

#### **DEMOGRAPHIC TRENDS**

The population of Hong Kong SAR is projected to peak at 7.3 million in 2030, followed by a period of decline, with the population decreasing by 19% to 5.9 million by 2075 (*Figure 1*). Hong Kongers currently have an average life expectancy of 84.2 years, which is expected to rise to 91.1 years by 2075, an increase of 8%.

The proportion of Hong Kongers aged 50 years or older is expected to rise until mid-century before gradually declining. In 2025, this demographic comprises 3.4 million people, or 47% of the total population. By 2050, the number is projected to exceed 3.8 million, making up 56% of the population. However, by 2075, it is expected to decline to 3.2 million, while still accounting for 55% of the total population (*Figure 1*).

A similar trend is projected for those aged 70 years or older, with their numbers rising from nearly 1.1 million in 2025 (15% of the population) to 2.1 million by 2050 (30%). By 2075, this group is expected to decline slightly to 1.8 million, while making up 31% of the total population.

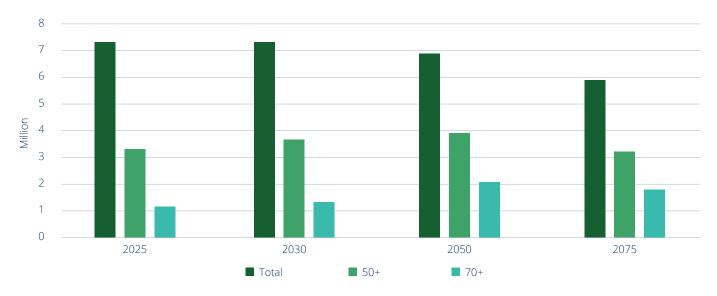


Figure 1. Population projections for Hong Kong SAR from 2025 to 2075 [1]

#### CENTRALISED DATABASES FOR FRACTURES AND EPIDEMIOLOGY

ls a centralised database established?	Yes	
Level of database coverage	Hospital	
Hip fracture records documented per year	5,475	
Percentage of hip fractures treated surgically	90	
All fracture records documented per year	34,675	
Percentage of all fractures treated surgically	42	
Age range and gender of patients in database	40-75+ years for both males and females	

#### HEALTHCARE COSTS ASSOCIATED WITH FRAGILITY FRACTURES

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

8,000 - 12,788

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

No data

Average bed days for hip fractures

18 - 24

#### CLINICAL SPECIALTY RESPONSIBLE FOR MANAGEMENT OF OSTEOPOROSIS

Osteoporosis is managed by primary care physicians, internal medicine physicians, and endocrinologists, rheumatologists, geriatricians, and orthopaedic surgeons. Osteoporosis is recognised as a standalone medical specialty and is a key component of specialty medical training, particularly in endocrinology and rheumatology. Indeed, the majority of complex and very high-risk cases are under the care of endocrinologists and rheumatologists.

#### PATIENT SUPPORT ORGANISATIONS

The Osteoporosis Society of Hong Kong SAR is a patient-focused organisation dedicated to osteoporosis. Operating both locally and internationally, the society focuses on a single disease and provides a platform to discuss various osteoporosis-related topics, including the latest scientific advances, clinical management, advocacy, capacity building, education, peer support, and research and development. For more information, visit <a href="https://www.oshk.org.hk/">https://www.oshk.org.hk/</a>.

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



#### **AVAILABILITY AND REIMBURSEMENT OF MEDICATION**

As shown in *Table 1*, a variety of osteoporosis treatments are available in Hong Kong. First-line treatments include alendronate with calcium and vitamin D, as well as zoledronate and denosumab (under the secondary fracture prevention programme). Treatment costs are partially reimbursed through a combination of the public health system, private providers, and co-payments, depending on the individual's insurance. Reimbursement is subject to conditions, including a history of prior fractures and the need for authorisation. Reimbursement policy does sometimes interfere with what physicians would normally recommend to patients.

Table 1. Availability and reimbursement of osteoporosis treatments in Hong Kong SAR

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

### OSTEOPOROSIS AS A DOCUMENTED NATIONAL HEALTH PRIORITY (NHP)

Osteoporosis is not documented as a Public Health Priority (PHP) in Hong Kong SAR.

#### WAITING TIME FOR HIP SURGERY

Average waiting time for hip surgery after hip fracture

2 - 3 days

% of hip fractures surgically managed

76 - 90%

#### **GUIDELINES FOR OSTEOPOROSIS MANAGEMENT**

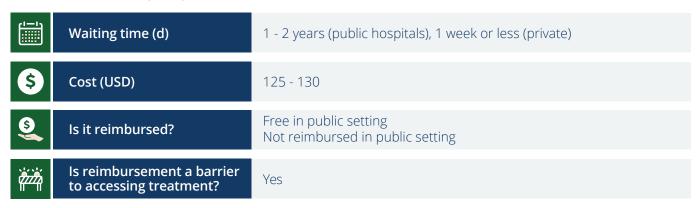
In 2024, the Osteoporosis Society of Hong Kong (OSHK) updated its 2013 guidelines for the clinical management of postmenopausal osteoporosis in Hong Kong<sup>[2]</sup>. The updated guidelines address population-based screening, with a focus on FRAX® and DXA screening. They provide a framework for fracture risk assessment, considering factors such as prior fractures, age, bone mineral density, and FRAX®. Additionally, the assessment guidelines align with reimbursement policies. Treatment criteria include prior fractures, age, BMD, FRAX®, and glucocorticoid-induced osteoporosis, all of which are consistent with reimbursement policies. 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 Hong Kong SAR<sup>[2]</sup>

Systematic literature review undertaken	Yes
Recommendations	Yes
Stakeholder involvement	Yes
External review	No
Procedure for update defined	Peer review
Economic analysis	No
Editorial independence	Yes

#### ACCESS TO DXA AND/OR ULTRASOUND AND REIMBURSEMENT

DXA is available in Hong Kong SAR.



No data was provided on access to ultrasound in Hong Kong SAR.

#### FRACTURE RISK ASSESSMENT TOOLS

FRAX® is widely used in Hong Kong SAR. When using FRAX®, the decision to initiate treatment is based on a fixed probability threshold and a combination of FRAX® score and BMD thresholds. This approach is applied to both men and women. An age-dependent probability threshold is not required for determining treatment eligibility.

## **QUALITY INDICATORS**

Level	Title	Topics covered	Frequency of reporting
Local	Treatment of osteoporosis	Osteoporosis and secondary prevention of fragility fracture	Don't know
Local	Fragility fracture programme	Hip fractures mainly	All hip fractures in hospital



# OVERVIEW OF OSTEOPOROSIS IN HONG KONG SAR

The number of osteoporosis cases is rising, placing an increasing burden on the public healthcare system. The majority of cases, whether related to primary or secondary fracture prevention, are managed within public hospitals. For secondary prevention, alendronate is the first-line treatment, followed by denosumab and zoledronic acid as second-line options, and teriparatide and romosozumab as third-line treatments. Patients requiring primary prevention must self-finance their osteoporosis medications. Access to DXA scans in the public sector is limited due to long waiting times, and DXA is not a reimbursed service. As a result, the public healthcare system is struggling to meet the growing demand. Currently, osteoporosis is not considered a public health priority in Hong Kong SAR.

Almost all hip fracture cases are managed within the public healthcare system, making it feasible to initiate a secondary fracture prevention programme. Efforts are underway to progressively extend this service to patients with other types of fragility fractures as resources allow. However, launching a widespread osteoporosis screening programme remains challenging due to the involvement of multiple healthcare professionals. There is hope that the Osteoporosis Society of Hong Kong will soon take the lead in driving progress in this area.

#### **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. OSHK Task Group for the Formulation of the 2024 OSHK Guideline for Clinical Management of Postmenopausal Osteoporosis in Hong Kong; Ip TP, Lee CA, Lui TD, Wong RMY, Cheung CL, Chiu KCP, Chow SLE, Ho CF, Ho TC, Ho YA, Lee KK, Li HR, Mak KC, Ng KD, Ngai SLI, Wong CG, Wong SJ, Wong SH, Wong TW. 2024 OSHK Guideline for Clinical Management of Postmenopausal Osteoporosis in Hong Kong. Hong Kong Med J. 2024 Apr;30 Suppl 2:1-44. PMID: 39113555.

This document highlights the key findings for Hong Kong SAR, 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** 

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Osteoporosis Society of Hong Kong (OSHK) https://oshk.org.hk

Queen Elizabeth Hospital https://www3.ha.org.hk/qeh/tch/main/index.htm





