

# Implementing Good Life with Osteoarthritis in Denmark (GLA:D®)

## in Horizon: Final Analysis

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### Background

- The GLA:D® program started in Denmark in 2013.
- It includes an evidence-based neuromuscular exercise and education program targeting patients presenting with hip or knee osteoarthritis.
- In 2015, a feasibility study was successful in Canada, and was adopted by Bone and Joint Canada in 2016. It has also expanded to Australia, China, Switzerland, New Zealand and Austria.

Consists of:

- Individual assessment to determine eligibility
- 2 x 45-60 minutes education sessions
- 12 neuromuscular exercise classes (2 classes per week for 6 weeks)

### Introduction

#### Why GLA:D®?

- New Brunswickers do not have access to a publicly funded preventative and management program for hip and knee osteoarthritis.
- New Brunswick has long wait times for hip and knee surgery and a growing population of people living with arthritis
- Osteoarthritis is the second most common chronic condition in New Brunswick.
- It will help seniors age in place

Figure 1: Levels of Management of Osteoarthritis Symptoms



### Methodology

- Horizon is offering GLA:D® at seven sites
- Analysis is from data collected between July 2022-March 2024
- Pre-post design
- Scores were analyzed using paired t-tests

#### Participants:

N = 720, M<sub>age</sub> = 69.5 (SD = 8.8; range = 29-91)

181 Males (25.1%), 539 Females (74.9%)

Knee OA 61.9%, Hip OA 24.1%, Both 14.0%

#### Measures:

- Pre and Post Pain Scores (0-10)
- 40 metre walking speed (m/s)
- Number of sit to stand movements
- Desire to have surgery (yes/no)
- Patient Compliance (yes/no)
- Patient Satisfaction (1 not satisfied, 5 satisfied)
- Referral Source (surgeon, self, PCP)

### Results

Figure 2: Pre and Post Exercise Pain Score

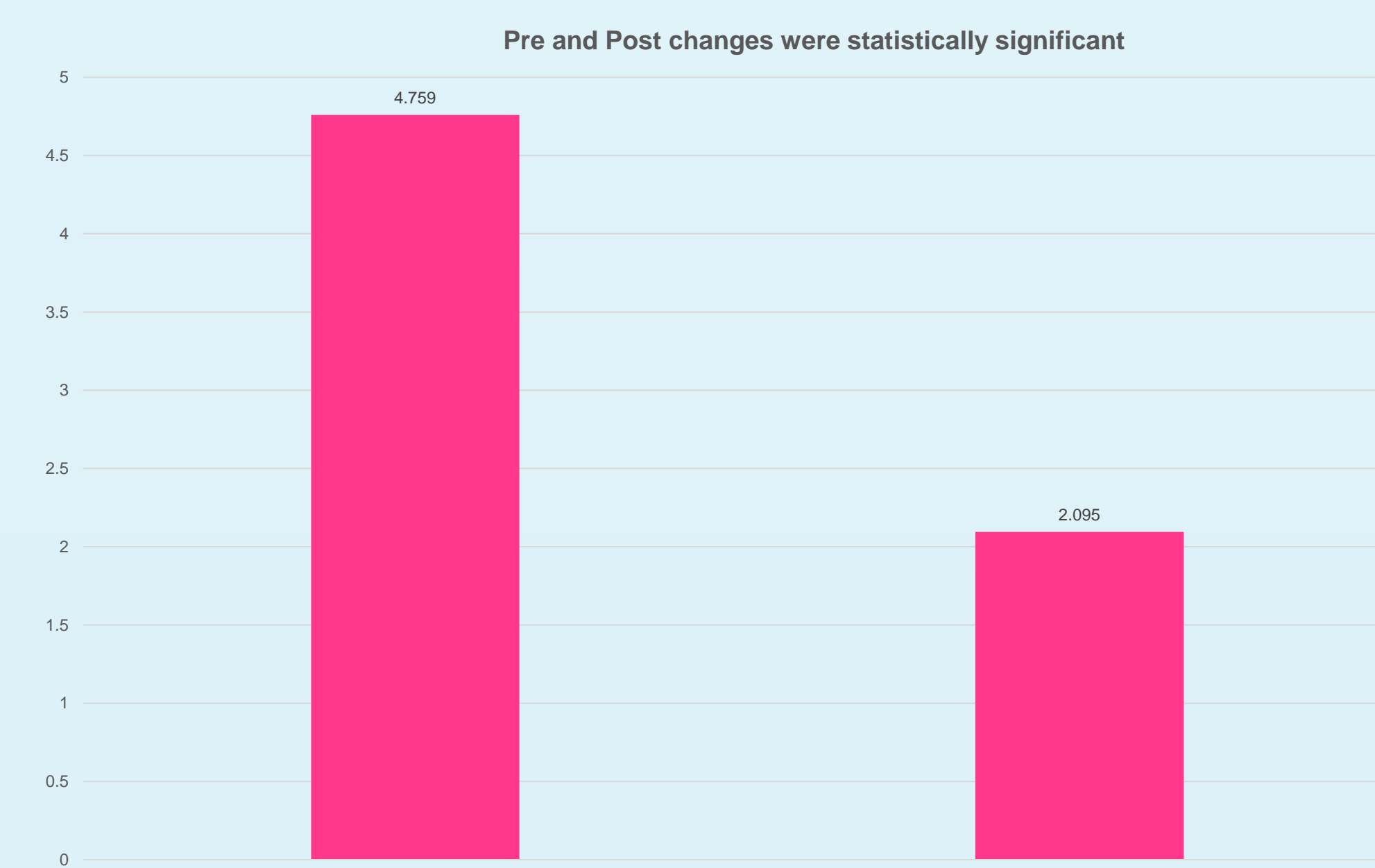


Figure 3: 40 Metre Walking Speed (m/s)

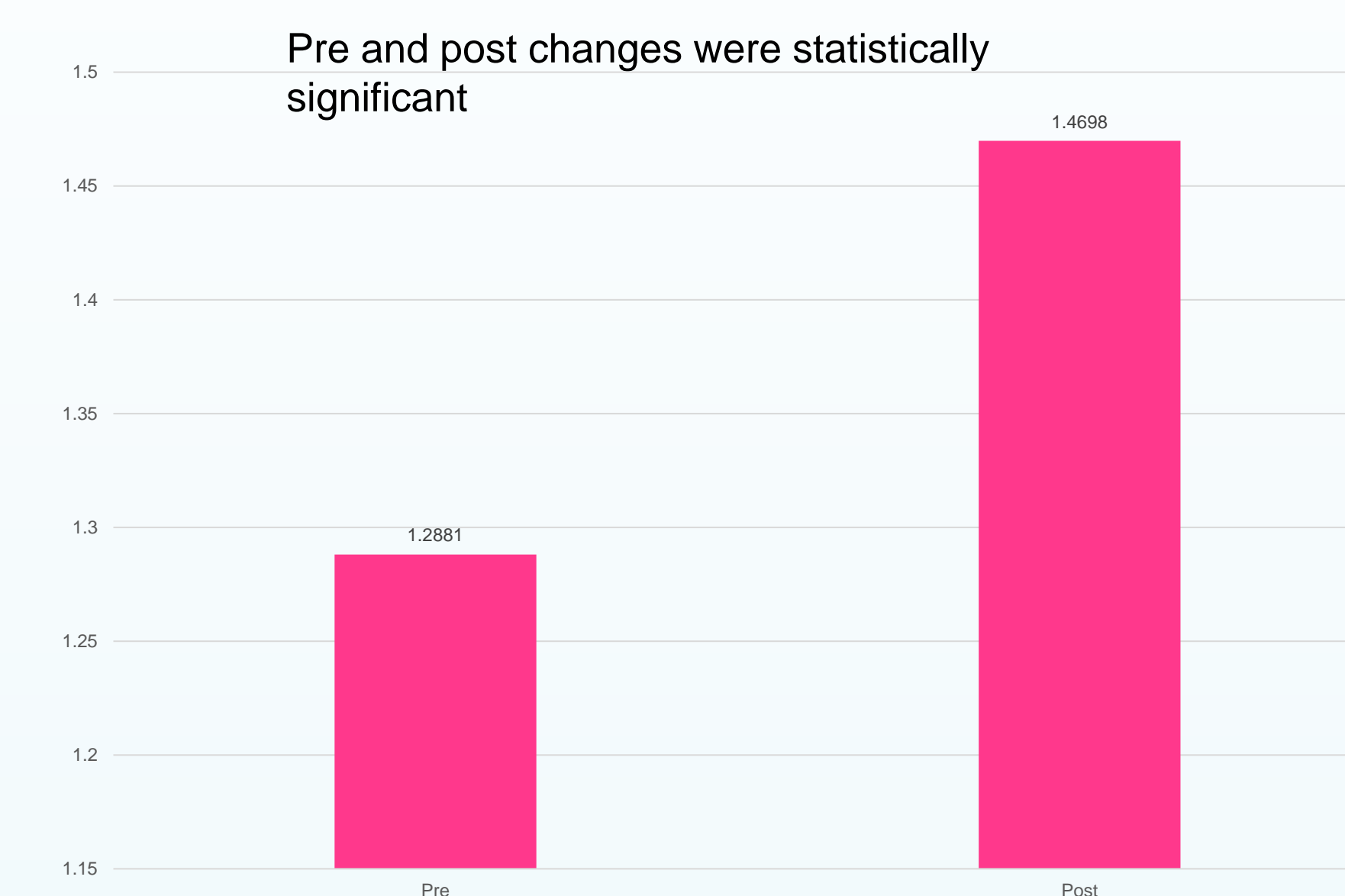
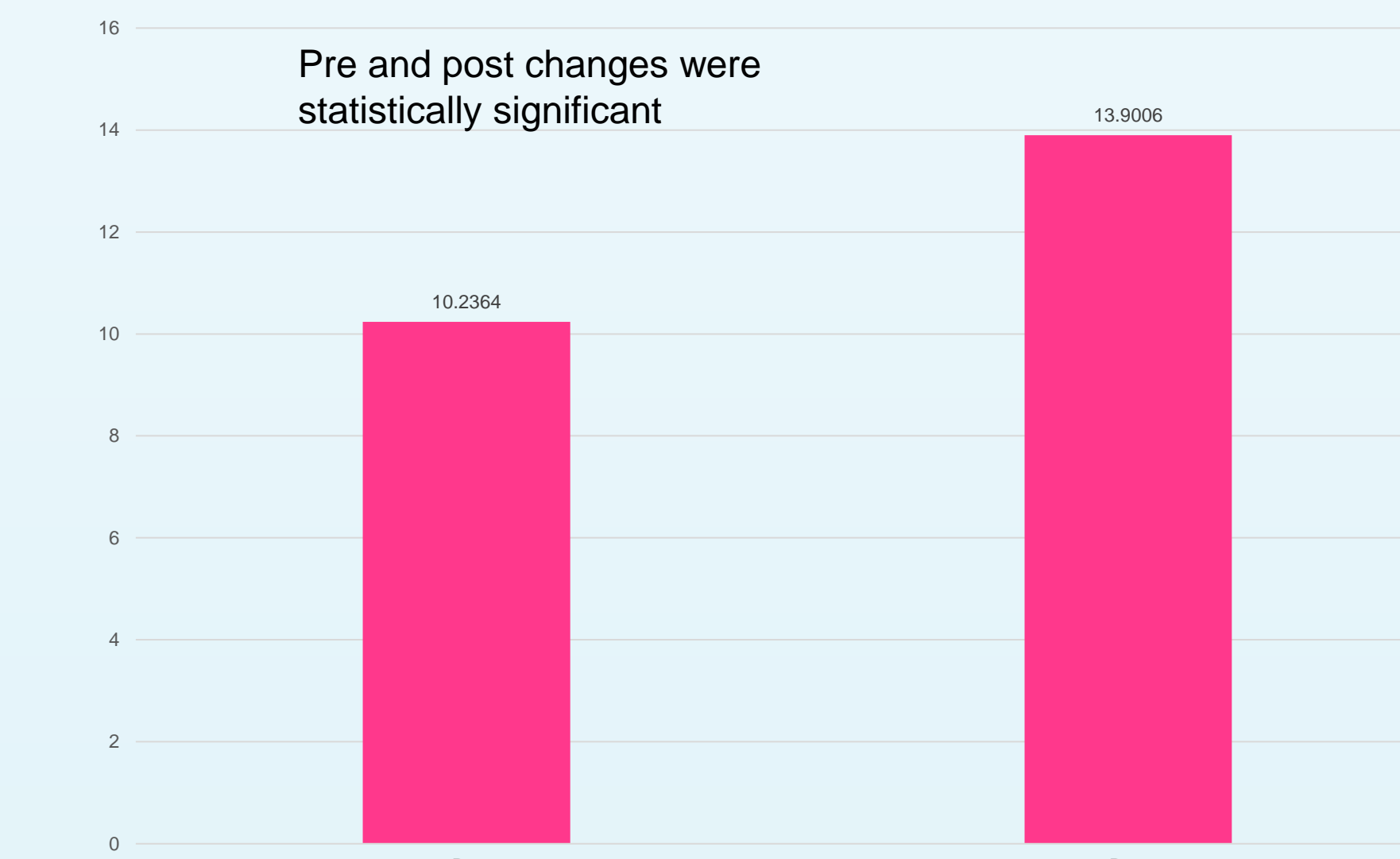


Figure 4: # of Sit to Stand Movements Results in 20 seconds



#### Desire to have surgery:

519/720 patients continued to delay need for surgery or avoid it. (72%)

Among the 81 individuals who changed their decisions about surgery, 54 (67%) opted out of surgery after participating in the program, while 27 (33%) who initially declined surgery chose to proceed with it.

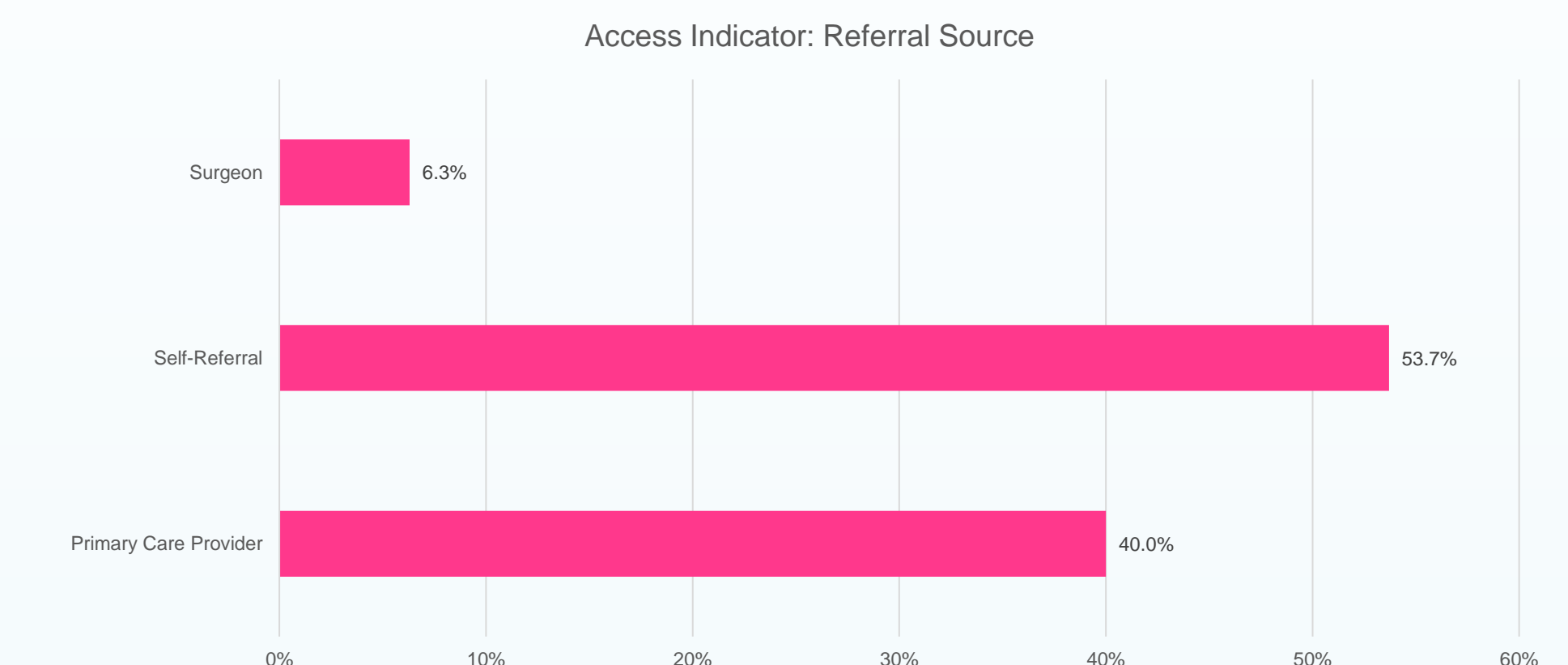
#### Patient Compliance

82.9% of patients completed all 12 of the exercise sessions.

#### Patients' self reported Satisfaction Scores

94.5% "Very Satisfied" with the program

Figure 5: Access Indicator: Referral Source



#### Patient Testimonial

*"I have accomplished so much since I completed the GLA:D program"*

"Everything has become easy — specifically, climbing the stairs, walking, gardening, mowing, and snow-blowing my yard. Even simple things like getting dressed, doing household chores, getting in and out of the car, and standing at my counter for long periods when cooking."

### Summary and Conclusions

- This program demonstrated statistical and clinically significant improvements in patient functional outcomes.
- Results further add to the existing data that GLA:D® is an effective program to use in the first line conservative management of osteoarthritis.
- New Brunswickers want this program as a first line treatment. Most participants self referred, completed all exercise classes and were highly satisfied.
- It has resulted in patients delaying the need for surgery or deciding to not have surgery due to the positive impacts on their health and function.

### Acknowledgements

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