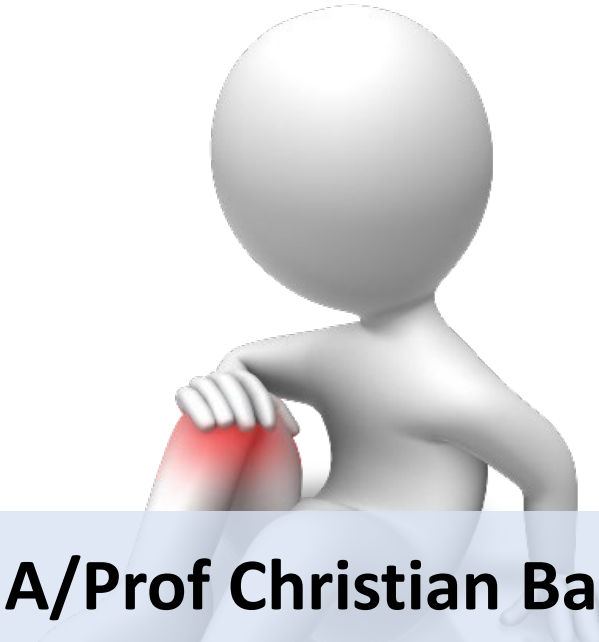
GLA:D to provide high value care for people with osteoarthritis



A/Prof Christian Barton

GLA:D Australia program co-lead

La Trobe Sport and Exercise Medicine Research Centre, Melbourne, Australia

Department of Physiotherapy, Podiatry and Prosthetics and Orthotics, School of Allied Health, Human Services and Sport, La Trobe University, Bundoora, Australia

LA TROBE UNIVERSITY

Sport and Exercise Medicine Research Centre

TODAY

1. Effective first-line care for osteoarthritis
2. Evidence/guideline practice gap
3. GLA:D as a solutions to support first-line care implementation

GLA:D™ AUSTRALIA

LA TROBE UNIVERSITY

Sport and Exercise Medicine Research Centre

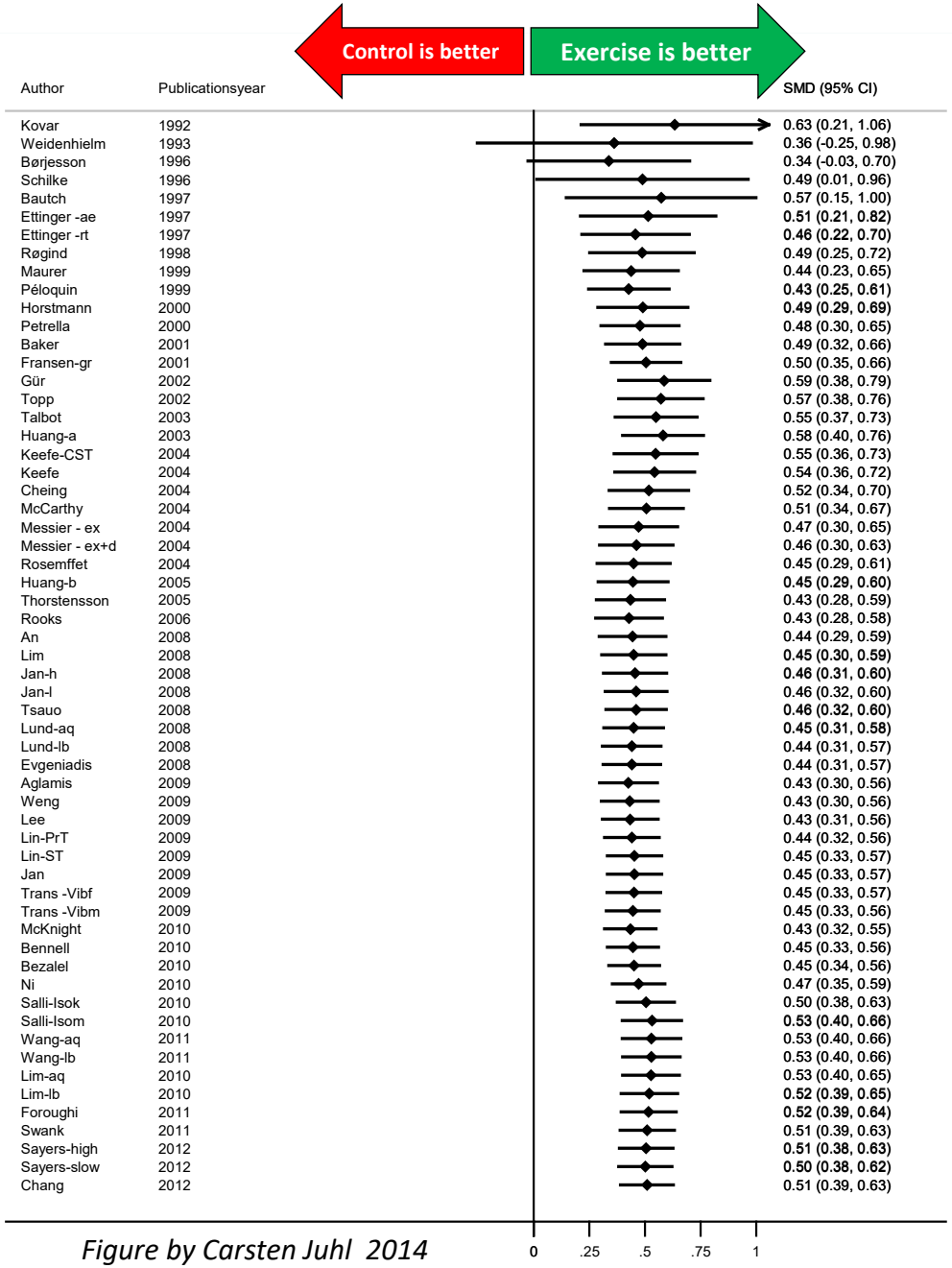


Figure by Carsten Juhl 2014

"As of 2002 sufficient evidence had accumulated to show significant benefit of exercise over no exercise in patients with osteoarthritis, and further trials are unlikely to overturn this result."

Osteoarthritis and Cartilage

OARSI OSTEOARTHRITIS RESEARCH SOCIETY INTERNATIONAL

Incremental clinical effectiveness and cost effectiveness of providing supervised physiotherapy in addition to usual medical care in patients with osteoarthritis of the hip or knee: 2-year results of the MOA randomised controlled trial

J.H. Abbott † *, R. Wilson †, D. Pinto ‡, C.M. Chapple §, A.A. Wright ||, For the MOA Trial team[a]

Osteoarthritis and Cartilage 28 (2020) 907–916

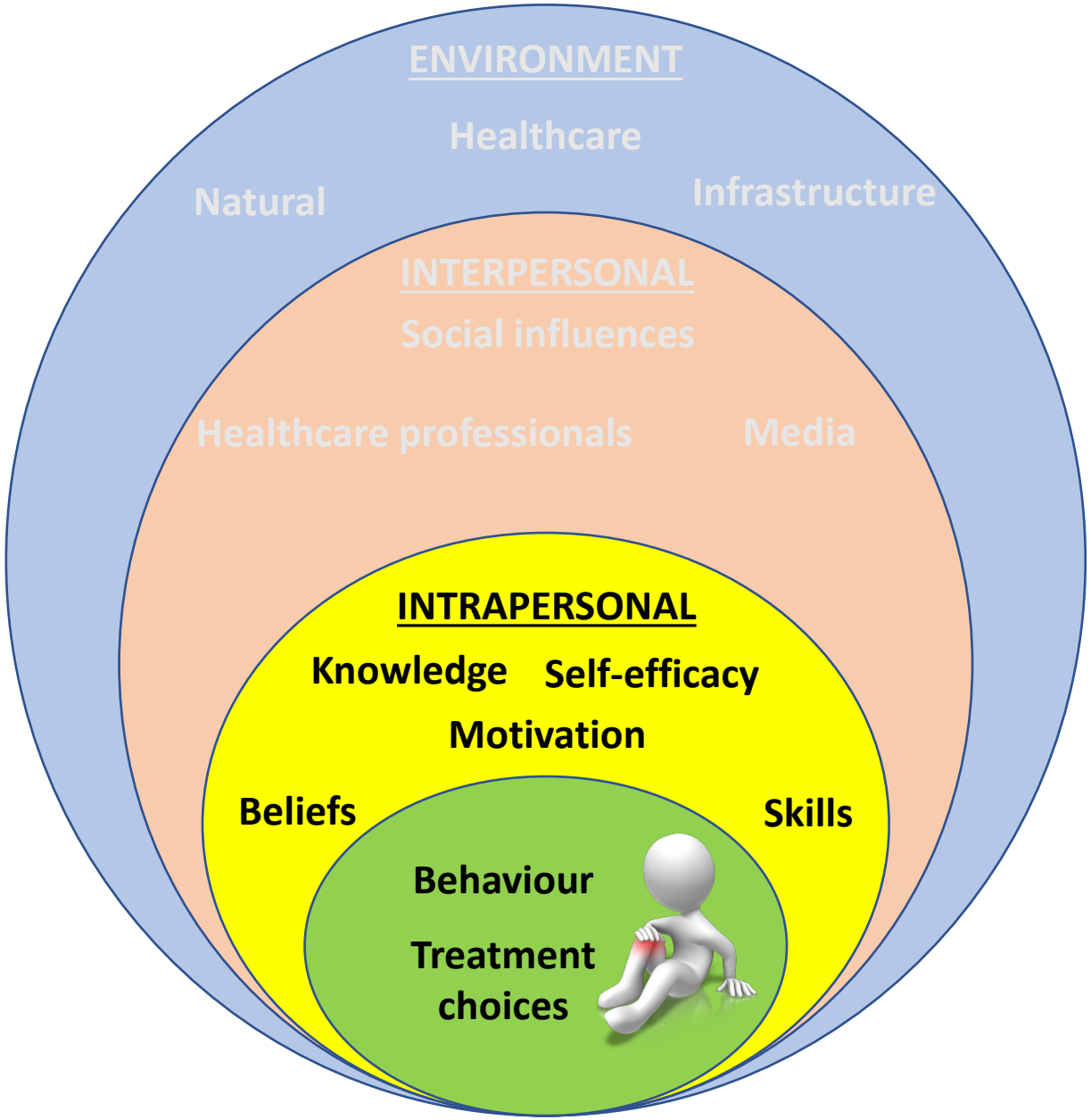
Osteoarthritis and Cartilage

OARSI OSTEOARTHRITIS RESEARCH SOCIETY INTERNATIONAL

Cost-effectiveness of 12 weeks of supervised treatment compared to written advice in patients with knee osteoarthritis: a secondary analysis of the 2-year outcome from a randomized trial

S.T. Skou † ‡ § || *, E.M. Roos ‡, M. Laursen † || ¶, L. Arendt-Nielsen ||, S. Rasmussen † || ¶, O. Simonsen † || ¶, R. Ibsen #, A.T. Larsen ††, J. Kjellberg ††

Exercise-therapy + education are cost-effective v usual care or written advice



Behaviour of people with knee osteoarthritis

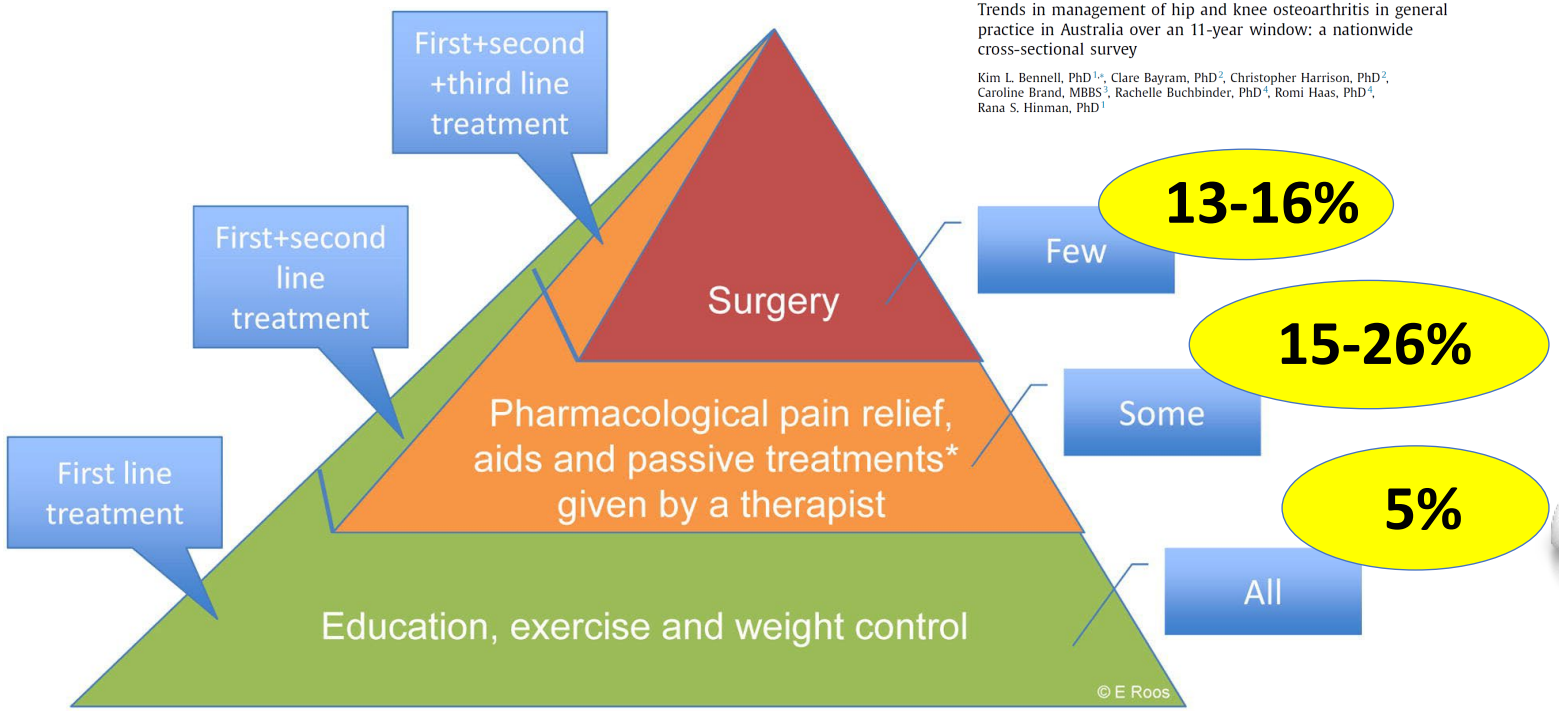
- 17% meet physical activity guidelines (Wallis 2013)
- 43% engage with appropriate first line care (Runciman 2012)

Beliefs of people with knee osteoarthritis (Bunzli 2021)

>> impairment discourse dominates <<

- Wear and tear disease
- Fear of pain and damage
- Exercise is dangerous
- Surgery is inevitable

What is effective care for osteoarthritis – guidelines (OARSI, NICE, RACGP, etc.)



The Lancet Regional Health - Western Pacific 12 (2021) 100187

Contents lists available at ScienceDirect

The Lancet Regional Health - Western Pacific

journal homepage: www.elsevier.com/locate/lanwpc

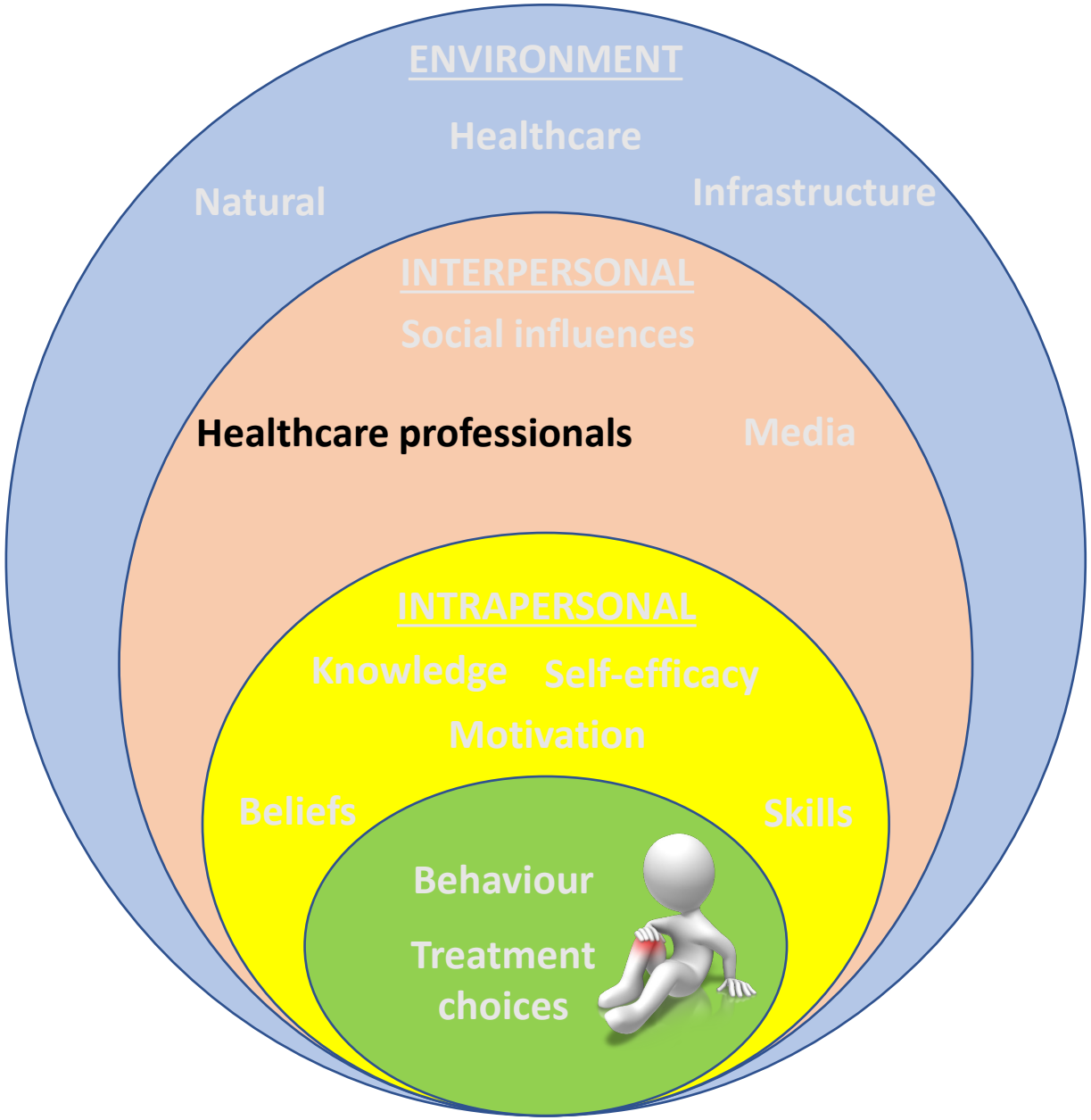
Trends in management of hip and knee osteoarthritis in general practice in Australia over an 11-year window: a nationwide cross-sectional survey

Kim L. Bennell, PhD[1,*], Clare Bayram, PhD[2], Christopher Harrison, PhD[2], Caroline Brand, MBBS[3], Rachelle Buchbinder, PhD[4], Romi Haas, PhD[4], Rana S. Hinman, PhD[1]

Few **13-16%**

Some **15-26%**

All **5%**



GLA:D™ AUSTRALIA

Osteoarthritis management care pathways are complex and inefficient: A qualitative study of physiotherapist perspectives from specialised osteoarthritis services

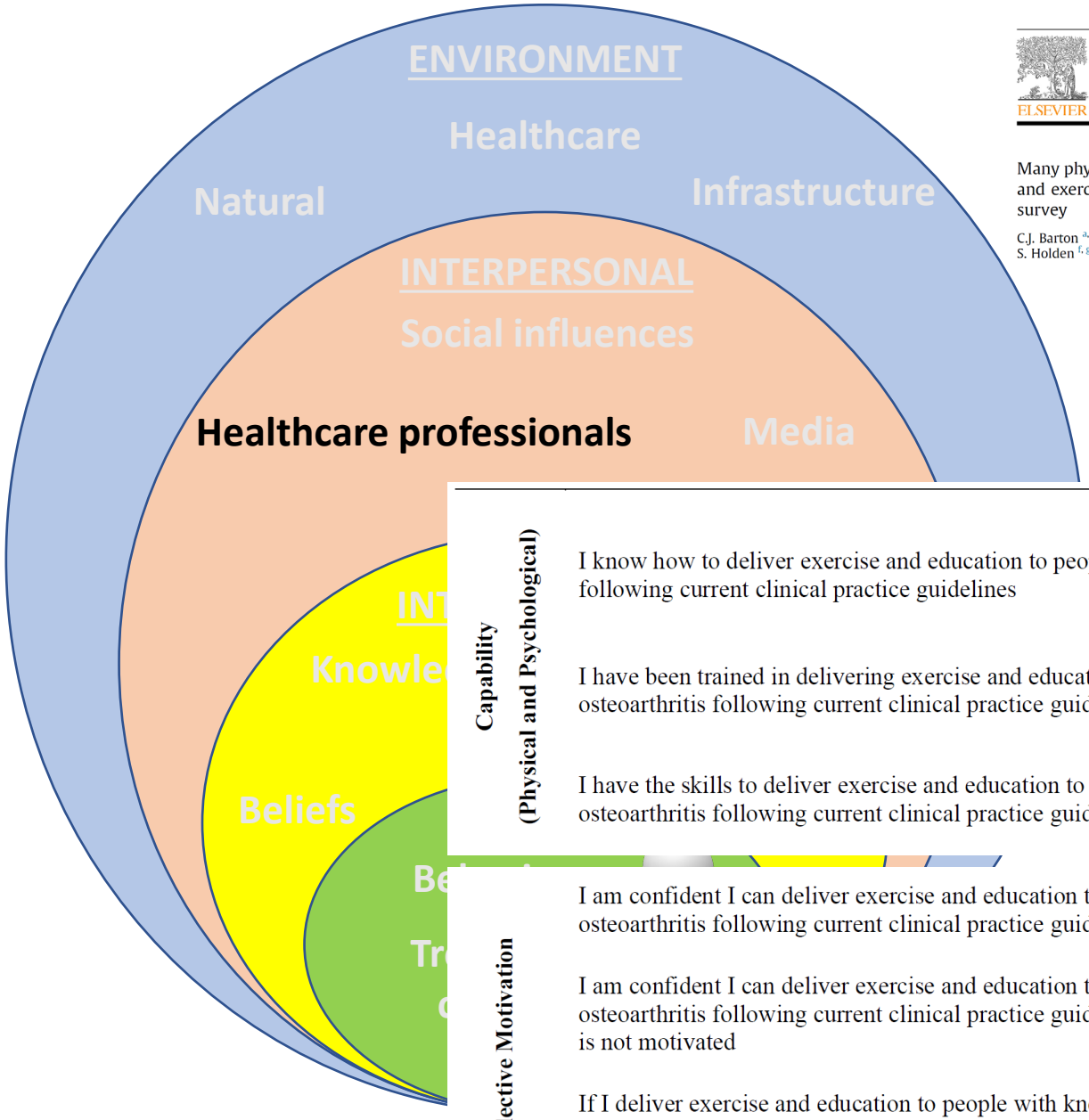
Alison J. Gibbs[1,2,3] | Jason A. Wallis[2,4,5] | Nicholas F. Taylor[2,6] | Joanne L. Kemp[1,2] | Christian J. Barton[1,2,7]

"It is challenging because GPs are telling them, ….I'm referring you to the hospital for a knee replacement"

"(People with osteoarthritis) have [been told it's] bone-on-bone disease, their joints are crumbling"

"I find it's really hit and miss with the physio that you're getting"

LA TROBE UNIVERSITY
Sport and Exercise Medicine Research Centre



Physical Therapy in Sport 49 (2021) 98–105

Contents lists available at ScienceDirect

Physical Therapy in Sport

journal homepage: www.elsevier.com/ptsp

Many physiotherapists lack preparedness to prescribe physical activity and exercise to people with musculoskeletal pain: A multi-national survey

C.J. Barton [a, b, c, *], M.G. King [a], B. Dascombe [a, d], N.F. Taylor [c, e], D. de Oliveira Silva [a], S. Holden [f, g], A.J. Goff [a, b], K. Takarangi [a], N. Shields [c]

Brazilian Journal of Physical Therapy 000 (xxxx) 1–10

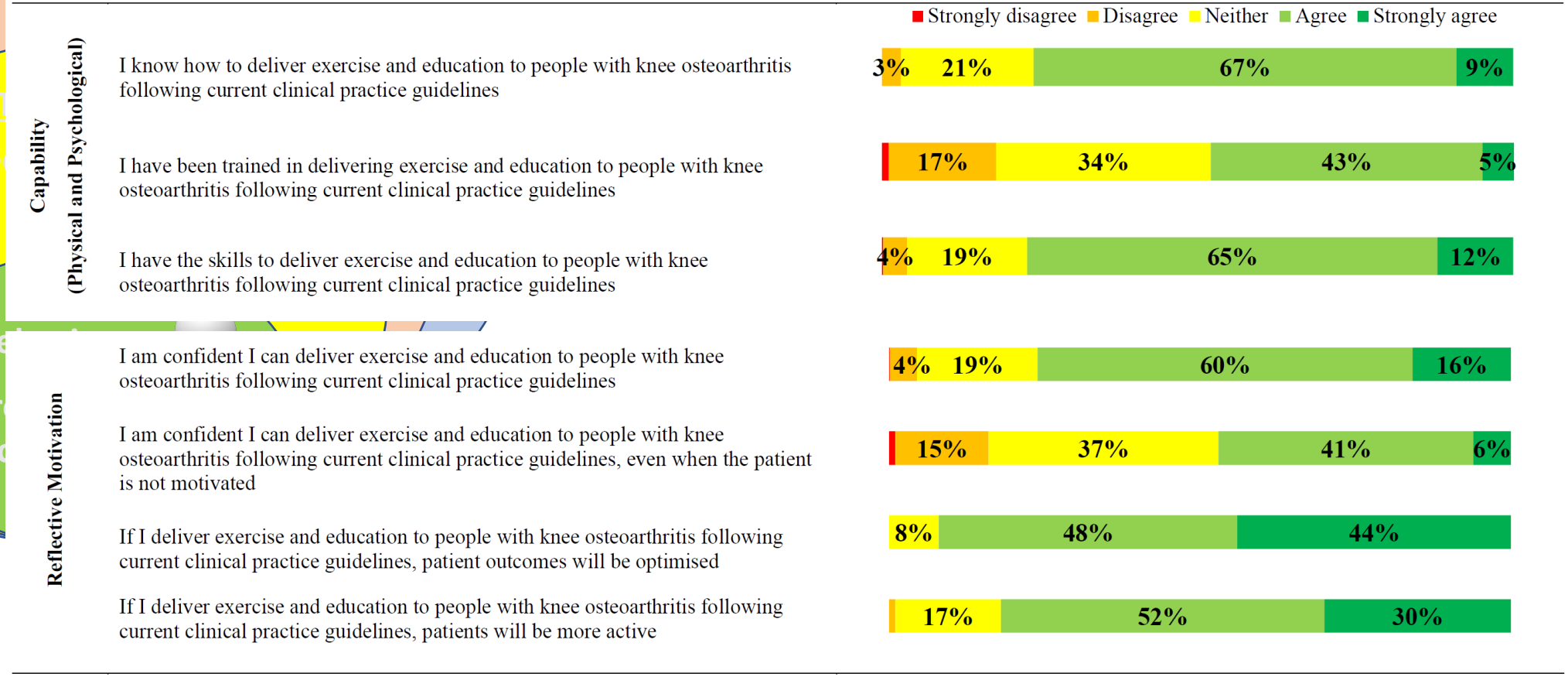
Brazilian Journal of Physical Therapy

https://www.journals.elsevier.com/brazilian-journal-of-physical-therapy

ORIGINAL RESEARCH

Reported practices related to, and capability to provide, first-line knee osteoarthritis treatments: a survey of 1064 Australian physical therapists

Christian J. Barton[a,b,c,*], Marcella F. Pazzinatto[a,b], Kay M. Crossley[a], Karen Dundules[a,b], Natasha A. Lannin[d,e], Matt Francis[a,b], Jason Wallis[f,g], Joanne L. Kemp[a,b]



RESEARCH ARTICLE Open Access

The projected burden of primary total knee and hip replacement for osteoarthritis in Australia to the year 2030

Ilana N. Ackerman[1,2*], Megan A. Bohensky[2], Ella Zomer[1], Mark Tacey[1,3,4], Alexandra Gorelik[2,5], Caroline A. Brand[1] and Richard de Steiger[6,7]

Contents lists available at ScienceDirect

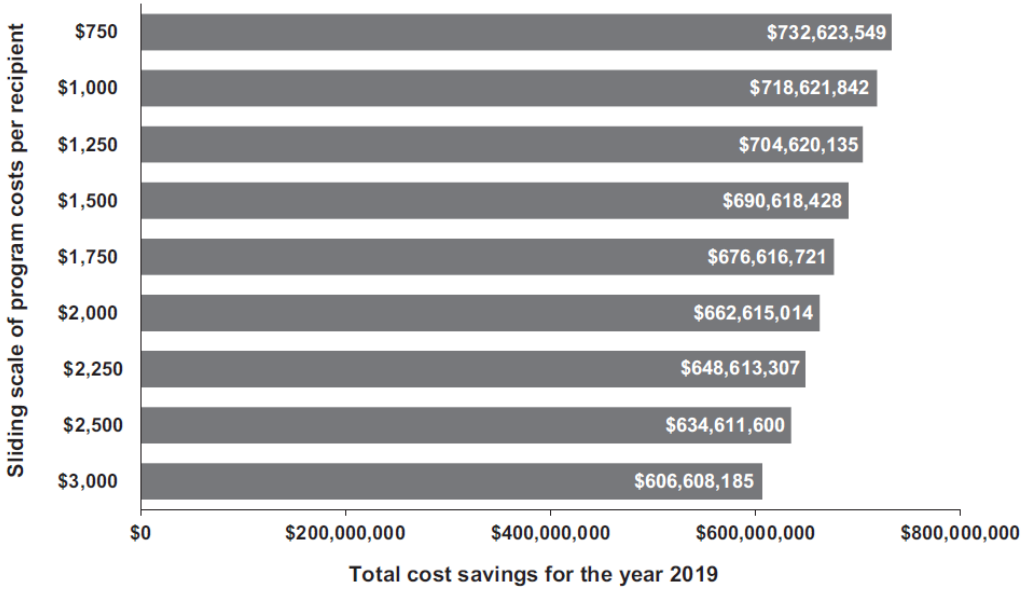
Osteoarthritis and Cartilage Open

journal homepage: www.elsevier.com/journals/osteoarthritis-and-cartilage-open/2665-9131

Implementing a national first-line management program for moderate-severe knee osteoarthritis in Australia: A budget impact analysis focusing on knee replacement avoidance

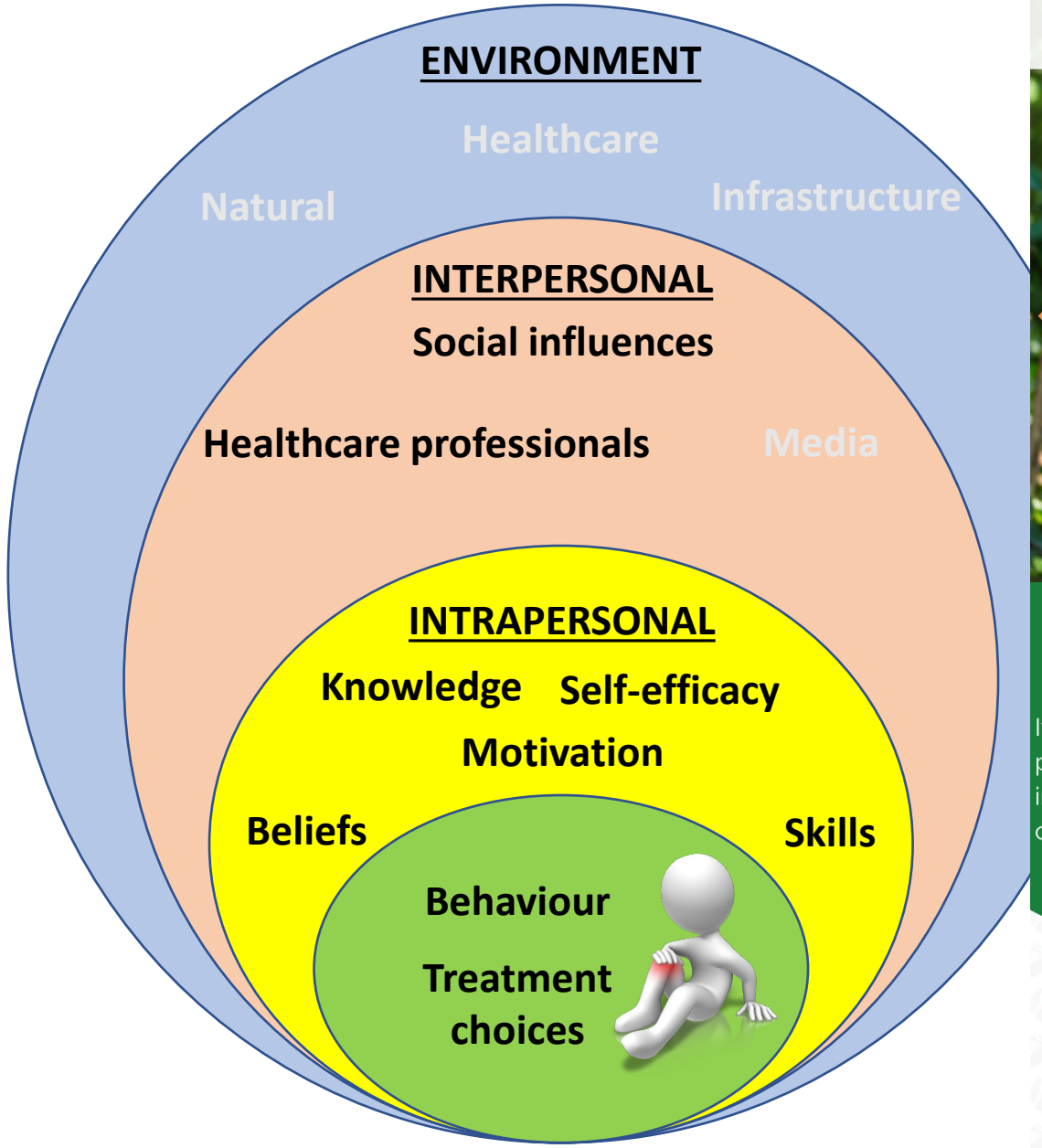
Ilana N. Ackerman[a,*], Søren T. Skou[b,c], Ewa M. Roos[d], Christian J. Barton[e,f], Joanne L. Kemp[e], Kay M. Crossley[e], Danny Liew[a], Zanfina Ademi[a]

- TKR and THR for OA is estimated to rise by **276% and 208%**, respectively, by 2030
- The total cost to the healthcare system would be **$AUD5.32 billion**



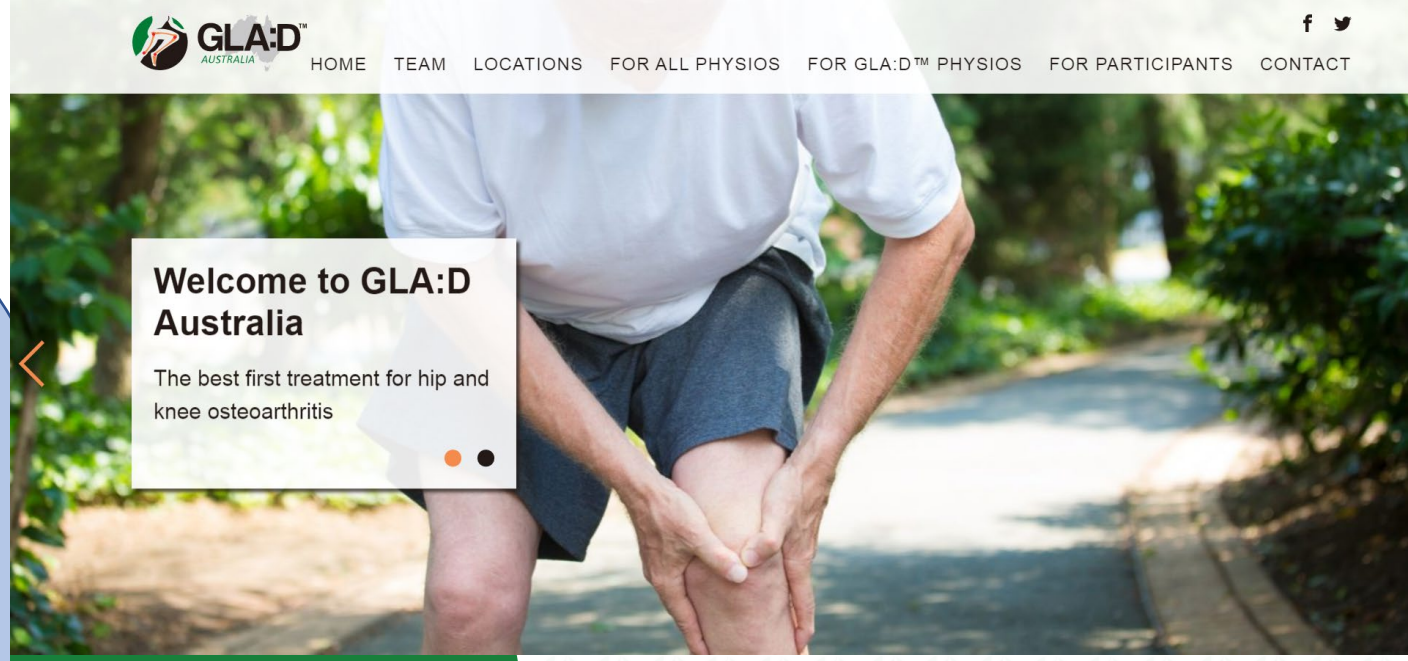
Let's conservatively call it >$300M each year

LA TROBE UNIVERSITY
Sport and Exercise Medicine Research Centre



LA TROBE UNIVERSITY

Sport and Exercise Medicine Research Centre



WHAT IS GLA:D®?

Good Life with osteoArthritis from Denmark

It is an education and exercise program developed by researchers in Denmark for people with knee or hip osteoarthritis symptoms

GLA:D AUSTRALIA

GLA:D® AIMS

- Accelerate implementation of the national clinical guidelines into clinical practice
- Ensure that all people with osteoarthritis have equal access to evidence-based treatment irrespective of place of residence or financial situation
- Ensure that surgery is considered only when non-surgical treatment measures have failed

3 CORE ELEMENTS OF GLA:D® in Australia and Internationally

1) Physiotherapist education, training and support

All physiotherapists who deliver GLA:D® Australia are trained and receive ongoing support

2) GLA:D® intervention delivery

All registered participants receive a standardised but individualised education and exercise therapy (tailored to patient needs and goals) program

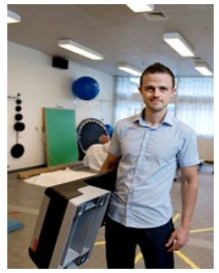
3) Data collection of patient outcomes

All program participants are registered into an online participant data registry, with an 'opt out' consent process for contributing to collection of participant-reported data

Designed by @M_Pazzinatto @DrChrisBarton

TREK

PAPER: Barton et al 2021 OAC Open





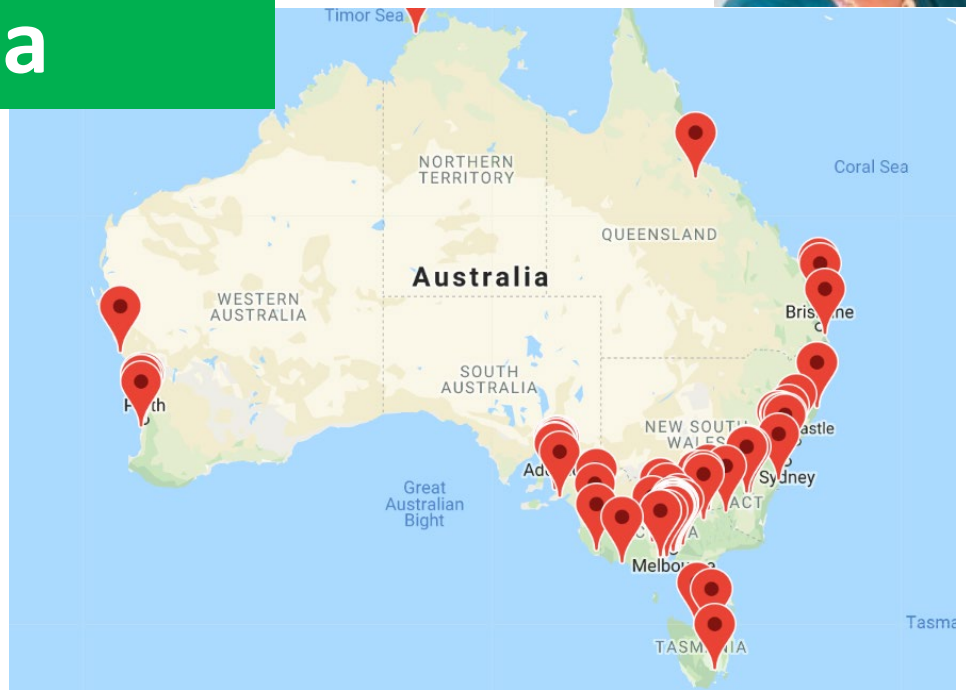


GLA:D™ AUSTRALIA

LA TROBE UNIVERSITY

Sport and Exercise Medicine
Research Centre

600+ sites in Australia



~2,500 clinicians

LA TROBE UNIVERSITY

Sport and Exercise Medicine Research Centre

Osteoarthritis and Cartilage Open 3 (2021) 100175

Contents lists available at ScienceDirect

Osteoarthritis and Cartilage Open

journal homepage: www.elsevier.com/journals/osteoarthritis-and-cartilage-open/2665-9131

Program evaluation of GLA:D® Australia: Physiotherapist training outcomes and effectiveness of implementation for people with knee osteoarthritis

Christian J. Barton [a,b,c,*], Joanne L. Kemp [a,b], Ewa M. Roos [d], Soren T. Skou [d,e], Karen Dundules [a,b], Marcella F. Pazzinatto [a,b,f], Matthew Francis [a,b], Natasha A. Lannin [g,h], Jason A. Wallis [a,i], Kay M. Crossley [a,b]

GLA:D™ AUSTRALIA

FOR AUSTRALIANS WITH KNEE OSTEOARTHRITIS

n = 1945

'Real world' improvements in pain and quality of life following GLA:D® are **consistent or better** than what is found in controlled clinical trials evaluating exercise therapy for osteoarthritis

3 IN 4 PEOPLE

desiring surgery before GLA:D® have **not had surgery** and **no longer desire surgery** at 12-month follow up

3 IN 4 PEOPLE

Report clinically meaningful **improvement** in pain or quality of life at 12-month follow up

Designed by
@M_Pazzinatto
@DrChrisBarton

TREK

PAPER: Barton et al 2021 OAC Open

Contents lists available at ScienceDirect

Osteoarthritis and Cartilage Open

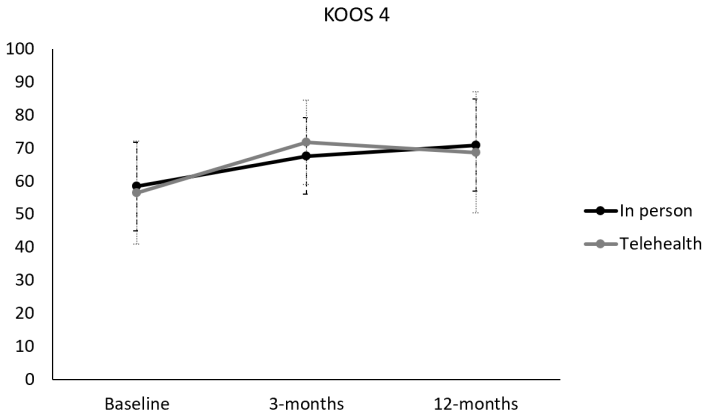
journal homepage: www.elsevier.com/journals/osteoarthritis-and-cartilage-open/2665-9131

Program evaluation of GLA:D® Australia: Physiotherapist training outcomes and effectiveness of implementation for people with knee osteoarthritis

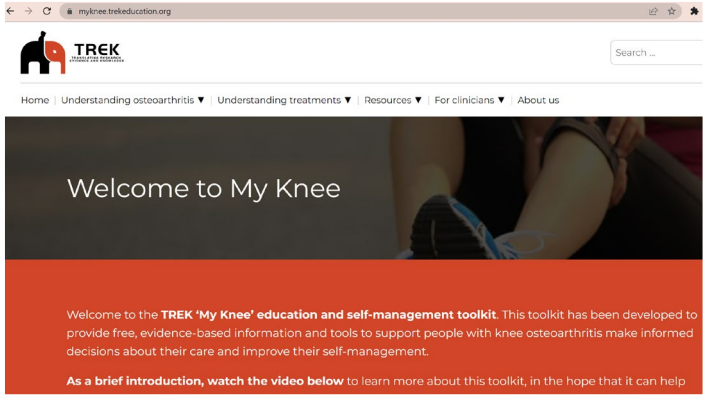
Christian J. Barton [a,b,c,*], Joanne L. Kemp [a,b], Ewa M. Roos [d], Soren T. Skou [d,e], Karen Dundules [a,b], Marcella F. Pazzinatto [a,b,f], Matthew Francis [a,b], Natasha A. Lannin [g,h], Jason A. Wallis [a,i], Kay M. Crossley [a,b]

Key findings from the GLA:D® Australia program evaluation guided by the RE-AIM QuEST framework (35, 38).

Dimension	Barriers and Enablers (detailed findings in Additional file 5)
Reach	**Barriers** *System:* personal cost to patient. *Patient:* patient motivation and commitment. *Program:* suitability for CALD communities; suitability for patients with complex needs; COVID-19 (preventing face-to-face care). **Barriers/Enablers** *System:* public/private funding to support participation. *Health professional:* referrer (e.g. GP) buy in. *Patient:* patient demand; patient beliefs and understanding. *Program:* program promotion and awareness; data and evidence.
Effectiveness	**Barriers** *Patient:* patient motivation and commitment.
Adoption	**Barriers** *Health services:* Conflicting managerial and organisational priorities; inadequate time to support program administration; rural/regional location. **Barriers/Enablers** *Health services:* Fit of program to current services; Equipment and physical space; scheduling.
Implementation	**Barriers** *Program:* program ethics and legal requirements. **Barriers/Enablers** *Health services:* staff resourcing and capacity to meet demand. **Enablers** *Program:* Developing materials for CALD groups; central program support; further professional development opportunity.
Maintenance	**Barriers/Enablers** *Program:* Access to staff training.



GLA:D™ AUSTRALIA



"Funding in public health setting"

"GLA:D would also be easier to implement in my region if Medicare would fund (low socio-economic area and low patient numbers due to rural nature)"

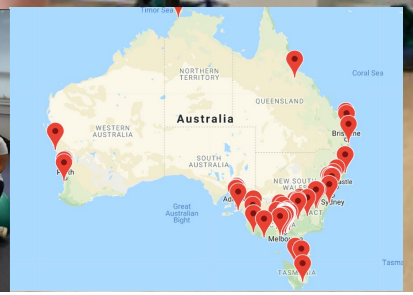
Health system funding remains the key barrier (and potential enabler)

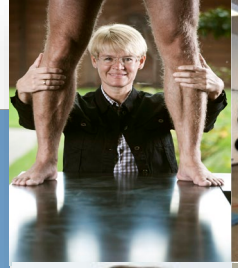
TAKE HOMES

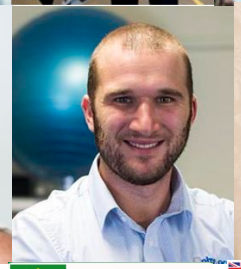
1. GLA:D provides an effective and cost-effective first-line care program

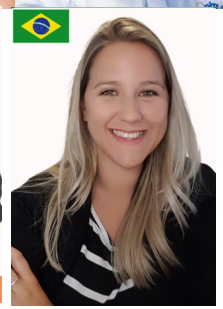
2. Although GLA:D is available in all states and territories, publicly funded offerings of the program remain limited

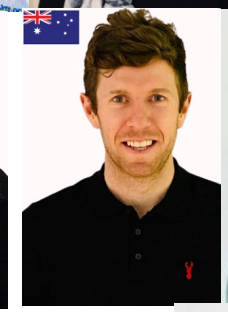
3. Improved health system funding (MBS, PHN, private health) to provide the program in the community at low or no cost would improve equity of access

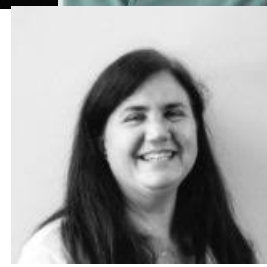












LA TROBE UNIVERSITY
Sport and Exercise Medicine Research Centre

GLA:D™ AUSTRALIA

c.barton@latrobe.edu.au
@DrChrisBarton