

# Launch of world-first expert resource to foster best practice osteoporosis care in the Asia Pacific

## *Expert collaboration key to reducing burden of disease*

More than 50 per cent of the world's hip fractures are expected to occur in the Asia Pacific by the year 2050.<sup>1</sup>

In a strong effort to stem the tide, and to promote quality care in osteoporosis, the Asia Pacific Consortium on Osteoporosis (APCO) has launched a world-first, interactive, educational osteoporosis resource – the APCO Health Care Professional (HCP) Peer to Peer Educational Modules – today, to mark World Osteoporosis Day (Wednesday, October 20).

The survival of those who sustain an osteoporotic fragility fracture is significantly compromised for up to six years, with patients facing twice the risk of death within the first year.<sup>2</sup> Furthermore, a prior fracture at any site doubles a person's risk of refracture.<sup>3,4</sup> Yet despite these alarming statistics, more than 80 per cent of fragility fracture patients are neither assessed, nor treated,<sup>5,6</sup> placing a substantial, but importantly, preventable burden on already strained healthcare systems.<sup>7,8</sup> This is despite the extensive availability of safe and effective osteoporosis management strategies.<sup>8</sup>

Minimum clinical standards for the assessment and management of osteoporosis are therefore urgently required in the Asia Pacific, to inform clinical practice guidelines, and improve osteoporosis care.<sup>9</sup> It was with this aim in mind that APCO launched 'The APCO Framework' in January, 2021. 'The Framework' comprises 16 minimum clinical standards that serve as a benchmark for the provision of best practice osteoporosis care in the Asia Pacific.<sup>9</sup>

**The APCO HCP Peer to Peer Education Modules will offer physicians a comprehensive, evidence-based resource encouraging widescale implementation of the minimum clinical standards of care for osteoporosis advocated in The APCO Framework. This will enable the delivery of best practice osteoporosis care throughout the Asia Pacific – the world's fastest ageing region.<sup>10</sup>**

According to APCO Chairperson, and Director of the Osteoporosis and Bone Metabolism Unit, Singapore General Hospital, Dr Manju Chandran, Singapore, there are significant inconsistencies in clinical practice guidelines in the Asia Pacific for the management and prevention of osteoporosis and fragility fractures.<sup>9</sup> These guidelines vary extensively in scope and recommendations. There is also a lack of information available on adherence to national guidelines in daily clinical practice.<sup>9</sup>

"It is to address this care gap, that APCO has developed an interactive, 17-module educational series today, to arm osteoporosis champions in the Asia Pacific, with information, supporting data, topical literature summaries, and best practice examples that support and emphasise each of The APCO Framework's 16 minimum clinical standards and emerging themes in osteoporosis care.

"Increasing awareness and education among healthcare professionals in the Asia Pacific is imperative to bringing change to the real-world clinical practice of osteoporosis care and fracture prevention," said Dr Chandran.

"The Asia Pacific is home to 4.5 billion people, rapidly ageing populations, and vastly different healthcare systems.<sup>11</sup>

"An overwhelming 319 million people aged 50 years and over from the Asia Pacific are projected to be at high risk of osteoporotic fracture over the next two decades,<sup>12</sup> while more than half of the world's hip fractures are expected to occur in the region by 2050,"<sup>11</sup> Dr Chandran said.

"Singapore, where I live, for instance, has one of the highest hip fracture rates in the world, with a four-to-five-fold increase in incidence noted over a recent 30-year period.<sup>13</sup>

"The incidence of osteoporotic fractures in Singapore is projected to rise from more than 15,000 in 2017, to 24,100 by 2035, an increase of 57.9 per cent.<sup>14</sup> The total economic burden (including both direct and indirect costs) associated with these fractures is projected to grow from SGD 183.5 million (USD 214 million) in 2017, to SGD 289.6 million (USD 136 million) by 2035."<sup>14</sup>

After one year, two in five people who sustain a hip fracture will be unable to walk independently,<sup>15</sup> while two-thirds will encounter difficulty performing at least one essential daily task.<sup>15</sup>

“Economically, the burden of current treatment of a single hip fracture in the Asia Pacific is extremely high, equating to approximately 19 per cent of our region’s per-head gross domestic product (GDP),”<sup>16</sup> said APCO Committee member, Consultant in Endocrinology and Diabetes at Tun Wah Hospital, and Chairperson of the Guideline for the Management of Postmenopausal Osteoporosis in Hong Kong, Dr Ip Tai-Pang, Hong Kong SAR.

In Hong Kong SAR alone, the direct medical costs of hip fractures was an estimated USD 85 million in 2018, the costs for which are projected to increase to USD 243 million by 2050.<sup>1</sup>

“Given the anticipated exponential growth in fragility fractures due to the region’s rapidly ageing population, mass urbanisation and our increasingly sedentary lifestyles,<sup>13</sup> we must act now,” Dr Ip said.

“Osteoporosis experts can use the new APCO HCP Education Modules either in full, or in part, to inspire and further inform their peers and professional communities on those at high-risk for fracture who require identification and assessment, based on their medical and fracture history, risk factors, co-occurring diseases, country-specific osteoporosis screening tool results, and falls risk.

“Supporting data on the administration, duration, monitoring of, and adherence to, various treatment interventions and their associated side-effects, as well as the critical need for long-term management plans, also feature in the APCO modules,” said Dr Ip.

Osteoporosis is vastly under-diagnosed and under-treated. Disturbingly, millions of people worldwide at high risk of fracture remain unaware of this underlying, silent disease.<sup>6</sup> Championed by the International Osteoporosis Foundation (IOF), World Osteoporosis Day is dedicated to raising global awareness of the importance of prevention, diagnosis and treatment of osteoporosis and musculoskeletal diseases.

“This World Osteoporosis Day, we encourage healthcare providers, policy makers, patients, members of the public, and the media on a global, regional and national stage, to recognise the monumental human and socio-economic burden of osteoporosis, and the severe impact of fractures on a patient’s independence and quality of life,”<sup>17</sup> IOF Chief Executive Officer, and APCO Executive Committee member, Dr Philippe Halbout, Switzerland said.

“One of the emerging osteoporosis themes outlined in the APCO HCP Education Modules, is the importance of Asia Pacific-wide systemic integration of case identification and management at all levels of health systems, including acute care services, when patients present with fractures through Post Fracture Care Coordination Programs, such as Fracture Liaison Services (FLS).

“These coordinated systems of care aim to identify, treat and monitor patients presenting with a fragility fracture. Intervention can reduce fractures by up to 50 per cent,<sup>18</sup> deliver substantial financial savings, and ultimately, save lives,”<sup>19</sup> said Dr Halbout.

“Today’s launch of the APCO Education Modules demonstrates the organisation’s ongoing commitment to achieving greater consistency in national and regional clinical practice guidelines for the screening, diagnosis, and management of osteoporosis in the Asia Pacific.”

**To request access to The APCO Education Modules, head to: [apcobonehealth.org/apco-education-modules](http://apcobonehealth.org/apco-education-modules).**

**To learn more, visit [www.apcobonehealth.org](http://www.apcobonehealth.org) or follow APCO on LinkedIn: [asia-pacific-consortium-on-osteoporosis](https://www.linkedin.com/company/asia-pacific-consortium-on-osteoporosis).**

### **About APCO**

The Asia Pacific Consortium on Osteoporosis (APCO) comprises osteoporosis experts from 19 countries in the Asia Pacific, charged with developing tangible solutions to the substantive challenges involving osteoporosis management and fracture prevention in this most populated and fastest growing part of the world. APCO’s mission is to engage with relevant stakeholders, including healthcare providers, policy makers and the public, to help develop and implement country and region-specific programs for the prevention and treatment of osteoporosis, and its complication of fragility fractures, in the Asia Pacific.

### **About osteoporosis in the Asia Pacific region**

- Osteoporosis is estimated to account for nearly nine million fractures each year,<sup>20</sup> noting more than 200 million people worldwide live with osteoporosis.<sup>21</sup>
- Osteoporotic fractures among Asia-Pacific populations are expected to increase exponentially, due to the region’s rapidly aging population, mounting urbanisation, and subsequent increase in sedentary lifestyles.<sup>22</sup>
- Osteoporosis is greatly under-diagnosed and under-treated in Asia, even among those at highest risk who have already fractured.<sup>23</sup> In most developing countries of the Asia Pacific, especially in rural areas, DXA technology is not widely available.<sup>23</sup>

### **About World Osteoporosis Day**

Falling each year on October 20, World Osteoporosis Day raises awareness of bone health and osteoporosis prevention. This year’s campaign, under the banner of ‘Take Action for Bone Health’, calls for global action to fight osteoporosis and related fractures. See: [www.worldosteoporosisday.org](http://www.worldosteoporosisday.org).

**ends#**

## MEDIA CONTACTS & INTERVIEWS

Kirsten Bruce & Mel Kheradi, VIVA! Communications, Sydney, Australia

T +61 (0)401 717 566; +61 (0)421 551 257

E [kirstenbruce@vivacommunications.com.au](mailto:kirstenbruce@vivacommunications.com.au); [mel@vivacommunications.com.au](mailto:mel@vivacommunications.com.au)

DOWNLOAD DIGITAL MEDIA KIT: [www.apcomediakit.org](http://www.apcomediakit.org)

## EXPERTS AVAILABLE FOR INTERVIEW

<b>Dr Manju Chandran</b>	APCO Executive Committee Chairperson, Senior Consultant, Department of Endocrinology, Director, Osteoporosis & Bone Metabolism Unit, Singapore General Hospital, <b>SINGAPORE</b>
<b>Dr Ip Tai-Pang</b>	APCO Committee member, Consultant in Endocrinology and Diabetes, Tun Wah Hospital, & Chairperson of the Guideline for the Management of Postmenopausal Osteoporosis in Hong Kong, Dr Ip Tai-Pang, <b>HONG KONG SAR</b>
<b>Dr Philippe Halbout</b>	APCO Executive Committee member & Chief Executive Officer, International Osteoporosis Foundation, <b>SWITZERLAND</b>
<b>Dr Manoj Chadha</b>	APCO Committee member, Consultant Endocrinologist, P. D. Hinduja National Hospital & Medical Research Centre & Mumbai & Hope & Care Centre, <b>INDIA</b>
<b>Prof Leilani Basa Mercado-Asis</b>	APCO Committee member, Former Chair, Faculty of Medicine & Surgery, University of Santo Tomas (UST), <b>PHILIPPINES</b>
<b>Prof Qun Cheng</b>	APCO Committee member, Chief Physician, Professor & Doctoral Supervisor, Department of Osteoporosis & Bone Disease, Huadong Hospital affiliated with Fudan University, <b>CHINA</b>
<b>Mr Greg Lyubomirsky</b>	APCO Executive Committee member & Chief Executive Officer, Healthy Bones Australia, <b>AUSTRALIA</b>

## References

- Cheung, C.-L., et al., *An updated hip fracture projection in Asia: The Asian Federation of Osteoporosis Societies study*. Osteoporosis and sarcopenia, 2018. 4(1): p. 16-21.
- Brown, J.P., et al., *Mortality in older adults following a fragility fracture: real-world retrospective matched-cohort study in Ontario*. BMC Musculoskeletal Disorders, 2021. 22(1): p. 105.
- Kanis, J.A., et al., *A meta-analysis of previous fracture and subsequent fracture risk*. Bone, 2004. 35(2): p. 375-82.
- Klotzbuecher, C.M., et al., *Patients with Prior Fractures Have an Increased Risk of Future Fractures: A Summary of the Literature and Statistical Synthesis*. Journal of Bone and Mineral Research, 2000. 15(4): p. 721-739.
- Royal Australian College of General Practitioners & Osteoporosis Australia, *Osteoporosis prevention, diagnosis and management in postmenopausal women and men over 50 years of age*. 2017.
- International Osteoporosis Foundation, *World Osteoporosis Day Toolkit*. 2021.
- Kim, T.K., *CORR® International-Asia-Pacific: Aging in the Asia-Pacific-The Elephant in the Room*. Clinical orthopaedics and related research, 2018. 476(10): p. 1933-1934.
- Benjamin, R.M., *Bone health: preventing osteoporosis*. Public health reports (Washington, D.C.: 1974), 2010. 125(3): p. 368-370.
- Chandran, M., et al., *Development of the Asia Pacific Consortium on Osteoporosis (APCO) Framework: clinical standards of care for the screening, diagnosis, and management of osteoporosis in the Asia-Pacific region*. Osteoporosis International, 2021. 32(7): p. 1249-1275.
- United Nations - Department of Economic and Social Affairs, *World Population Ageing 2019 Highlights*. 2019.
- Chandran, M., et al., *IQ driving QI: the Asia Pacific Consortium on Osteoporosis (APCO): an innovative and collaborative initiative to improve osteoporosis care in the Asia Pacific*. Osteoporosis Int, 2020. 31(11): p. 2077-2081.
- Odén, A., et al., *Burden of high fracture probability worldwide: secular increases 2010-2040*. Osteoporosis Int, 2015. 26(9): p. 2243-8.
- International Osteoporosis Foundation, *The Asia-Pacific Regional Audit - Epidemiology, cost & burden*. 2013. p. 61-67.
- Chandran, M., et al., *The health and economic burden of osteoporotic fractures in Singapore and the potential impact of increasing treatment rates through more pharmacological options*. Arch Osteoporosis, 2019. 14(1): p. 114.
- Cooper, C., *The crippling consequences of fractures and their impact on quality of life*. The American Journal of Medicine, 1997. 103(2): p. S12-S19.
- The Economist Intelligence Unit, *Demystifying Ageing: Lifting the burden of fragility fractures and osteoporosis in Asia-Pacific*. 2017.
- Office of the Surgeon General (US). *Bone Health and Osteoporosis. A Report of the Surgeon General*. Rockville (MD): Office of the Surgeon General (US) - The Burden of Bone Disease. 2004 Jan, 2020]; Available from: <https://www.ncbi.nlm.nih.gov/books/NBK45502/>.
- Andreasen, C., et al., *Effect of a Fracture Liaison Service on the Rate of Subsequent Fracture Among Patients With a Fragility Fracture in the Norwegian Capture the Fracture Initiative (NoFRACT): A Trial Protocol*. JAMA Network Open, 2018. 1(8): p. e185701-e185701.
- Walters, S., et al., *Fracture liaison services: improving outcomes for patients with osteoporosis*. Clinical interventions in aging, 2017. 12: p. 117-127.
- Johnell, O. and J.A. Kanis, *An estimate of the worldwide prevalence and disability associated with osteoporotic fractures*. Osteoporosis Int, 2006. 17(12): p. 1726-33.
- International Osteoporosis Foundation (IOF). *Osteoporosis Facts and Statistics*. [Jan, 2020]; Available from: <https://www.iofbonehealth.org/facts-and-statistics/calcium-studies-map>.
- International Osteoporosis Foundation, *The Asia-Pacific Regional Audit: Epidemiology, costs & burden of osteoporosis in 2013*. 2013. p. 1-128.
- International Osteoporosis Foundation (IOF). *Key statistics for Asia*. [October 2021]; Available from: <https://www.osteoporosis.foundation/facts-statistics/key-statistic-for-asia>.