



#### **DEMOGRAPHIC TRENDS**

Myanmar's population is projected to grow steadily until the mid-21<sup>st</sup> century, increasing by 11% from 57.9 million in 2025 to 64.2 million by 2050. However, this growth will be followed by a period of gradual decline, with the population decreasing by 2% to 62.9 million by 2075 (*Figure 1*). Myanmar nationals currently have an average life expectancy of 70.8 years, which is expected to rise to 85.0 years by 2075, an increase of 20%.

The proportion of Myanmar nationals aged 50 years or older is set to rise significantly. In 2025, this group of 13 million people represents 22% of the total population. By 2075, this will increase to 46%, with numbers more than doubling to 28.9 million (*Figure 1*).

The most dramatic demographic shift in Myanmar will be among those aged 70 years or older, whose numbers are projected to surge from 2.4 million in 2025 to 12.9 million in 2075, a 430% increase in absolute terms. Equally striking is their growing share of the total population. In 2025, those aged 70+ accounted for just 4% of Myanmar's 57.9 million people. By 2075, they will make up 20% of a larger 62.9 million population, reflecting a 388% relative increase in their proportion of the total population.

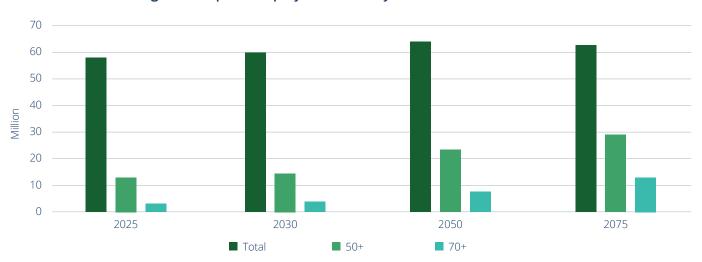


Figure 1. Population projections for Myanmar from 2025 to 2075[1]

#### CENTRALISED DATABASES FOR FRACTURES AND EPIDEMIOLOGY

There is no centralised database for fractures in Myanmar.

# 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 recognised as a standalone medical specialty. However, it is currently a formal component of specialty medical training, particularly for rheumatologists, orthopaedic surgeons, endocrinologists and geriatricians.

# HEALTHCARE COSTS ASSOCIATED WITH FRAGILITY FRACTURES

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

200 - 2,000\*

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

100 - 500\*

Average bed days for hip fractures

7 - 20\*

#### PATIENT SUPPORT ORGANISATIONS

There are no patient support organisations that focus on osteoporosis in Myanmar.

# OSTEOPOROSIS AS A DOCUMENTED NATIONAL HEALTH PRIORITY (NHP)

Osteoporosis is not documented as a National Health Priority (NHP) in Myanmar.

### FRACTURE LIAISON SERVICES (FLS) REIMBURSEMENT AND AVAILABILITY

% of hospitals with an FLS

1 - 9%

Hip fractures identified by or referred to an FLS

1%

Vertebral fractures identified by or referred to an FLS

1%



Other fracture types identified by or referred to an FLS

1%

Reimbursement mechanism to support FLS activities

**Private funding** 

% of patients recommended for treatment who actually receive treatment

< 20%

#### WAITING TIME FOR HIP SURGERY

Average waiting time for hip surgery after hip fracture

% of hip fractures surgically managed

2 - 3 days

51 - 75%

<sup>\*</sup>Best available estimates as reported by country experts in the absence of published data.

#### AVAILABILITY AND REIMBURSEMENT OF MEDICATION

As shown in *Table 1*, a range of osteoporosis treatments are available in Myanmar. Treatments designated as first-line include alendronate, zoledronic acid, risedronate, ibandronate, calcium and vitamin D.

Treatment costs are partially reimbursed through a combination of the national health system, private insurance, and patient co-payments. The extent of reimbursement varies depending on the individual patient's insurance coverage and financial circumstances. Currently, there is no standardised or unified reimbursement system in place. Importantly, there are no specific conditions or clinical criteria that must be met for treatment reimbursement. As a result, reimbursement policies do not restrict or interfere with physicians' ability to prescribe treatments based on clinical judgment.

Table 1. Availability and reimbursement of osteoporosis treatments in Myanmar

Treatment	Available	Reimbursed	% Reimbursed
Risedronate	Χ		
Alendronate	X	X	10%
Ibandronate	X		
Zoledronic acid	X		
Clodronate			
Pamidronate			
Raloxifene			
Bazedoxifene			
Denosumab	X		
Strontium Ranelate			
Teriparatide	X		
PTH (1-84)			
Abaloparatide			
Romosozumab			
Vitamin D/Calcium supplements	X	X	10%
Calcitonin	X		
Hormone Replacement Therapy			
Testosterone	X		
Alfacalcidol	X		
Calcidiol			
Calcitriol	X		
Tibolone	X		

# FRACTURE RISK ASSESSMENT TOOLS

Myanmar utilises fracture risk assessment tools such as FRAX®, FRAXplus®, and QFracture. However, FRAX® is not yet widely adopted in clinical practice across the country.

# **GUIDELINES FOR OSTEOPOROSIS MANAGEMENT**

In 2023, the Myanmar Society of Endocrine & Metabolism published the *Myanmar Clinical Practice Guideline for the Management of Osteoporosis and Fragility Fracture* [2]. The guideline covers the management of osteoporosis in postmenopausal women, men, individuals with glucocorticoid-induced osteoporosis (GIOP), and those who have sustained fragility fractures.

While the guidelines offer detailed recommendations on fracture risk assessment, including factors such as prior fracture, age, bone mineral density, and FRAX® scores, they do not include strategies for population-based screening. The guidance also sets out criteria for initiating treatment based on similar clinical risk factors.

However, the implementation of these guidelines faces significant limitations. There is currently no reimbursement policy for osteoporosis care in Myanmar, meaning that patients must bear the full cost of diagnosis and treatment. As a result, while the guidelines align with international standards in terms of clinical assessment and treatment initiation, their practical application is constrained by the absence of financial coverage or national funding mechanisms. The guidelines were developed without direct patient involvement. Additional details on the development of these guidelines are included in *Table 2*.

Table 2. Development of clinical guidelines for the management of osteoporosis in Myanmar

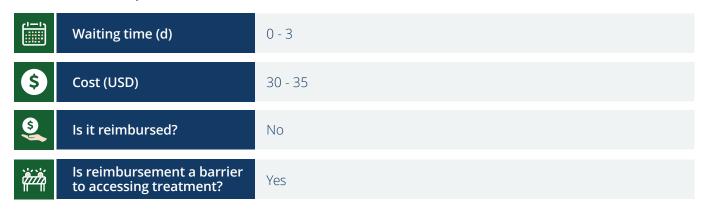
Systematic literature review undertaken	Yes
Recommendations	Yes
Stakeholder involvement	In progress
External review	Multidisciplinary review
Procedure for update defined	Every 5 years
Economic analysis	No
Editorial independence	Yes

#### QUALITY INDICATORS

Level	Title	Topics covered	Frequency of reporting	
National	Reimbursement scheme	Management of hip fracture	No regular system available yet	
National	Myanmar Clinical Practice Guide- line for Management of Osteopo- rosis and Fragility Fracture	Osteoporosis and Fragility Fracture	Don't know	

# ACCESS TO DXA AND/OR ULTRASOUND AND REIMBURSEMENT

DXA is available in Myanmar.



Quantitative ultrasound is available in Myanmar.		
	Waiting time (d)	0
\$	Cost (USD)	15
<b>E</b>	Is it reimbursed?	Limited or none
	Is reimbursement a barrier to accessing treatment?	No

# OVERVIEW OF OSTEOPOROSIS IN MYANMAR

Osteoporosis is an emerging public health concern in Myanmar, yet the country currently lacks comprehensive national data on the prevalence and burden of osteoporotic fractures. Tertiary centre-based data suggest that the prevalence of osteoporosis among postmenopausal women ranges from 35-45%. However, the absence of a robust national health information system has hindered large-scale epidemiological studies and accurate fracture forecasting. The Myanmar Society of Endocrine and Metabolism (MSEM) emphasises the urgent need for nationwide data collection and research to inform evidence-based policy and planning.

There is no health insurance system in Myanmar, and consequently, no reimbursement mechanism for osteoporosis diagnosis or treatment. This leads to out-of-pocket expenses for patients, with treatment costs in private hospitals averaging approximately 20% higher than in public facilities. Access to care is further limited by widespread vitamin D deficiency, insufficient calcium intake, and limited availability of diagnostic tools such as DXA.

In response to these challenges, MSEM has played a leading role in advancing osteoporosis care. The first Myanmar osteoporosis guideline was published in 2012 in the Journal of the ASEAN Federation of Endocrine Societies (JAFES) [3] but remained primarily utilised within the endocrinology community. Recognising the need for broader, multidisciplinary guidance, MSEM coordinated the development of a national clinical practice guideline titled Myanmar Clinical Practice Guideline for Management of Osteoporosis and Fragility Fracture [2], launched on World Osteoporosis Day in 2023. This updated guideline includes recommendations for postmenopausal osteoporosis, glucocorticoid-induced osteoporosis, osteoporosis associated with aromatase inhibitor therapy, and the management of fragility fractures.



In addition to guideline development, MSEM has been proactive in professional and public education. The society regularly conducts continuing medical education (CME) sessions and online courses for healthcare professionals, as well as public talks to raise awareness about bone health. World Osteoporosis Day is observed annually with community outreach events, advocacy campaigns, and stakeholder engagement.

A key strategic goal for the society is the establishment of FLS to improve secondary fracture prevention. While a proposal has been submitted to the Ministry of Health, official approval is still pending. MSEM continues to advocate for osteoporosis to be recognised as a national health priority and calls for stronger government commitment, multi-stakeholder collaboration, and increased public awareness to address the growing burden of osteoporosis and fragility fractures in Myanmar.

#### **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.
- 2. Myanmar Society of Endocrinology and Metabolism (MSEM). Myanmar Clinical Practice Guideline for Management of Osteoporosis and Fragility Fracture (2023). Yangon: Myanmar Society of Endocrinology and Metabolism; 2023. https://msem.org.mm/edu/myanmar-clinical-practice-guideline-for-management-of-osteoporosis-and-fragility-fracture-2023/. Accessed 8 August 2025.
- 3. Latt TS, Aye TT, Ko K, Myint T, Hliang NN, ThaungM, Chit TT (2012) Myanmar clinical practice guidelines for osteoporosis. JAFES 27:151–155.

This document highlights the key findings for Myanmar, 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 Myanmar

Myanmar Society of Endocrinology and Metabolism https://msem.org.mm/





