audit Contributor based in Brunei Darussalam
Dr. Yung Chee Kwang

