



DEMOGRAPHIC TRENDS

Bhutan's population is projected to grow steadily until the mid-21st century, increasing by 17% from 893,000 in 2025 to 1,048,000 by 2050. However, population growth is expected to slow significantly in the second half of the century, with only a marginal increase of less than 1% to 1,053,000 by 2075 (*Figure 1*). Bhutanese currently have an average life expectancy of 74.4 years, which is expected to rise to 86.2 years by 2075, an increase of 16%.

The proportion of Bhutanese aged 50 years or older (50+) is set to rise significantly. In 2025, this group of 169,000 people represents 19% of the total population. By 2075, this will increase to 49%, with numbers tripling to almost 512,000 (*Figure 1*).

The most dramatic demographic shift in Bhutan will be among those aged 70 years or older (70+), whose numbers are projected to surge from 40,000 in 2025 to 252,000 in 2075, a 531% 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 Bhutan's 893,000 people. By 2075, they will make up 24% of a larger 1,053,000 population, reflecting a 435% relative increase in their proportion of the total population.

1.2

1.0

0.8

0.6

0.4

0.2

0.0

2025

2030

2050

2075

Figure 1. Population projections for Bhutan from 2025 to 2075[1]

HEALTHCARE COSTS ASSOCIATED WITH FRAGILITY FRACTURES

Average direct hospital costs for treating osteoporotic hip fractures (USD)

10,000*

Average indirect hospital costs for treating osteoporotic hip fractures (USD)

5,000*

Average bed days for hip fractures

^{*}Best available estimates as reported by country experts in the absence of published data

CLINICAL SPECIALTY RESPONSIBLE FOR MANAGEMENT OF OSTEOPOROSIS

Osteoporosis is not primarily managed by primary care physicians. Instead, it is under the care of orthopaedic surgeons and internal medicine physicians. Osteoporosis is recognised as a standalone medical specialty. However, it does not feature as a core component of specialty medical training.

PATIENT SUPPORT ORGANISATIONS

Bhutan does not have any patient support organisations focused on osteoporosis.

OSTEOPOROSIS AS A DOCUMENTED NATIONAL HEALTH PRIORITY (NHP)

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

FRACTURE LIAISON SERVICES (FLS) REIMBURSEMENT AND AVAILABILITY



FRACTURE RISK ASSESSMENT TOOLS

In Bhutan, FRAX® is widely used to assess fracture risk. When determining whether treatment is indicated using FRAX®, clinicians apply a fixed probability threshold, age-dependent threshold, and may also consider a combination of FRAX® score and bone mineral density (BMD) results. This approach is applied consistently for both men and women.

GUIDELINES FOR OSTEOPOROSIS MANAGEMENT

There are no guidelines for osteoporosis management in Bhutan.

AVAILABILITY AND REIMBURSEMENT OF MEDICATION

As shown in *Table 1*, several osteoporosis treatments are available in Bhutan, with bisphosphonates 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, bone mineral density (BMD) thresholds, and whether treatment is for primary or secondary prevention, as well as alignment with first-line therapy recommendations. Importantly, reimbursement policies do not restrict or conflict with physicians' clinical judgment or treatment recommendations for their patients.

Table 1. Availability and reimbursement of osteoporosis treatments in Bhutan

Treatment	Available	Reimbursed	% Reimbursed
Risedronate			
Alendronate	X	X	70%
Ibandronate	X	X	90%
Zoledronic acid			
Clodronate			
Pamidronate			
Raloxifene			
Bazedoxifene			
Denosumab			
Strontium Ranelate			
Teriparatide			
PTH (1-84)			
Abaloparatide			
Romosozumab			
Vitamin D/Calcium supplements	X		
Calcitonin			
Hormone Replacement Therapy	X	X	90%
Testosterone			
Alfacalcidol			
Calcidiol			
Calcitriol	X		
Tibolone			

WAITING TIME FOR HIP SURGERY

Average waiting time for hip surgery after hip fracture

1 - 2 days

% of hip fractures surgically managed

51 - 75%

CENTRALISED DATABASES FOR FRACTURES AND EPIDEMIOLOGY

Bhutan does not have a centralised database for fractures.

ACCESS TO DXA AND/OR ULTRASOUND AND REIMBURSEMENT

DXA and ultrasound are generally not available in Bhutan, with only one axial DXA scanner available at the Jigme Dorji Wangchuck National Referral Hospital.

QUALITY INDICATORS

At the regional level in Bhutan, quality indicators have been established for the management of hip and vertebral fractures, with annual reporting on performance against these measures.



OVERVIEW OF OSTEOPOROSIS IN BHUTAN

Although still in the early phases, important steps are being taken in Bhutan to establish epidemiological surveillance, enhance diagnostic access, and develop national clinical guidance. Facilities are now in place for vitamin D screening at every regional hospital and a DXA scanner is now available at the national hospital. All doctors working in district hospitals have received training on osteoporosis screening and use of the FRAX® tool.

REFERENCES

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

This document highlights the key findings for Bhutan, 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

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Dr. Kinzang Dorj





