

# POLICY BRIEF

## MANDATE SUPERVISED GROUP EDUCATION AND EXERCISE AS FIRST LINE TREATMENT FOR HIP AND KNEE OSTEOARTHRITIS

### EXECUTIVE SUMMARY

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#### RECOMMENDATIONS

- A top-down government-led initiative is required to overcome barriers to accessing care, avoid increases in surgical rates and limit the burden of disease for people with osteoarthritis.
- As other countries have done (e.g., Denmark, Sweden) mandate that structured group-based physiotherapist-supervised education and exercise be the first line of treatment for people with hip and knee osteoarthritis, in line with international clinical guidelines.

This will improve equitable access to evidence-based and high-value care for people with osteoarthritis in Ireland and to ensure surgery is only considered after evidence-based care has been trialled.



#### WHY IS THIS ISSUE IMPORTANT?

- More than 577,800 people in Ireland live with chronic joint pain, restricted movement and poor quality of life from osteoarthritis, with increases of 23-30% projected by 2050 due to **population ageing**.
- Total joint replacement surgery is a last resort and an extremely costly intervention for the health service (**€112 million in 2024**). We have one of the longest wait times for surgery in Europe, and surgical rates are expected to increase by **49-65% in the public sector by 2036**.
- Those who can access first-line osteoarthritis treatment (**i.e. exercise and education**) have reduced desire for surgery and responders to this treatment have reduced frequency of hip and knee joint replacements within 5 years.

#### KEY INSIGHTS

- Less than 40% of people with osteoarthritis surveyed in Ireland reported being referred to a physiotherapist by their GP due to **cost, accessibility and long waitlists**.
- HRB-funded research has shown that an evidence-based physiotherapist-supervised group education and exercise programme (**GLA:D® Ireland**) is appropriate, acceptable, feasible and sustainable across **45 public and private healthcare settings in Ireland**.

GLA:D® has **reduced pain and desire for surgery, improved function and quality of life** in over 1000 patients to date using a bottom-up approach to implementation.

	KNEE	HIP
PAIN 	-17%	-27%
MEDICATION 	-41%	-51%
WALK SPEED 	+13%	+13%
QUALITY OF LIFE 	+17%	+19%

GLA:D Ireland Annual Report 2025

**POLICY BRIEF: Mandate supervised group education and exercise as first line treatment for hip and knee osteoarthritis****LIST OF CONTRIBUTORS**

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**WHAT IS GLA:D®?**

- International clinical guidelines<sup>1,2</sup> recommend exercise and education as core components for management of hip and knee osteoarthritis (OA) but most people in Ireland are not receiving this type of high-value care<sup>3</sup>.
- In October 2021, an **international evidence-based non-profit programme called GLA:D®** (Good Life with osteoArthritis Denmark) was brought to Ireland with a Health Research Board grant to investigate implementation in the Irish healthcare system.<sup>4</sup>
- There are over 260 physiotherapists in Ireland who are currently GLA:D®-certified. GLA:D has been delivered across **45 public and private healthcare settings** and 17 counties in Ireland to over **1000 patients to date** using this bottom-up approach.<sup>5</sup>



GLA:D® is an 8-week, twice per week, group-based **exercise and education** programme delivered by physiotherapists and accompanied by a national **patient data registry**. Patient outcomes are monitored following the programme and up to 12-months later.

**BURDEN OF OSTEOARTHRITIS**

- There are more than **577,800 people with osteoarthritis (OA) in Ireland** facing into older adulthood with chronic pain, restricted movement and function and reduced quality of life.<sup>6</sup> Projections to 2050 are alarming, with **increases of 23%-30%** in the knee and hip respectively.<sup>6</sup> This is exacerbated by people living longer, inactive lifestyles, and having overweight or obesity.
- Irish people with OA have **4-fold higher prevalence of having >3 chronic conditions** and an increased annual cost of €13.6 million in GP and outpatient services compared to those without OA.<sup>7,8</sup>
- **There are no disease modifying medications for OA.** Total joint replacement is a last resort for severe disease, but conservative therapy is not always trialed first. Approximately 1 in 5 people are dissatisfied with outcomes after a knee replacement,<sup>9</sup> which can be influenced by pre-surgical leg strength and function.<sup>10</sup> The Hospital In-Patient Enquiry (HIPE) reveals surgical costs of €112 million in 2024 in public hospitals alone, excluding private procedures, rehabilitation costs and productivity losses during the recovery period.
- **Waitlists to access consultant care in Ireland are amongst the highest in the EU** and at capacity (>72,000 on orthopaedics outpatient lists and 18-23% waiting over a year)<sup>11</sup>, although many are unlikely to be surgical candidates.

**Hip and knee replacements are expected to increase by 49-65% in the public sector by 2036.**<sup>12</sup> With the projected growth and cost of this disease, the sustainability of this health-care model is questioned. **OA should be viewed as a chronic condition, where prevention and early integrated care models are the accepted norm**, as is the case with other chronic diseases. We know that responders to first-line osteoarthritis treatment (i.e. exercise and education) have reduced frequency of hip and knee joint replacements within 5 years.<sup>13</sup>

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## PATIENT NEEDS ARE NOT BEING MET

*"Yeah, stuff like put up with it, you know what I mean. And it's not bad enough yet to have an operation was being said to me but I was never ever told that if you did A, B, C or D, you might not need surgery"*

Interview with woman  
with knee  
osteoarthritis



- **Less than 40%** of people with OA surveyed in Ireland reported having been referred to a physiotherapist by their GP.<sup>3</sup> While 91% of GPs surveyed reported they would refer patients to physiotherapy if no barriers existed, the top barriers identified were **cost, accessibility and long waitlists for physiotherapy**.<sup>14</sup>
- While lack of knowledge and fear of movement are commonly cited reasons for not exercising, people with OA in Ireland report that exercise **recommendation from a physiotherapist** is the top facilitator to exercising, while the **social aspect** of participating in a group was also deemed important.<sup>14</sup>

## GLA:D IMPROVES PATIENT OUTCOMES AND REDUCES DESIRE FOR SURGERY

- Data on 636 participants in the GLA:D® Ireland Registry has shown significant and clinically meaningful reductions in pain and medication use and increases in physical function (chair stand test, walking speed), quality of life and physical activity after the programme, with **sustained improvements shown 12-months later**.<sup>5</sup> Results have been replicated across numerous healthcare systems where GLA:D® is delivered across 10 other countries.
- **High adherence rates** across health settings are attributed to the group delivery format, providing motivation, social support and opportunities for peer learning.<sup>14,15</sup> In addition, the provision of education sessions prior to exercise builds confidence and expectation around pain management and long-term management of the condition.
- **Reduced desire for surgery** after GLA:D® is an important finding given the strongest predictor of having a joint replacement within 5 years is desire for surgery.<sup>16</sup>
- There was a **41% reduction in utilisation of healthcare services** following GLA:D®, including reduced allied health, GP and consultant visits.



**2 IN 3** PARTICIPANTS  
RATED THEIR JOINT  
PROBLEM AS **SOMEWHAT  
BETTER, BETTER OR  
MUCH BETTER** 1 YEAR  
AFTER GLA:D.



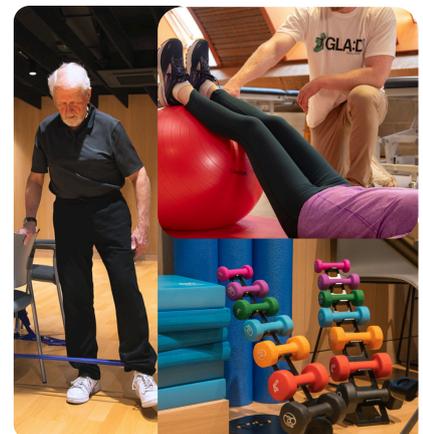
**8 IN 10** PARTICIPANTS  
ATTENDED ALMOST ALL (12/14)  
OF THE SESSIONS

THE NUMBER OF PEOPLE  
WANTING JOINT  
REPLACEMENT SURGERY  
PRIOR TO GLA:D®  
REDUCED FROM **25% TO  
16%** ONE YEAR AFTER THE  
PROGRAMME.



## BARRIERS TO IMPLEMENTATION OF HIGH-VALUE CARE

- Data gathered from our database and implementation studies<sup>13,14</sup> reveal that the most common barrier to implementing these programmes in practice has been the **lack of resources** for service improvement in primary care. Resources including a **consistent workforce capacity** (1.0 WTE physiotherapists), **support staff** (e.g., therapy assistants) to assist with classes and dedicated clinical time are required to effectively manage this caseload.
- Despite their prevalence, chronic musculoskeletal conditions become lower priorities on primary care waitlists compared to falls and fractures. Group-based standardised interventions are an effective way to tackle this problem<sup>17</sup> but **prioritisation and resourcing is urgently needed for scale-up**.



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### CASE STUDY: GLA:D® IN BALLYBODEN PRIMARY CARE

- Since February 2023, physiotherapists at Ballyboden Primary Care Centre, Dublin have delivered the GLA:D® programme to 144 patients with OA.
- The programme has been deemed to be an effective means to improve wait times and manage a long waitlist that is made up of 20-25% people with OA.
- Demand for the programme has grown with GPs now referring directly into the programme, more physiotherapists availing of the training and the introduction of dietetic input for those who require it.
- Less patients are utilising primary care services after the programme, suggesting improved knowledge and self-management skills.



### Resources required for successful implementation:

- **Personnel:**
  - 1 senior physiotherapist
  - 1 physiotherapy assistant
  - Administration support
- **Time:**
  - 2 hours per class including preparation and charting
  - 2 classes/week in 8 week block 3 times per year
  - 96 hours/year facilitating 30-38 patients
- **Space:** New gym in primary care facility and use of existing equipment
- *Note: Many primary care services are not equipped with these resources (i.e. therapy assistant and gym space)*

### HOW GLA:D® IS CHANGING PRACTICE AND POLICY AROUND THE WORLD

- A budget impact analysis of **GLA:D® Canada** revealed that publicly funding the programme in just one province would cost \$4.3 million, serve 12,500 people, and **save \$8.5 million** by avoiding 1,300 surgeries in year one.<sup>18</sup>
- In **Australia**, avoidance of surgery after GLA:D was estimated to translate to savings of \$303-690 million in 2019, if it were nationally implemented.<sup>19</sup> **Only 1 in 8 would need to avoid surgery for savings to be generated.**
- GLA:D® was deemed **cost-effective at 1 year** in 16,255 patients with knee or hip OA, supporting large scale implementation in **Denmark**. Healthcare costs per QALY were below conventional thresholds for willingness-to-pay at €22,804 and €43,979.<sup>20</sup>
- Due to these savings, the healthcare system in Denmark is now mandating that all patients with hip and knee osteoarthritis are being treated with **structured group-based exercise and education** as the first line of treatment upon diagnosis. This is based directly on the GLA:D® model which has been running there since 2013.

### GLA:D International Network

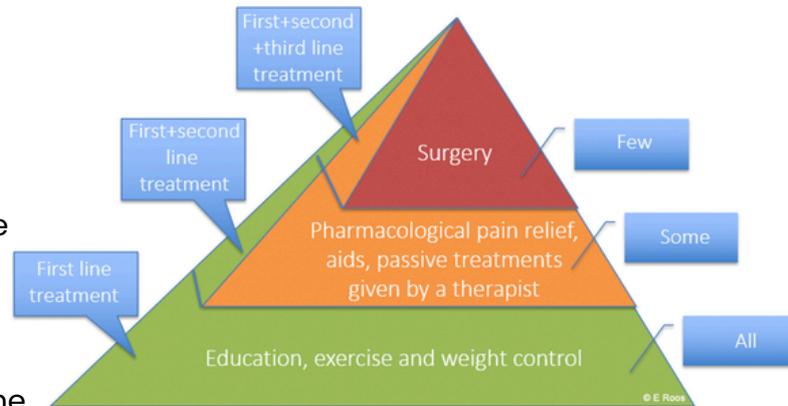


Members: Denmark, Canada, Australia, China, Switzerland, Netherlands, New Zealand, Austria, Ireland, Germany and Finland

*GLA:D® has been implemented nationally in 11 countries across 4 continents. Over 10,000 clinicians have been GLA:D® trained and over 150,000 patients have benefitted from the programme.*

## RECOMMENDATIONS

- **Mandate that structured group-based physiotherapist-supervised education and exercise be first line of treatment for people with hip and knee osteoarthritis when clinically indicated, in line with international clinical guidelines.**
- Referral to secondary orthopaedic waitlists should only occur after first and second line treatment has been trialled (see treatment pyramid)
- Optimise the capabilities of primary care clinicians working to their potential through the provision of resources and prioritised time to provide high-value care.
- This policy aligns strategically with the HSE's Modernised Care Pathways Programme and the National Clinical Programme for Trauma and Orthopaedic Surgery proposal to improve equitable access to conservative management nearer to home with the national implementation of the OA hip and knee pathway.



Treatment pyramid based on clinical guidelines for the management of hip and knee osteoarthritis<sup>1,2</sup>

- As evidenced, this will improve equitable access to evidence-based care for people with osteoarthritis in Ireland and ensure that self-management approaches (education and exercise) are offered to limit progression of the disease. This is critical and timely given the rapidly growing economic burden of this condition.
- Integrating timely group-mediated exercise programmes into the routine care of people with chronic conditions aligns with Sláintecare priorities and recent calls to scale-up implementation efforts for such innovations.<sup>17</sup> This can **optimise the quality of care afforded to patients, address the physical inactivity pandemic, alleviate systemic pressure on orthopaedic healthcare resources, reduce waiting lists and wait times, increase service capacity and throughput and enhance staffing efficiency.**
- This should be a primary example of data-driven decision-making in health policy to improve patient outcomes, tackle the rapid growth and cost of this disease and allow people with osteoarthritis to live better for longer.

## REFERENCES

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1. Moseng, T. et al. Ann. Rheum. Dis. 83, 730–740 (2024).
2. NICE Osteoarthritis in over 16s: diagnosis and management <https://www.nice.org.uk/guidance/ng226>.
3. Toomey, C. M. et al. BMJ Open 14, (2024).
4. Toomey, C. M. et al. BMC Musculoskelet. Disord. 23, (2022).
5. Toomey CM, (GLA:D) Ireland Annual Report 2024. <https://gladireland.ie/glad-ireland-annual-reports/> (2024).
6. Steinmetz, J. D. et al. Lancet Rheumatol. 5, e508–e522 (2023).
7. Doherty, E. & O'Neill, C. Journal of Public Health (United Kingdom) 36, 504–510 (2014).
8. French, H. P. et al. Eur. J. Public Health 26, 192–198 (2016).
9. Scott et al. J. Bone Joint Surg. Br. 92-B, 1253–1258 (2010).
10. Judd, DL. et al. Int J Rehabil Res 42(3) (2019).
11. The National Treatment Purchase Fund Enhanced Waitlist Data. <https://www.ntpf.ie/enhanced-waiting-list-data/> (2026).
12. St John, et al. The Surgeon 23, 216–219 (2025).
13. Gustafsson, et al. Acta Orthop. 95, 373–379 (2024).
14. Bhardwaj, A. et al. Physiotherapy 101416 (2024) doi:10.1016/j.physio.2024.101416.
15. Bhardwaj, A. et al. Rheumatol. Int. 44, 1035–1050 (2024).
16. Gustafsson, et al. Bone Joint J. 104-B, 792–800 (2022).
17. Rees, T et al. British Journal of Sports Medicine Preprint at <https://doi.org/10.1136/bjsports-2024-109318> (2025).
18. Mazzei, D. R., et al. Arthritis Care Res. (Hoboken). 77, 744–752 (2025).
19. Ackerman, I. N. et al. Osteoarthr. Cartil. Open 2, (2020).
20. Gronne, D. T. et al. BMJ Open 11, (2021).