Topic 7 supplement – strategies to improve hip fracture prevention and care

This supplementary information for Topic 7 introduces the national strategy proposed by Osteoporosis New Zealand, and is one of the readings required for the professional development activity.

Policymakers, professional organisations and patient societies in Australia,¹ Canada,² the UK³ and the United States⁴ have advocated implementation of a systematic approach to hip fracture prevention and care, as has the International Osteoporosis Foundation.⁵

In December 2012, Osteoporosis New Zealand published such a strategy, *BoneCare 2020:* A systematic approach to hip fracture care and prevention for New Zealand.⁶

The strategy is summarised below and specific steps for each objective are outlined overleaf, where you can identify those most relevant to your service.

The strategy proposes that particular groups are targeted sequentially, from highest to lowest risk, as the most effective approach from clinical and cost perspectives. In other words, we should prioritise our efforts to those most at risk of future fracture – the people who already have a fragility fracture.

A systematic approach to hip fracture prevention and care⁶



Adapted from Department of Health. 2009. Falls and Fractures: Effective interventions in Health and Social Care.³



Objectives		Specific steps – which are relevant for your service? (select as many as apply)
1	Improve outcomes and quality of care after hip fracture by routinely delivering ANZ professional standards of care; monitor through a National Hip Fracture Registry.	Deliver best practice hip fracture care
		Development of an Australian and New Zealand Guideline for Hip Fracture through the Australian and New Zealand Hip Fracture Registry (ANZHFR) organisation ⁷ will supercede guidance given in a 2011 position statement by the Australian and New Zealand Society for Geriatric Medicine. ⁸
		Support and monitor implementation of best practice
		Efforts are underway to establish a Hip Fracture Registry in New Zealand (and all Australian states and territories) modelled on the successful experience of the United Kingdom's National Hip Fracture Database. ⁹
2	Respond to the first fracture to prevent the second through universal access to Fracture Liaison Services in every DHB.	Secondary prevention through fracture risk assessment and appropriate interventions
		Implement systems to 'capture the fracture' i.e. ensure patients presenting with their first fragility fracture always receive assessment for future fracture risk (including both falls risk and osteoporosis) and that they and their family/whānau are involved in selecting interventions to reduce risk.
		 One half of hip fracture patients give us advance notice by breaking another bone prior to breaking their hip.^{10–13} Given that only one sixth of postmenopausal women (and a smaller proportion of men aged 50 years and over) have suffered a fragility fracture14, prioritising intervention to these individuals is the most costeffective way to begin reducing the incidence of fragility fractures nationally. Introduction of the Fracture Liaison Service (FLS) model of care15–23 has been included as a priority in the District Annual Plans for District Health Boards for 2013–14.²⁴
		Retrospective case finding for secondary prevention
		Identify patients who have suffered a fracture since age 50 years and ensure that all of these individuals

		 undergo fracture risk assessment and have their risks addressed. Many patients with previous fragility fractures will not have received appropriate fracture risk assessment and osteoporosis interventions at the time they were treated. Fracture risk assessment will often include Bone Mineral Density (BMD) testing and increasingly make use of an absolute fracture risk calculator such as FRAX®²⁵ or the Garvan fracture risk calculator.²⁶
3	Stratify fracture risk in enrolled population in primary healthcare using fracture risk assessment tools supported by local access to axial bone densitometry.	 Prospective case finding for primary prevention Identify individuals at high risk of suffering their first fragility fracture or other injurious falls and work with them to address their risks. Fracture risk assessment will often include Bone Mineral Density (BMD) testing and increasingly make use of an absolute fracture risk calculator such as FRAX®²⁵ or the Garvan fracture risk calculator.²⁶ Primary prevention strategies should also be cognisant that those living with dementia fall more frequently, fracture more often and suffer higher postfracture mortality than their cognitively intact peers.^{27–30} Screen older people for risk of falling, and undertake multifactorial assessment and intervention for those at risk, including osteoporosis treatment when appropriate.³¹
4	Deliver consistent public health messages on physical activity, healthy lifestyles and reducing environmental hazards.	Prevent osteoporosis and falls in older people Health promotion initiatives for older people emphasising physical activity and healthy lifestyles, enhancing strength and balance and reducing environmental hazards. The Osteoporosis Australia strategy 'Building healthy bones throughout life', ³² published in 2013 with expert contributors from both sides of the Tasman, provides a contemporary synthesis of the global literature and makes evidence – informed recommendations for public health messaging.

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