



GLA:D[®]
IRELAND

ANNUAL REPORT 2022

HIP AND KNEE OSTEOARTHRITIS



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UNIVERSITY OF
LIMERICK
OILScoil LUIMNIGH

EDITORIAL

Welcome to the first GLA:D® Ireland Annual Report! The GLA:D® Ireland non-profit initiative was set up to improve outcomes for people with hip and knee osteoarthritis in Ireland, with involvement of those with lived experience and clinicians treating these conditions.

GLA:D® aims to accelerate implementation of clinical guidelines into practice, with an overall objective to ensure that: **1.** All people with osteoarthritis have equal access to evidence-based treatment irrespective of place of residence or financial situation; and **2.** Surgery is considered only when non-surgical treatment measures have not led to satisfactory outcomes

GLA:D IRELAND TEAM



Clodagh Toomey PT, PhD

Research Lead GLA:D Ireland
Primary Investigator IMPACT
Project



Avantika Bhardwaj

PhD Student



Tadhg Pyne

Research Assistant

RESEARCH FUNDERS AND COLLABORATORS

The GLA:D® Ireland initiative came to fruition through a **Health Research Board** Emerging Investigator Award to fund the **IMPACT (Implementation of osteoarthritis clinical guidelines together) project**. The co-applicant team and steering committee are made up of a diverse group of stakeholders and have oversight of the research and co-design strategies to implement GLA:D® in Ireland.

IMPACT



**Implementation of
osteoArthritis Clinical
Guidelines Together**

IMPACT Research Project Co-Applicants/Collaborators: Dr. Clodagh Toomey (PI, University of Limerick (UL)), Prof Norelee Kennedy (UL), Prof Anne MacFarlane (UL), Prof Liam Glynn (UL), Prof John Forbes (UL), Prof Ewa Roos (University of Southern Denmark (SDU)), Prof Soren Skou (SDU).

IMPACT Project Steering Committee:

Jacqui Browne (Patient representative)
Adrian Cassar-Gheiti (Orthopaedic Consultant)
Ian Dowling (PT - Private Practice)
Helen French (Researcher RCSI, PT)
Stacey Grealis (Patient representative)
Peter Hayes (UL, GP representative)

Norelee Kennedy (Researcher UL, PT)
Darragh Maguire (PT - Public Hospital)
Bronwen Maher (Arthritis Ireland)
Brenda Monaghan (Researcher TCD, PT)
John O'Hora (PT - Primary Care)
Clodagh Toomey (Chair, Researcher UL, PT)
James Young (GLA:D International Network)



WHAT IS GLA:D®?

GLA:D® is an **education and exercise programme** that has helped over 100,000 people with hip and knee osteoarthritis (OA) manage their symptoms of pain and loss of function.

GLA:D® stands for Good Life with osteoArthritis from Denmark and was first developed in Denmark in 2013, before expanding to 10 other countries around the world.

The programme reflects the latest research and has been developed and adapted based on feedback from people with OA, as well as healthcare professionals who provide care to individuals with mild to severe symptoms in Ireland. GLA:D® therefore provides **an evidence-based approach that works in the real world.**



THREE PARTS OF GLA:D®

1 Course for Physiotherapists
2-Day (hybrid) continuous professional development course for physiotherapists with theory and interactive practical and discussion sessions



2 GLA:D® Group Exercise & Education Programme Delivery
GLA:D® is delivered by the certified physiotherapist to people with hip and knee OA in clinics and hospitals around Ireland. Group sessions that are tailored to each patient's needs and goals consists of:



- 2 (or 3) education sessions
- 12 supervised education sessions (held twice weekly)

3 GLA:D® National Registry for Patient Outcomes
Patient questionnaires are completed with consent, before and after the programme, to monitor how GLA:D® affects patient outcomes like pain, function and quality of life in Ireland.



TRAINING OF PHYSIOTHERAPISTS

The first GLA:D® Ireland Course for Physiotherapists was held at the University of Limerick in October 2021. Danish programme co-developer Ewa Roos and trainer Sarah Kroman provided training on the GLA:D® concept. The programme was then adapted to the Irish setting by the project steering committee.



From October 2021 to December 2022, 3 courses were held in Ireland, with 71 physiotherapists certified to deliver GLA:D®

80% of physiotherapists were employed by the public sector and 20% were in private practice.

“ *I think it gave patients a love for exercise and it showed them the benefits and gave them the tools to continue after the course, which was nice.*
GLA:D trained Primary Care Physiotherapist ”

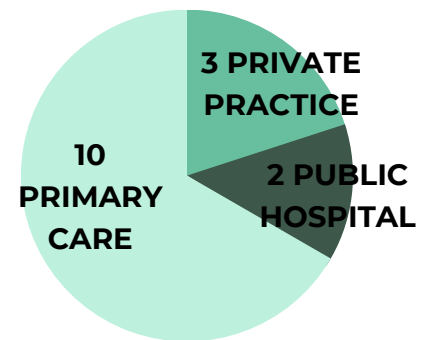


100% of physiotherapists agreed or strongly agreed that they were **satisfied** with the course.



In 2022, 15 sites were offering GLA:D® across all four provinces in Ireland.

Up-to-date lists of sites offering GLA:D® can be found on the [website](#).



Interested in becoming a GLA:D® certified physiotherapist? Details on upcoming courses are found [here](#)

GLA:D® IRELAND PARTICIPANTS

In the first year of GLA:D® Ireland, 130 people with hip or knee osteoarthritis were registered on a programme with their physiotherapist. Of these, 95 participants completed a baseline questionnaire.

78% of those who participated in GLA:D® in year one were **women**.

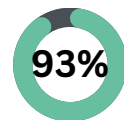
The **average age was 64 years**. The youngest participant was in their 40's, while the oldest participant was in their 80's.

The average **Body Mass Index (BMI)** of participants was **30.1**. A total of 86% of the knee participants and 64% of the hip participants were **overweight or obese**.



90% had pain in more than one joint

Symptoms before starting GLA:D®



Joint stiffness in the morning



Reduced movement in the joint



Average duration of symptoms was 5.6 years and **1 in 4** had symptoms for **more than 5 years**.

Average pain on Visual Analog Scale (VAS)

0 100 **43.8/100 for Knee**

0 100 **39.5/100 for Hip**

Painkiller Use

71% of knee participants and **67% of hip** participants reported taking painkillers in the previous 2 weeks.

Previous Surgery

19% of knee participants and **9% of hip** participants had undergone joint surgery before starting in GLA:D®.

Other Health Conditions

90% of all participants reported having another health condition. The most common conditions are high blood pressure (37%), back pain (35%) and high cholesterol (27%).

Referral

Most patients were referred by their **GP or other physician (71%)**. Other sources of referral were from a musculoskeletal triage physiotherapist, orthopaedic consultant or self-referral.



GLA:D® IRELAND RESULTS

The immediate changes in patient outcomes after participation in a GLA:D® programme in the first year are presented below. There were 58 participants with follow-up questionnaires complete in the GLA:D® Ireland Registry.

LESS PAIN

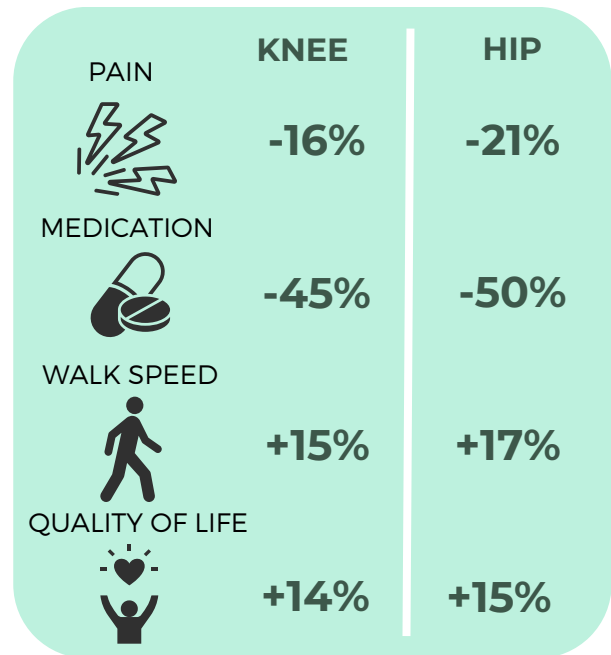
After GLA:D®, the **average pain reduced** by **16%** (from 47 to 39 mm on VAS (visual analogue scale) 0-100) for **knee** participants and **21%** (from 44 to 34 on VAS 0-100) for **hip** participants.

LESS PAIN MEDICATION

After GLA:D®, **45% of knee** participants and **50% of hip** participants reported that they were using **less or much less medication**, such as paracetamol, NSAIDs (non-steroidal anti-inflammatory drugs) or opioids.

Thank you so much, a FANTASTIC programme, I now understand how to exercise...I have become so much stronger, I picked up 10 wheelbarrows of leaves from my drive in one go last week. Increased targeted exercise has made me stronger and more confident in improving my mobility and general function.

69 year-old participant with knee pain



BETTER PHYSICAL FUNCTION

After GLA:D®, the **number of sit to stands** in 30 seconds increased by **27%** (from 10 to 13 repetitions) for knee participants and increased by **10%** (from 10 to 11 repetitions) for hip participants.

The average **walking speed increased** by **15%** (from 1.4 m/sec to 1.6 m/sec) for knee participants and **17%** (from 1.2 m/sec to 1.5 m/sec) for hip participants.

HIGHER QUALITY OF LIFE

Average **joint-related quality of life increased** by **14%** (Knee injury and Osteoarthritis Outcome Score QoL from 42 to 49) and **15%** (Hip disability and Osteoarthritis Outcome Score QoL from 47 to 59) respectively.

GLA:D® IRELAND RESULTS

HIGH ATTENDANCE AND SATISFACTION

90% of participants attended at least 10 of the 12 recommended **group exercise** sessions.

93% attended the 2 recommended **group education** sessions.



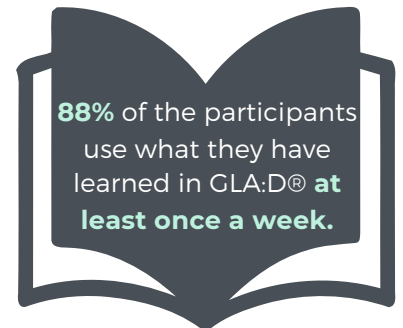
9 IN 10 PARTICIPANTS ATTEND ALMOST ALL OF THE SESSIONS



93% of the participants were **satisfied or very satisfied** with GLA:D®.



3 IN 4 PARTICIPANTS RATED THEIR JOINT PROBLEM AS **SOMEWHAT BETTER, BETTER OR MUCH BETTER** AFTER GLA:D.



88% of the participants use what they have learned in GLA:D® at **least once a week.**



Future GLA:D® Ireland Registry Results

Please note that results presented are from first year pilot programme with limited numbers and follow-up time. The next GLA:D® Annual Report (2023) will also include results from a one-year follow-up, in addition to outcomes related to surgery and physical activity participation, as numbers grow across private and public healthcare and community settings in Ireland.

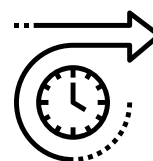
GLA:D® INTERNATIONAL NETWORK RESEARCH



GLA:D® has now been around for 10 years, in 10 different countries with over 100,000 participants. Some research results from those countries with links, and some research projects ongoing in Ireland are presented below.

GLA:D® improves long-term pain and quality of life

The improvements in pain and quality of life at 3-months follow-up, were still sustained after one year in 9,825 patients from the GLA:D® registry in **Denmark**. Reduced pain intensity (by 26-33%), improved walking speed (by 8-12%), improved chair stand ability (by 18-30%), and improved quality of life (by 12-26%) were reported after GLA:D® participation in 28,370 participants across **Denmark, Canada, and Australia**.



GLA:D® is cost-effective

GLA:D® was deemed cost-effective at 1 year in 16,255 patients with knee or hip OA, supporting large scale implementation in **Denmark**.



GLA:D® reduces joint replacement surgery

Non-surgical intervention (GLA:D®) delayed the need for surgery for 74% of participants with moderate to severe knee osteoarthritis that are eligible for surgery. 68% of the non-surgical group had still avoided total knee replacement surgery at two **years**. In **Australia**, these figures translate to savings of \$AUD 303-690 million in 2019.



Some on-going and planned research from GLA:D® Ireland



Over the next few years, the GLA:D® Ireland research team will conduct research on topics such as: barriers and facilitators to implementation of the programme, using a participatory health research approach to co-designing implementation strategies, differences in effectiveness in public vs. private healthcare settings and conduct a healthcare utilisation and cost-utility analysis. The research project protocol can be found [here](#).



GLA:D®
IRELAND

Questions?
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