

Advanced Physiotherapy Practitioners can provide efficient access to care in orthopaedics.

A knowledge translation project

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The Canberra Times

Canberra health system falls short of elective surgery, emergency targets



By [Lucy Bladen](#)

October 18 2023 - 5:30am

36 Comments



Elective surgery wait times have blown out to a year or more



By [Layton Holley](#)

Updated May 17 2023 - 12:03pm, first published May 11 2023 - 7:00am

1 Comment



Canberra Health Service “Reboot Project” 2020

- Tracked 1592 patients waiting to see an orthopaedic surgeon
- 62% were not seen within 2 years
 - Median wait: knee OA 741 days (n=344), shoulders 896 days (n=192)
- Wait times not reported in ACT



“Will” aged 75 knee OA

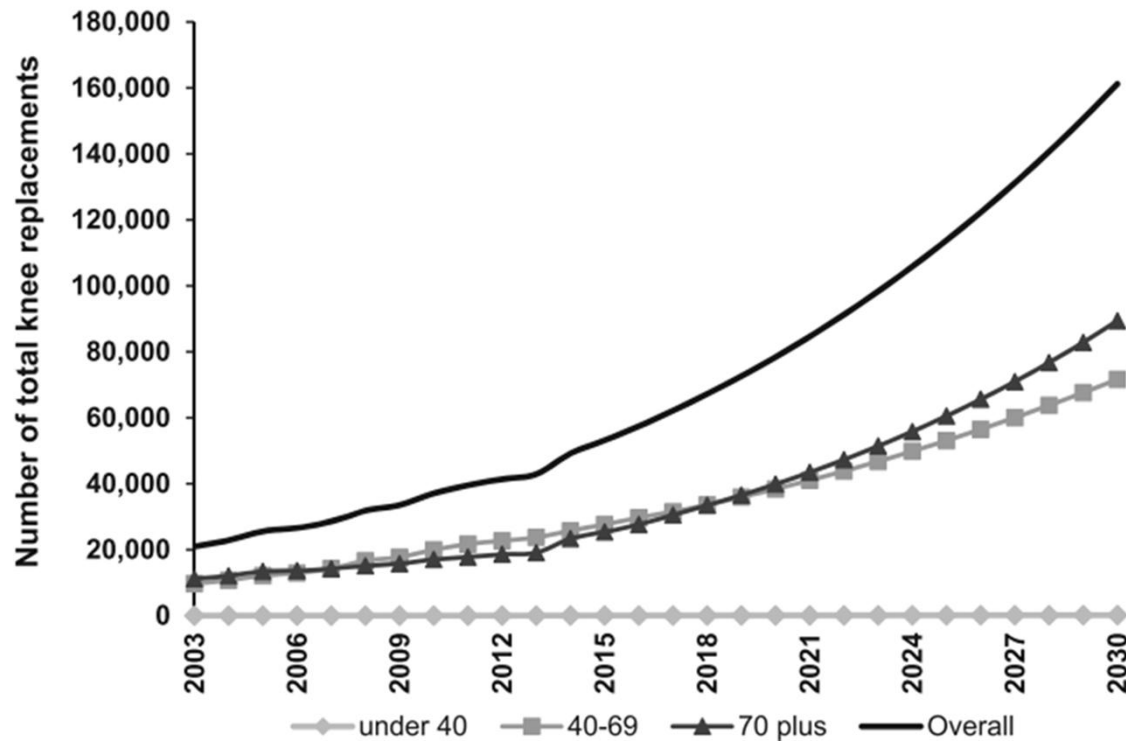
Referred to public clinic 28 Feb 2019

Seen by an orthopaedic surgeon 9 Sept 2021

Waited 924 days for an appointment



Increasing demand for orthopaedic services



Sedentary lifestyles, obesity, baby boomers

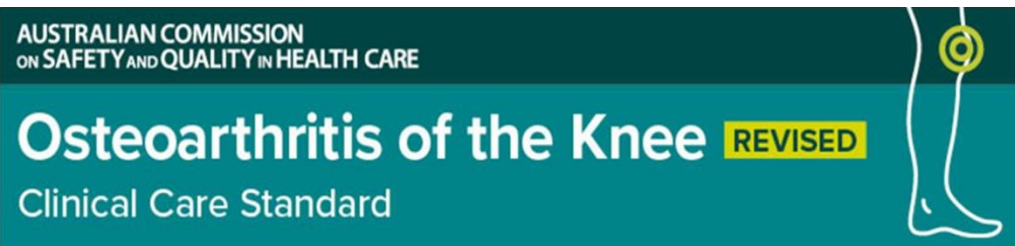
By 2030:

Incidence of TKR is estimated to rise by 276%

TKR + THR costs estimated at \$AUD 5.32 billion

Ackerman 2019, BMC Musculoskeletal Disorders

We cannot afford an inefficient health system



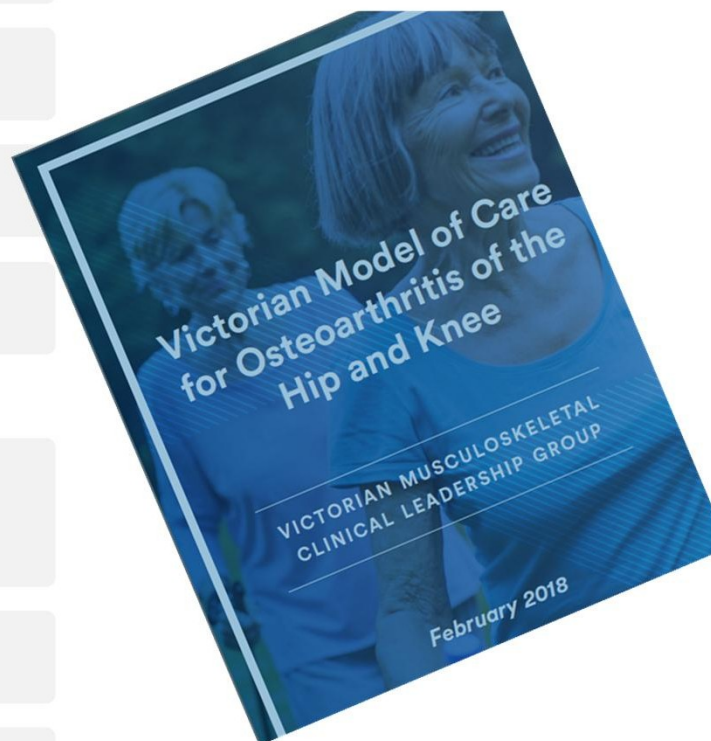
Guideline for the management of knee and hip osteoarthritis

Second edition



MUSCULOSKELETAL NETWORK

Osteoarthritis Chronic Care Program Model of Care



1. Comprehensive Assessment and Diagnosis
2. Imaging only when appropriate
3. Education and self management
4. Physical activity and exercise
5. Weight management
6. Medicines to manage pain
7. Patient review
8. Surgery

“Do not consider TKR until all other avenues are exhausted”

(Gibbs 2023)

Good Life with Arthritis: Denmark



Evidence based

Structured group exercise and education program

Implements clinical guidelines into clinical care



Despite compelling evidence, barriers persist

Long waitlists are detrimental to patients who are waiting for advice on what to do and a missed opportunity to try nonsurgical care

Morris 2018, Ackerman 2018

BUT

70% of participants on the waiting list for knee replacement surgery had not received any non-surgical management other than medication.

NSW Agency for Clinical Innovation 2012

68-75 % patients improve with GLA:D

Skou 2017, Barton 2023

BUT

3% were referred to physiotherapy or exercise by GP - After several years of education 3% rose to 5%

Bennell 2021

Many people have OA that does not progress

Gibbs 2023

BUT

Patients see knee replacement as inevitable...And would have a TKR now if they could. Barton 2025

Advanced Practice Physiotherapists

Experience

Training

Capabilities

Authority

Role Autonomy



Advanced practice physiotherapists can diagnose and triage patients with musculoskeletal disorders while providing effective care: a systematic review

Simon Lafrance ^{a,b}, Raphaël Vincent ^{a,b}, Anthony Demont ^c, Maxime Charron ^b, François Desmeules ^{a,b}

^a School of Rehabilitation, Faculty of Medicine, Université de Montréal, Montreal, Canada; ^b Hôpital Maisonneuve-Rosemont Research Center, Université de Montréal Affiliated Research Center, Montreal, Canada; ^c Université Paris Cité, Inserm, Paris, France

Canberra Hospital Advanced Practice Physiotherapy triage and screening clinic

Evaluate GP referrals to orthopaedic surgeons and allocate triage urgency

Allocate some patients for face-to-face screening consult to determine triage urgency

Limited resources, can't screen all patients

No evaluation regarding impact on waiting lists





“Best Practice Pathways for knee OA”

Project Design and Method

Ethics: LRE 00185, ACT Health, UC

AIM: to get the right patients to surgery at the right time in ACT

To minimise wait times and remove barriers to best-practice interventions, by

1. a systems approach to implement expert review that is responsive, cost-effective and follows best practice.
2. strong collaboration between consumers, primary healthcare, public orthopaedic triage and surgeons, and across public and private sectors.
3. pathways to ensure the right patients have knee replacement surgery at the right time

Method

Knowledge translation

Stakeholder and consumer engagement

Steering committee

Embedded consumers

Working Groups

Data on wait times

Patient and Health Professional experience

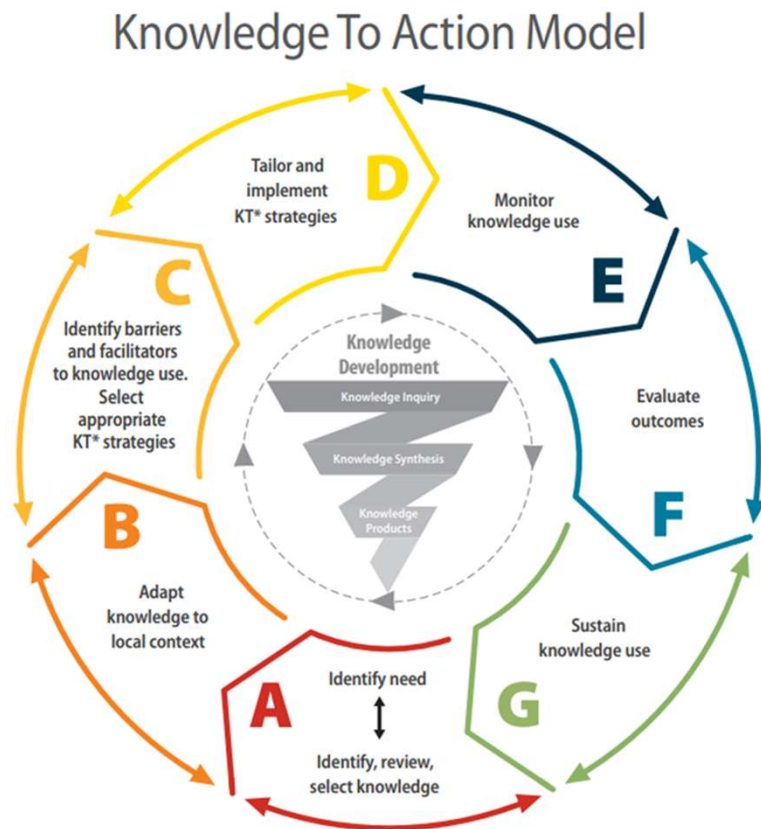
Health Economics

Implementation

Economic analysis



Knowledge Translation



Identify need

Identify best evidence

Adapt knowledge to local context

Identify barriers and facilitators to implementation

- waiting times not monitored
- “just in case” referrals

Implement health system changes to improve patient care

Monitor

Evaluate

Sustain

Graham 2006
Health Canada Handbook 2017

Quantitative Data



Method:

Prospective records extraction
2022 compared to 2023 and 2024

Inclusion criteria:

- Patients with knee osteoarthritis
- Aged >40
- Referred to Canberra Hospital Orthopaedics
- 1 March to 30 September 2022, 2023, 2024

Analysis

- Patient numbers + pathways + outcomes
- Analysis of risk factors for delay to consultation

Qualitative Data

Interviews 2022

Interviews and focus groups 2023-4

Analysed against framework

Our interview questions were:

1. What is working well now?
2. What needs improving?
3. What does the best model of care look like?
4. barriers to best practice?
5. enablers?

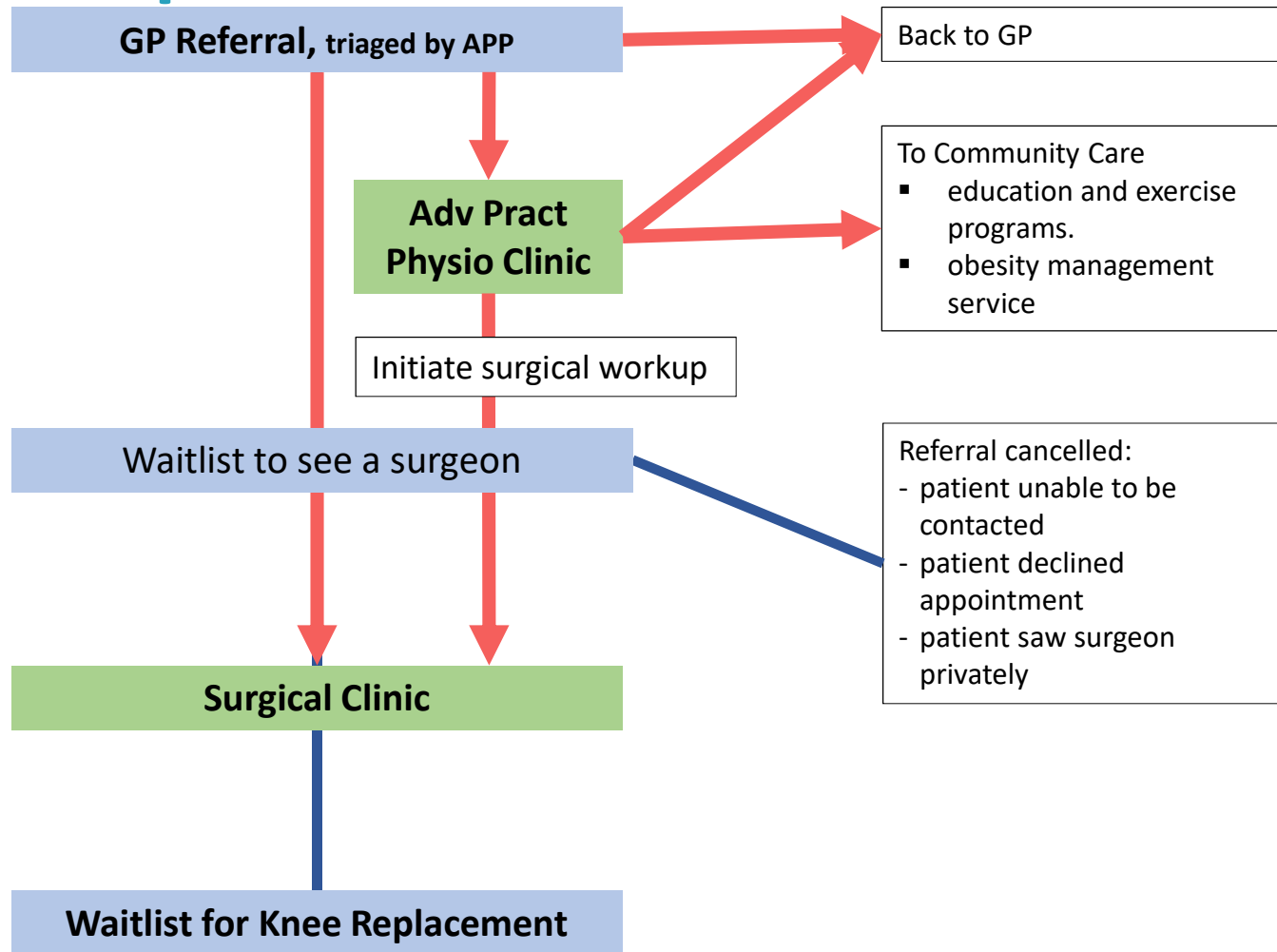
	2022	2023-4
Patients	5	9
Primary care	6	4
Physiotherapists	4	5
Surgeons and Registrars	5	5
Health Executives	5	4
Total		52



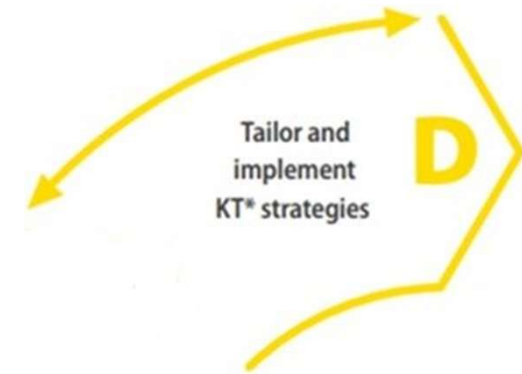
C
Identify barriers
and facilitators
to knowledge use.
Select
appropriate
KT* strategies

Patient pathway in orthopaedics

**Clinical decisions
made by
Advanced Practice Physiotherapists**



Changes since 2022



Advanced Practice Physiotherapy clinic screening

- From 0.5 to 1.5 FTE
- From filtering specific non-surgical patients, to all knee OA patients
- Collaboration with orthopaedic & Community Care teams

Community Care expansion of GLA:D program

- Belconnen AND Tuggeranong
- From 2 to 6 classes per week
- No longer need for “My Aged Care” application

Collaborations with Obesity service

Digital Health Record

- Wait lists 2022 were in clinical portal + ACTPAS

Upgrade to HealthLink e-referrals system

- GP’s can track referrals

Stakeholder engagement

- Cross – divisional communication
- Steering Committee, working parties
- Interviews and Focus groups



Results:

- Stakeholder voices
- Waiting times
- Care pathways
- Economic analysis

2022 Voices of stakeholders

Strong support for Advanced Physio

Monitoring and reporting of wait times and patient outcomes needed

Communication and stakeholder engagement essential

Optimal use of non-surgical options

Public messaging that surgery is a last resort

Physios are the right people to be the gatekeepers of that list. So I think they have

I've been saying this for years about the silent waiting list.

I think we're all aware of it, that it is completely

people with nobody hidden

– Surgeon

No one sends them to Canberra Health Services because nobody really knows how to refer them. It's this big mystery that you can never get in.

– Primary care GP

We need to teach the community why we have this program (GLA:D). And we need to take that education right out wide. We've got to teach the community that "this is why we do these things".

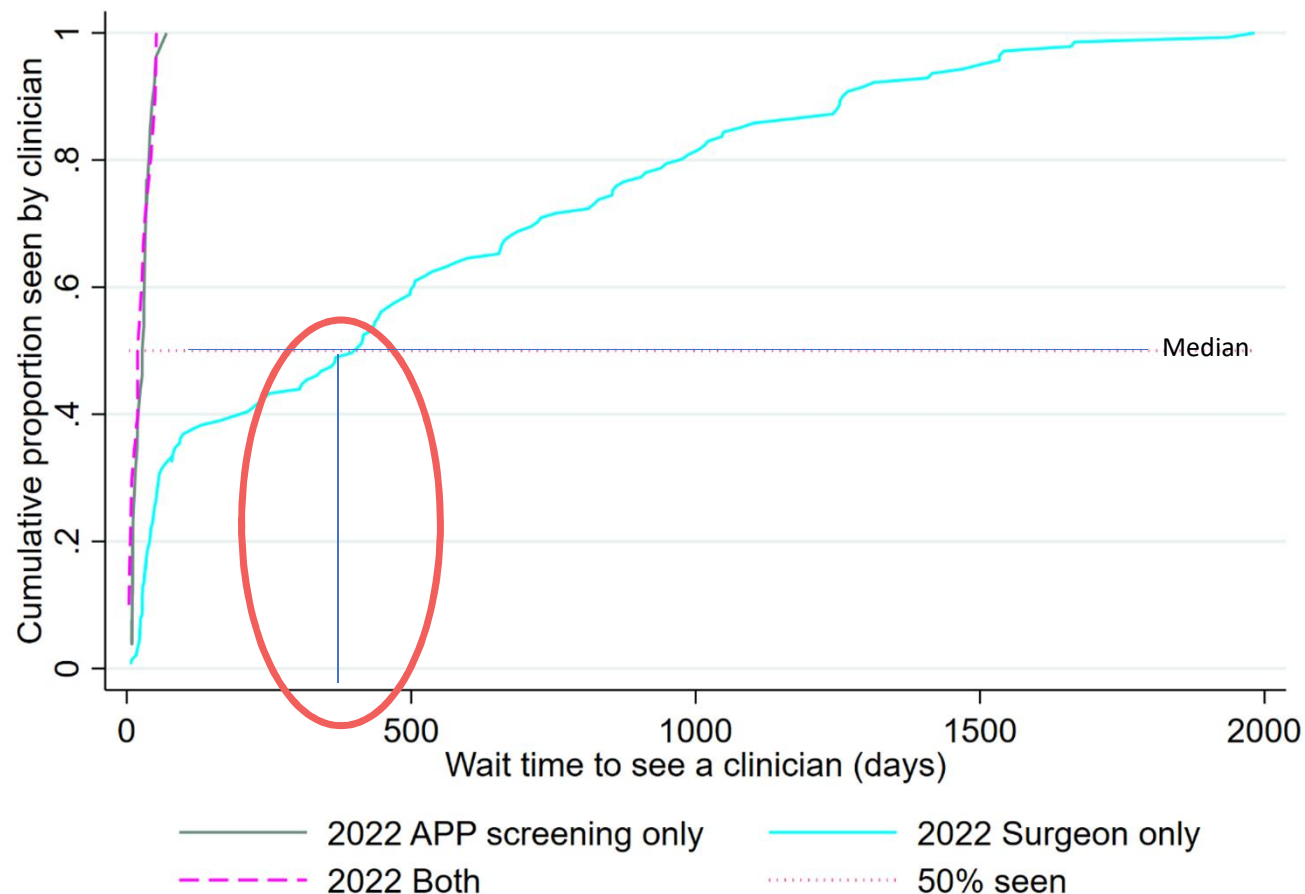
– Primary Care GP



Patients in 2022 vs 2023, 24

	2022	2023	2024
New Knee OA patients referred to a surgeon	n = 270	n = 206	n = 205
Patients - cancelled or declined appointment	93 (34%)	25 (12%)	0
- seen in APP clinic	20%	81%	76%
- diverted to nonsurgical care pathway	16%	40%	47%
Included in analysis	177	181	205
Female	58%	69%	52%
Age in years - mean (SD)	63 (± 11)	65 (± 11)	65 (± 10)
** Mean age for TKR is 69 years (Aust Joint registry)			
Spoken language is English	91%	89%	94%
Metropolitan postcode	92%	87%	86%

Waiting time for consultation in 2022



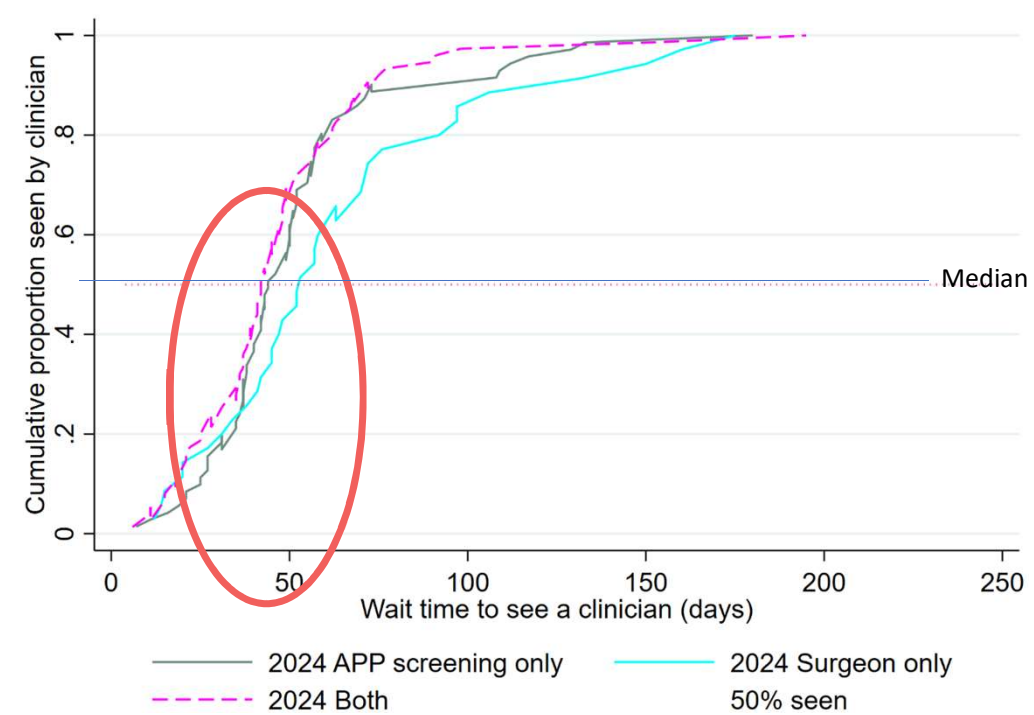
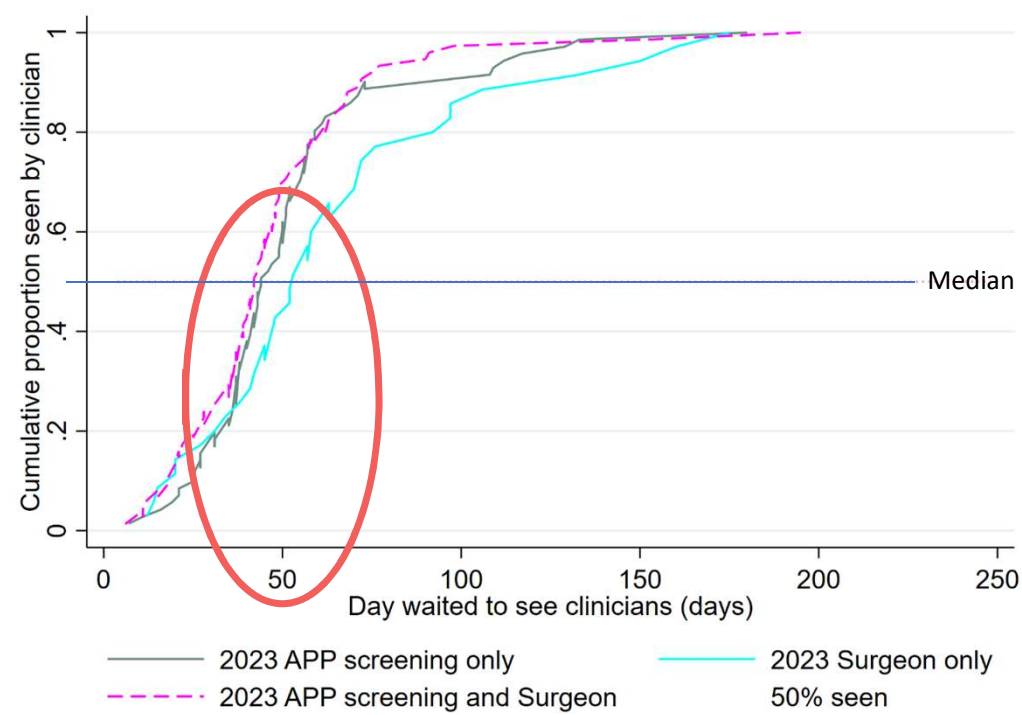
Semi-urgent median 57 days

Non-urgent median 904 days

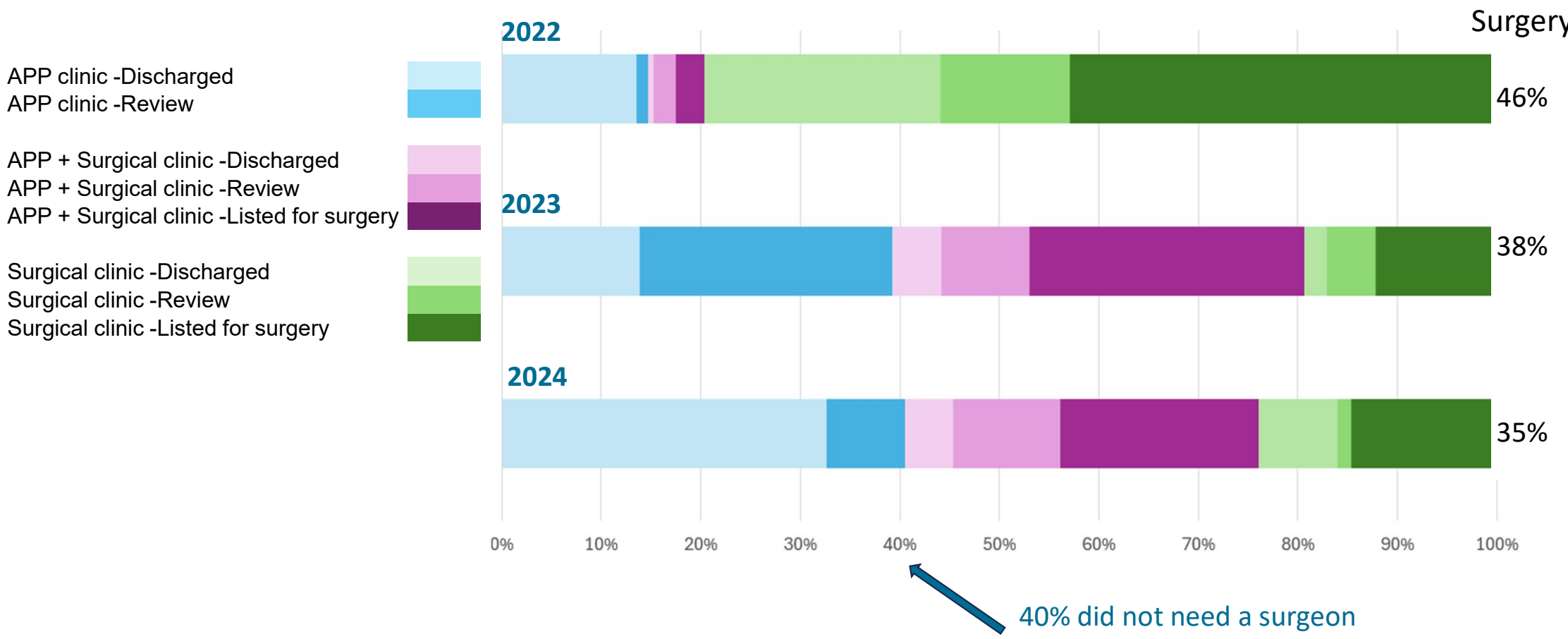
Overall median 404 days

Range 7-1985 days

Waiting times in 2023 and 2024



Patient pathways 2022 vs 2023, 24



Voices of stakeholders 2023, 24

Imperative to expand this Model

It feels like this group is getting some preferential treatment in terms of access, and to be able to replicate that similar kind of model to different cohorts, universally. *Health Exec C*

Difficulty recruiting and training APPs

It's staffing really. We've been trying to recruit. We're struggling to get (even) HP 2. *PT4, physio*

Community Health Services need to be resourced to meet demand

If I could scream *community* in bold letters and as big as I could and every time I'm in a forum where it's hospital centric, lifting this banner. *Health Exec B*

Patient education, empowerment, and changing beliefs can be successfully addressed.

I take on board what the physios say, I do my exercises and basically as I said, you know, I'm managing what is wrong with my body. *K, patient*

Data and Collaborative Solutions enable these changes

It has changed the last couple of years, and I'd like to be very positive about what's happened. It really works really well.
George, GP

From my perspective, the project is really validating what we are doing is actually impactful and is making a positive impact in improving that patient's journey in terms of timeliness and flow. *Health Exec C*

Economic analysis

1. Out of pocket costs to patients
2. Markov chain analysis of care pathways

Costs to patients

Cost to Patients Assessment Questionnaire
Patients n = 16,
living with knee OA over 6 months

Total costs per day range \$ 0.45 to \$ 16.09
(median \$ 7.42)

Direct cost median \$ 921 /6 mo

Indirect cost median \$ 233

Largest costs incurred for patients accessing home care and allied health

“What if” modelling on Markov chain analysis of policy changes

2022 cohort n=270	2022 patients	2022 patients if APP see low severity patients	2022 patients if APP see all patients
Median wait (days)	510	227	64
Healthcare (\$m)	2.2	1.5	1.4
Indirect costs (\$m)	6.6	6.2	5.0
Total costs (\$m)	8.8	7.6	6.6
TKR (%)	68	45	40
Exerc, edu, wt loss (%)	32	55	60
Care option % after excluding patients discharged (n= 131 out of 270)			

Effects of changes on wait time, direct and indirect healthcare costs, and the proportion of patients who receive surgical or non-surgical management (exercise, education, wt loss), modeled on 2022 data set.



Conclusions

Clinical significance

AP Physio screening is an effective filter that reduces pressure on waitlists to see a surgeon

43% of new referrals to CHS orthopaedics in 2023/2024 were managed by AP Physios without seeing a surgeon, saving 151 surgeon consultations



"They're fantastic. The physios are quite thoughtful about who they refer on, and they filter out people who really don't have anything relevant to a surgeon."

Orthopaedic Surgeon

*It's an expert physio.
It's an excellent opinion
that you usually get
from that physio and
they can also start the
investigation trail if
needed.*

George, GP



People with knee OA are accessing expert advice and directed to appropriate care without long waits

Discussion

High acceptability of APP clinicians

- Level 1 evidence for this La France 2022, Vedanayagam 2021, Evans 2021

Shorter wait times in ortho clinics with APPs working at top of scope

- 191 evaluation studies in a SR, shows better access to care Evans 2021

Enablers of project success

- Need services in the community to manage these patients
- Need strong evidence base to launch from
- Knowledge translation methodology leads to practice change that sticks
- Change will be driven by data, and by collaboration across divisions.

Take home message

Imperative to expand this model to other orthopaedic patients, and other clinics

I assume get the patient in early, do a bit of an assessment, then send them off to one of the clinics they need to go to - sleep clinic, respiratory or COPD or something like that.

Nathan, GP

it feels like this group is getting some preferential treatment in terms of access, and to be able to replicate that similar kind of model to different cohorts. Universally

Health Exec C

This model is a template for how the other areas could be managed, with the screening by health professionals

– although there is an issue that we don't have a GLA:D for shoulders, or feet.

So, there is no clear pathway for evidence based conservative management.

Henry, surgeon

Investigator Team - HCF Foundation Translation Research

Project: Best Practice in Knee Osteoarthritis.

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PLUS
Working groups
Steering committee
Linda Trompf, consumer
representative
And the amazing screening
clinic physios
Thank you!

Clinical Research
Rehabilitation & Translation Group

