



NICS- DEPARTMENT OF VETERANS' AFFAIRS FELLOW 2007

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*The National Institute
of Clinical Studies (NICS)*

Implementation Project:

Improving awareness, investigation and management of osteoporosis in patients presenting with a fracture

Osteoporosis costs the Australian health care system more than seven billion dollars annually; affecting one in two women and one in three men aged over 60 years. Osteoporosis resulting in fragility fracture is a common and increasing problem, especially amongst post-menopausal women.

The impact of osteoporosis can be significant. Fragility fractures that result are associated with disability, increased mortality and future fracture risk.

There are evidence-based Australian and International guidelines for the management of patients with osteoporosis with and without fracture. However, patients with previous fragility fracture remain untreated.

Improving awareness of osteoporotic fracture risk among patients with fracture and their clinicians is an important strategy. This project therefore targets patients presenting to hospital with a fracture. They are provided with an information sheet alerting them to their risk of osteoporosis and recommending review of their osteoporosis risk with their medical practitioner (improving patient awareness). In addition they are provided with an "Osteoporosis Management Guideline" which they are encouraged to take to their medical practitioner (improving GP awareness and management). Combined with this there will be a survey of medical practitioner attitudes and knowledge on osteoporosis and an education and awareness program through the local medical institution and the Divisions of General Practice.



Australian Government
Department of Veterans' Affairs

Implementation Project Progress Report, October 2007:

Dr Inderjeeth has completed a survey of GPs to assess their attitude to osteoporosis and their knowledge on investigation and treatment. There has been a 50% response rate out of 600 surveys posted. The data will be analysed and should give some insight into why GPs' management of patients with osteoporosis. He plans a similar survey of orthopaedic surgeons to gauge their attitude to the management of osteoporosis.

Dr Inderjeeth has completed the (consensus) guideline on osteoporosis management. This is currently being implemented. He has involved major stakeholders in both these processes to ensure acceptability and support in implementation.

This project has provided useful opportunities to engage and work with various organisations including the local institution (Sir Charles Gairdner Hospital), Divisions of General Practice, Arthritis and Osteoporosis WA and the Department of Health WA.

The next phase is to optimise implementation and review three months post implementation, reanalyse the barriers and evidence practice gap and any change in the evidence guiding treatment.

Implementation Project Progress Report, April 2008:

My fellowship project is currently progressing well without any significant additional delays and is expected to be completed on time. The major milestones achieved so far are:

A clinical consensus guideline on the management of osteoporosis for local use has been completed and is currently being implemented at Sir Charles Gairdner Hospital. There has been good support from local stakeholders.

A number of the geriatric departments in other hospitals in Western Australia have considered and taken on components of the project to be implemented locally in their service (orthogeriatrics). They have used and adapted the documents and tools that we have developed e.g. patient information sheet, clinical guidelines and posters.

The local project has generated a significant interest in osteoporosis identification and management which has been incorporated into clinical pathway and implementation policies in the areas of fracture and falls management both at an institutional level and the Department of Health in Western Australia.

The next phase is to analyse the effectiveness of the current program through a reaudit of patients accessing services at Sir Charles Gairdner hospital. Following this we will reanalyse barriers and the evidence practice gap, optimise implementation and reanalyse the effectiveness of the intervention three months later.

As part of the project I have completed a survey of general practitioners to assess their attitudes to osteoporosis and their knowledge and investigation and treatment. This information is being collated for possible publication. In addition I am in the process of surveying orthopaedic surgeons and medical physicians with regards to their knowledge and attitude to the management of osteoporosis in patients with previous fractures.

Implementation Project Progress Report, October 2008:

The current NICS Fellowship project has identified significant gaps in knowledge and the translation of research into practice. Engaging stakeholders has been both challenging as well as rewarding although overall there has been some improvements in patient care. There remain significant limitations to the implementation of evidence in organisations due to conflicting priorities within specific service areas.

The updated major milestones achieved so far are:

- The clinical consensus guideline developed for this current project has been widely disseminated and used at various institutions within Western Australia. The feedback to date has been positive and the usefulness of the guideline in individual institutions is being audited.
- This project continues to generate a significant amount of interest in osteoporosis identification and management and has been incorporated into clinical pathways and implementation policies in the areas of fracture and falls management both at institutional level and the Department of Health in WA.
- The main limitation is the uptake of the evidence is in some of the crucial areas involved in osteoporotic fracture care ie Emergency departments and Orthopaedic Services. There are rarely easily identifiable champions with an interest in these areas to help facilitate interest.
- On the positive side, a preliminary analysis of the data suggests that, there has been a significant improvement in the rate of referral of patients with osteoporosis to appropriate services when it is available (Fragile bone Clinic). The future aim may be to encourage referral, which is more achievable, rather than assessment and treatment, which are not considered core business in these areas. An active case finding service eg Fracture liaison coordinator may be an additional goal.

The information from this project will be presented at various annual scientific meetings and published in relevant journals. The dissemination of information will include the strengths and weaknesses (limitations) in working in these settings and possibly resetting of priorities may be appropriate.

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The Department of Veterans' Affairs (DVA) supports those who serve or have served in defence of our nation and commemorates their service and sacrifice. DVA does this by providing compensation and income support entitlements, delivering health care and rehabilitation services, and fulfilling Australia's commitment to remember and honour those who serve our nation.

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Key Publications:

Inderjeeth CA, Glennon D, Petta A, Soderstrom J, Boyatzis I, Tapper J. Vitamin D and muscle strength in patients with previous fractures. The New Zealand Medical Journal. 21 September 2007;120(1262).