

INTRODUCTION TO GLA:D[®] AUSTRALIA

GLA:D[®] is a standardised but individualised program that supports clinicians to provide guideline-based education and exercise-therapy to people with hip and knee osteoarthritis.

The program was founded by Professor Ewa Roos and Professor Soren Skou (University of Southern Denmark), and has now been adapted for implementation in the Australian health system context by Professor Kay Crossley, A/Prof Joanne Kemp and A/Prof Christian Barton. The research related to the program focuses on implementation (i.e. studying what happens in the 'real world') and is not a clinical trial (e.g. if education and exercise therapy is effective).

GLA:D[®] consists of three elements:

- (i) Clinician training and support.
- (ii) Delivery of patient education and standardised but individualised neuromuscular exercise-therapy (12 x 60-minute group exercise and 2 x 60-minute small group education sessions).
- (iii) Patient outcome collection (baseline; and 3- and 12-months follow-up) via an online registry.

All three elements are essential. This means that only trained clinicians can deliver the program, which must include participant education, exercise and data collection.

Components of GLA:D Participant Education:

- The burden of osteoarthritis.
 - Risk factors.
- Factors related to pain and disability.
 - Treatment options.
- Exercise and physical activity, including managing pain and pain flares.
 - Self-management.

Components of GLA:D exercise-therapy (Neuro-muscular exercise, or NeMEx):

- Warm up
- Neuromuscular exercises/lunges: <https://nemex.trekeeducation.org/lunges/>
 - Functional :<https://nemex.trekeeducation.org/functional/>
 - Knee strength: <https://nemex.trekeeducation.org/knee-strength/>
 - Hip strength: <https://nemex.trekeeducation.org/hip-strength/>
 - Trunk strength: <https://nemex.trekeeducation.org/trunk-strength/>

Feasibility of exercise-therapy program in severe hip and knee osteoarthritis:

<https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/1471-2474-11-126>

Nb: This program has since been adapted and expanded to ensure it meets the needs of people with hip and knee osteoarthritis of all ages and functional levels.



Why was GLA:D® developed?

Education and exercise-therapy are recommended in all clinical practice guidelines as first line care for hip and knee osteoarthritis. The effectiveness and cost-effectiveness of this care is supported by compelling evidence. Yet, there is a large gap between guidelines and practice, which is driven by many factors. GLA:D® provides a solution to help bridge this guideline-practice gap.



Read about the evidence supporting education and exercise-therapy for hip and knee osteoarthritis

- Cochrane systematic review
- Benefits of exercise and physical activity for osteoarthritis
- Cost effectiveness of patient education and exercise-therapy similar to GLA:D®
- Patient education and exercise-therapy programs similar to GLA:D® to avert surgery.

Listen to Ewa Roos discuss the need for GLA:D® in Denmark:



https://www.youtube.com/watch?v=B2XMsZQP_pY&feature=emb_logo



Read about the implementation of GLA:D® in Denmark

<https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/s12891-017-1439-y>



What is the burden of osteoarthritis in Australia?



Osteoarthritis affects one in eleven Australians, reduces occupational capacity, and triples the likelihood of poor health. Direct healthcare costs for osteoarthritis are estimated to exceed \$3 billion by 2030 in Australia. These clear health and economic burdens highlight the need to ensure that people with osteoarthritis receive the most effective treatments.

Based on current evidence, and consistent with other international guidelines, the Royal Australian College of General Practitioners (RACGP) guidelines recommend education and exercise-therapy as first line care for osteoarthritis:

<https://www.racgp.org.au/download/Documents/Guidelines/Musculoskeletal/guideline-for-the-management-of-knee-and-hip-oa-2nd-edition.pdf>

How does the evidence match with clinical practice?

Despite the evidence and recommendations, 57% of Australians with osteoarthritis do not receive this care, and large cohort studies indicate that one in two people with osteoarthritis have not tried exercise-therapy to manage their symptoms. Evidence also indicates general practitioners refer less than 4% of people with osteoarthritis who present to them to a clinician or any form of exercise-therapy. Qualitative research in Australia has revealed one of the drivers of this low referral rate is the variation in care provided by clinicians and an absence of a trusted program to refer to. The GLA:D® program in Australia provides an effective option to bridge this gap between guidelines and practice.

What are the outcomes associated with GLA:D® in Australia?

[Read the latest annual reports](#)

What are the potential health system savings?

<https://www.sciencedirect.com/science/article/pii/S2665913120300595>



Watch a [patient story](#) about a patient who averts surgery following participation in GLA:D®:



GLA:D® Australia is now part of an international network of GLA:D® programmes who collaborate with the philosophies of:

- Equal access for all osteoarthritis patients to evidence-based patient education and exercise irrespective of place of residence and financial situation
- That surgery is indicated only when nonoperative treatment fails.